

MINUTES OF THE XXXII MEETING OF THE ACADEMIC COUNCIL OF THE NORTHCAP UNIVERSITY HELD ON 17 MAY 2023 (WEDNESDAY) AT 11:00 AM.

THE NORTHCAP UNIVERSITY
SECTOR – 23A
GURUGRAM – 122 017

MINUTES OF XXXII MEETING OF ACADEMIC COUNCIL HELD ON 17 MAY 2023 (WEDNESDAY) AT 11:00 AM

The following members attended the **XXXII** Meeting of Academic Council on **17 May 2023 at 11:00 AM** in the conference room of the University, is as under: -

| S. No | Name | Designation | Representing |
|-------|---|---------------------|---|
| 1. | Prof. (Dr.) Nupur Prakash | Chairperson | Vice-Chancellor |
| 2. | Prof. Prem Vrat | Member | Pro-Chancellor, Professor of Eminence and Chief Mentor |
| 3. | Prof. S D Joshi | Member | Prof, Electrical Engineering Department, IIT, Delhi |
| 4. | Prof. V. G. Hegde | Member | Professor, Centre for International Legal Studies, JNU, New Delhi |
| 5. | Prof. Rajesh Chadha (Leave of Absence) | Member | Senior Fellow, Energy, Natural Resources & Sustainability, Centre for Social and Economic Progress, New Delhi |
| 6. | Dr. Kumkum Garg (Retd.) | Member | Prof. of Computing (Ex IIT Roorkee) |
| 7. | Prof. (Dr.) Hari M. Gupta (Retd.) | Member | Ex Professor and Head, Department of Electrical Engineering, and Ex Dean (UGS), IIT, Delhi |
| 8. | Dr. Pratishtha Pandey (Leave of absence) | Member | Scientist 'F' and Head R&D Infrastructure Program, Department of Science and Technology, New Delhi |
| 9. | Dr. Kavita Khanna | Member | Campus Director, Delhi Skill and Entrepreneurship University, New Delhi |
| 10. | Dr. Agueda Benito (Leave of Absence) | Member | Representative of Cintana Education LLC |
| 11. | Prof. Manoj K Gopaliya | Member | Dean (Academics) |
| 12. | Prof. Swaran Ahuja | Member | Advisor Academic Affairs |
| 13. | Dr. Rita Chhikara | Member | HOD - CSE |
| 14. | Dr. Sharda Vashisth | Member | HOD – Dept. of Multidisciplinary Engineering |
| 15. | Dr. Rohit S. Lather | Member | Associate Head (MDE) |
| 16. | Dr. Nimit Gupta | Member | Officiating HOD – Management Programs |
| 17. | Dr. Sona Vikas | Member | Officiating HOD – Commerce & Liberal Studies |
| 18. | Dr. Archana Sarma | Member | HOD – SOL |
| 19. | Dr. Divyabha Vashisth | Member | HOD – CLL |
| 20. | Dr. Hukum Singh | Member | Officiating HOD – APS |
| 21. | Dr. Vaishali Sahu | Member | Associate Head (MDE) |
| 22. | Dr. Rekha Vig | Member | Dy. Dean - IQAC |
| 23. | Dr. Nitin Malik | Member | Dy. Dean – RDIL |
| 24. | Cmde. Diwakar Tomar (Retd.) | Member Secretary | Registrar |

MINUTES OF THE MEETING

The Chairperson welcomed all members to the 32nd meeting of the Academic Council of The NorthCap University. She informed that the last Academic Council Meeting was held on 16 Jan 2023, and that the present meeting has been scheduled to address some important matters that needed deliberations at this stage. She thereafter requested the member secretary to proceed with the agenda of the day.

The Member Secretary welcomed all members to the meeting and proceeded to the agenda items.

ITEM NO. 1: CONFIRMATION OF THE MINUTES OF XXXI MEETING OF ACADEMIC COUNCIL held on 16 January 2023, circulated by email on 25.03.2023 and placed as Annexure 1.

(Member Secretary)

The Minutes of the XXXI Academic Council Meeting were confirmed by the members of the Academic Council, as there were no observations received on the circulated minutes by email.

ITEM NO. 2: RATIFICATION OF MINUTES OF MEETING OF THE ACADEMIC COUNCIL STANDING COMMITTEE HELD ON 14 MARCH 2023

(Member Secretary)

The member secretary apprised the members that there was a need to conduct a meeting of the Standing Committee of the Academic Council on 14 March 2023 to discuss and deliberate on the following issues: -

- Readiness for applying for Open and Distance Learning (ODL)/ Online (OL)
 Programmes (BBA and BCom) with effect from Academic Session 2023-24, on the
 UGC-DEB portal.
- Proposal for starting 05 new programmes from the academic year 2023-24 viz. BSc Sound Engineering, BSc Visual Communication, BSc Visual Effects and Animation, BCA Game Development and BCA Media and Information Technology.

The Minutes of meeting of the Standing Committee of the Academic Council held on 14 March 2023 is enclosed as **Annexure 2**.

Points discussed during the Standing Committee meeting on 14 March 2023 are as follows:

(a) Status of readiness for applying for ODL and OL Programmes on UGC-DEB portal. Dr Anjali Garg Director, Centre for Open and Distance Education (CDOE) briefed the members about the readiness of the CDOE to upload data on the UGC-DEB portal. She brought out that the contents of the Self Learning Material (SLM) have been prepared in-house for the BBA and BCom programmes, in line with the University Grants Commission (Open and Distance Learning Programmes and Online Programmes) Regulations 2020. She also brought out that the detailed programme with course and credit framework has been approved by the Board of Studies held on 06 March 2023. She further informed the members that the SLM along with PPTs and recording of video lectures have been completed, and that 80% content for the ODL and OL has been developed in-house, and 20% courses will be offered in the MOOCs form through SWYAM platform. (b) Approval of New Programmes. The Dean Academics Affairs Dr Manoj Gopaliya briefed the members of the Standing Committee about the proposals of the university to start the five new programmes mentioned above from the Academic Session 2023-24, and informed that detailed course curriculum of these will be prepared and approved by the respective Board of Studies, and put up for approval in the next Academic Council meeting, whenever held.

Members of the Academic Council noted the above, and ratified the minutes of the meeting of the Standing Committee of the Academic Council held on 14 March 2023.

ITEM NO. 3: SOFT SKILLS & PERSONALITY DEVELOPMENT PROGRAM FOR UG & PG STUDENTS TO BE OFFERED FROM BATCH 2023 ONWARDS

(Dr. Shrutimita Mehta (CLL))

Dr Shrutimita Mehta, Associate Professor Centre for Language Learning (CLL), gave a presentation on plans of the university towards enhancing soft skills and personality development of the students of NCU. She brought out that the Centre for Language Learning (CLL), in association with Centre for Professional Attachment and Alumni engagement (CPAA) has prepared a Soft skills, Communication and Language Enhancement (SCALE) program to be offered to all undergraduate and post graduate students from Batch 2023 onwards.

She presented the structure, modules, delivery, and evaluation methodology of the framework before the council. The proposed program includes a well-structured curriculum, interactive sessions and practical exercises designed to foster effective communication, teamwork, leadership, and other essential soft skills.

Dr HM Gupta stated that it would be worthwhile to address the aspect of Artificial Intelligence in Law and Ethics, as this is a very pertinent matter these days. Dr Archana, HOD School of law informed the members that introduction of a minor area course on Al in Law is under active consideration. Prof VG Hegde stated that it may be better to consider 'Law and Technology' rather than just Law and Al, as there are other aspects of Technology that impact law and legislation. Prof HM Gupta also suggested to specifically target Anxiety and Anger Management for PhD students, as this would help them in dealing with such issues. Dr Divyabha informed the members about Thought lab of the university, and brought out that the engagement of Brahmakumaris in such matters has been a very successful initiative of the university.

The members of the council appreciated the proposed framework and mentioned that it is a valuable initiative to equip students of the University with the necessary skills for their personal and professional development. They praised the program's comprehensive approach with well-structured components, that incorporate both theoretical and practical elements to ensure a holistic learning experience for the students.

The members of the Academic Council took note of the commendable initiative of the University towards enhancing soft skills and personality development, and approved the proposal.

ITEM NO. 4: MINOR AREA SPECIALIZATION CERTIFICATIONS

(Dean Academic Affairs)

Dr Manoj Gopaliya, Dean-Academic Affairs presented the agenda during the meeting. He informed the committee that the university provides an excellent opportunity to all its students to earn "Minor Area Specialization" certificates in an area or theme beyond their major areas. He further added that "Minor Area Certification" refers to a supplemental second discipline of study and concentration beyond the major. Some students use a minor certification to pursue personal interests, while other students may pursue a minor to gain specific specialization and make themselves more attractive to employers. He brought out that this helps students to diversify their portfolio and give them a competitive edge in this VUCA world.

Dr Gopaliya presented the offering model of this certification. The certification is offered through "Open Elective" opportunities available in the scheme of programmes. The offering model was as follows:

- A student will opt and register for courses mentioned in the scheme of a minor area specialization offered by any department/ school under open elective category in subsequent semesters.
- A total of 3 courses of 4 credits each need to be passed to earn the required 12 credits for awarding a minor area specialization certificate.
- This certificate will be awarded along with the programme degree after completing all the academic requirements of a programme.

The following minor area specialization certificates duly approved by BOSs of offering schools/departments were presented during the meeting for approval:

Department of Multi-Disciplinary Engineering

- VLSI Design
- Internet of Things
- Sustainability
- Project Management
- Supply Chain Management

Department of Applied Science

Nanotechnology

School of Management & Liberal Studies

• People Management

School of Law

- Law & Technology
- Business Law

The details are attached as Annexure 3

Members of the Academic council brought out the following during discussions:

- (a) The minor area specializations are noted to be very contemporary and diverse.
- (b) The certification on "Sustainability" was proposed to be renamed as "Sustainable Development".
- (c) The members also suggested including mini projects in these certifications either as separate requirement, or through practice hours of these courses. BOS should review and decide accordingly.
- (d) It was suggested that the syllabus should be made 'modular' (i.e module wise), and more crisp, rather than lengthy and overly descriptive.

Post discussions, members of the Academic Council approved the minor area specializations presented, for implementation from AY 2023-24 onward.

ITEM NO. 5: AMENDMENTS IN THE SCHEMES OF EXISTING PROGRAMMES ACROSS THE THREE SCHOOLS

(Dean-Academic Affairs)

Dr Manoj Gopaliya, Dean-Academic Affairs informed the council that as a matter of practice, The NorthCap University Gurugram conducted its yearly review of the scheme of existing programmes across the three schools, to ensure that these schemes remain contemporary with time. Furthermore, the University has launched a comprehensive soft skills & personality development program for its students from AY 2023-24. These have resulted in amendments to the schemes of all the existing programmes.

He brought out that the respective Boards of studies have deliberated and recommended the amendments. He further informed the council that as per the mandate of the NEP 2020, the 3 Year UG Programmes are advocated to be converted to 4 Year UG Programmes with multiple entry and exit options. It was informed that the Department of Higher Education, Govt. of Haryana regularly asks for submitting compliance reports in this regard. The NorthCap University Gurugram has taken up this overhaul in a calibrated fashion and has decided to implement this change in a 'phased manner'.

The Dean-Academic Affairs proposed to convert two 3 Year UG Programmes, namely Bachelor of Business Administration (BBA) – General, and Bachelor of Computer Applications (BCA) into 4 Year UG Programmes from the AY 2023-24. The respective BOSs have deliberated and recommended the proposal. The amendments in the schemes of the existing programmes and the new schemes of two 4 Year converted UG programmes are attached as **Annexure 4**. Minutes of the Board of Studies are attached as **Annexure 5**.

Members of the Academic Council noted the details of the amendments proposed and approved the new schemes of 4 Year converted UG programmes, and amendments to the other existing programmes.

ITEM NO. 6: INTRODUCTION OF 05 NEW PROGRAMMES FROM THE ACADEMIC YEAR 2023-24

(Dean-Academic Affairs)

Dr Manoj Gopaliya, Dean-Academic Affairs informed the council that the University is planning to launch 5 new programmes in the field of media and visual communication from AY 2023-24, in association with its industry partner. The programmes to be launched are as follows:

- BSc (Sound Engineering)
- BSc (Visual Communication)
- BSc (Visual Effects and Animation)
- BCA (Game Development)
- BCA (Media and Information Technology)

Dr Gopaliya presented the scheme of these programmes during the meeting for approval. Details are attached as **Annexure 6**. The council appreciated the initiative and suggested ensuring necessary arrangements to bridge the gap between the diverse feeder groups, who may aspire to take these programmes.

Dr Gopaliya also informed the council about the possible lateral entry into these programmes, as these were in demand and contemporary in nature. The council, after due deliberation approved lateral admission to higher semesters of these programmes, following due academic mapping.

The Academic Council members approved the proposal and schemes of these programmes.

ITEM NO. 7: APPROVAL OF ACADEMIC CALENDAR FOR ODD SEMESTER AY 2023-24 (Dean-Academic Affairs)

Dean-Academic Affairs presented the Academic Calendar for the Odd Semester of Academic Year 2023-24 (**Annexure 7**) during the meeting for approval.

The Academic Council members approved the Academic calendar for the odd semester for AY 2023-24.

ITEM NO. 8: RATIFICATION OF AQAR 2021-22 BY ACADEMIC COUNCIL MEMBERS. (Dy. Dean-IQAC)

Dr Rekha Vij, Dy. Dean-IQAC presented the AQAR 2021-22 which was prepared by IQAC to upload on NAAC portal. The complete document was placed before the members. It was brought out that in early May 2023, this document was reviewed during the IQAC meeting with internal and external IQAC committee members, and various suggestions/ recommendations made during the IQAC meeting have been incorporated in the final AQAR 2021-22 document. Dr Rekha Vij brought out that the AQAR, being an annual feature helps the university immensely in the long run, by ensuring that actions in line with NAAC requirements are taken progressively, and do not get bunched up closer to the NAAC inspections dates. Copy of the AQAR 2021-22 is placed at **Annexure 8**.

The Academic Council members took note of the above and ratified the AQAR 2021-22.

ITEM NO. 9: AMENDMENTS IN PHD RULES FOR WORKING PROFESSIONALS.

(Dy. Dean-RDIL/PhD)

Dr Nitin Malik, Dy Dean (PhD Program) tabled the proposed amendments in the PhD rules for working Professionals. He highlighted the salient amendments as:

- (a) 5% relaxation in minimum eligibility criterion for working professionals with more than 10 years of experience.
- (b) The entrance test will have questions on analytical and logical reasoning only.
- (c) Suitable weightage subject to maximum of 20% for professional experience in qualifying marks for those who do not have valid GATE/NET/SLET/JRF score.

The members deliberated the proposals and concluded that the proposed amendments would assist in providing due impetus/ flexibility to working professionals in pursuing PhD, with certain safeguards with respect to quality of intake through due weightage to written exam and interview process.

Besides the above, Dr Malik also informed the members about the PhD enrolments in Jan 2023, the number of seats being offered in July 2023, and the PhD scholars whose viva voce was conducted since the last Academic Council meeting held on 16 Jan 2023.

Post discussions, members of the Academic Council approved the proposed amendments to the PHD rules for working professionals.

ITEM NO. 10: TECHNICAL EDUCATION AND CURRENT TECHNOLOGICAL DEVELOPMENTS

(Prof. H.M Gupta)

Prof HM Gupta initiated discussions on current technological developments and their impact on technical education in India. He stated that Information and Communication technology is poised for immense growth in the third world countries, and India can play a significant role in helping these countries. He brought out that times have changed, and todays India has reversed several technological trends, wherein, from seeking help of other countries in technologies such as optical communication and space programs (just to name a few) in the past, India now is totally self-reliant in these fields, and is even exporting such technologies.

He brought out that India is a super-power in Information Technology, and all this has been made possible by work happening at three different levels viz. Government, Educational Institutions and Industry. The collective efforts of all stakeholders have resulted in the superlative achievements of India in the IT and Communications sector.

Prof Gupta thereafter went on to highlight that the Semiconductor industry is poised for a major growth and could be the driver for change in related technologies in the next decade. He emphasized that Higher Educational Institutes must gear themselves up to produce competencies in such sector(s), definitely in the next 4 to 5 years. In this regard, he gave example of how Nokia and Helsinki Institute of Technology have collaborated to create a world class facility for facilitating quality research and education. He stated that Indian Universities should also consider such tie ups with the industry and create facilities conducive for indigenous research and development of a high quality products and services

All members of the Academic Council took note of the suggestions of Prof. H M Gupta, and agreed that such initiatives with Industry in emerging technologies can be a focus area.

ITEM NO. 8: REPORTING MATTERS/INFORMATION POINTS

(Member Secretary)

The members secretary informed the important matters / activities which have taken place since the last meeting held on 16.01.2023:

1. 12th Fee Concession & Scholarship Distribution Ceremony – 21 March 2023 (Tuesday)

The NorthCap University held the 12th Fee Concession & Scholarship Distribution Ceremony for the students on 21 March 2023. Hon'ble Governor of Haryana, Shri Bandaru Dattatraya was the Chief Guest for this function.

During the Academic Year 22-23, the University has provided 464 students with fee concessions, Merit Scholarships, financial assistance amounting to a total sum of Rs.1.94 Cr. The Governor in his address complemented the University for this event and exhorted the students to do well in life.

Of the students admitted in the current academic year, 150 Haryana domiciled students were given fee concessions amounting to Rs. 53.52 lacs. In addition, 314 students from the earlier semesters have been provided with financial assistance amounting to Rs. 1.40 Cr. The University also awarded Merit scholarships to 59 students in the Dean's List. 3 Students pursuing full time research were offered the position of university fellow and awarded a grant of Rs. 10.20 lakhs. 12 girl students pursuing STEM education whose parents' income is less than 10 lakhs / year were awarded Hatch associate Scholarships amounting to Rs. 29.08 lakhs. Mr. Pierre Oliver, Regional Managing Director of Hatch Associates, South Africa and Ms. Ruby Rajvanshi, Director, Hatch Associates were also present for awarding the Hatch scholarships.

2. 12th Academic Advisory Board Meeting – 03 March 2023

The Annual 12th Academic Advisory Board Meeting of the University was held on 03 March 2023 to review the progress made during the year and advise on future plans for the growth and development of the University. Honourable members exchanged views, presented new and refreshing ideas, and advised on actions to improve the academic life and other essential deliverables so that the University could achieve its ultimate aim of attaining a position of pre-eminence in India and have a global presence. Members discussed various key issues and their inputs on the same shall go a long way to help shape and enhance the overall academic quality, curriculum development and spectrum of services at this premier University. Minutes of the meeting are enclosed as **Annexure 9**.

3. Visit of delegates from Vilnius Gediminas Technical University (VGTU), Lithuania.

A team (Ms. Dovile Jodenyte, Chief Coordinator of International Studies Centre, Dr. Arturas Serackis, Head of Department, Electronics systems and Dr. Kristina Baziene, Vice Dean of the Faculty of Mechanics) from Vilnius Gediminas Technical University (VGTU), Lithuania, along with 2 coordinators from their India office visited The NorthCap University on 28.03.2023.

VGTU offers a range of undergraduate, graduate, and doctoral programs in various fields, including architecture, civil engineering, mechanical engineering, electronics and electrical engineering, information technology, business, and economics. VGTU is recognized globally for its research and innovation in various fields. Discussions were held on future collaborations, developing combined degree and blended incentive programmes, joint research projects, faculty exchange, guest lectures and amongst other issues.

4. Visit of Ms. Melissa Terrio, Executive Director, Worcester Polytechnic Institute (WPI), Massachusetts, USA

Ms. Melissa Terrio, Executive Director, Worcester Polytechnic Institute (WPI), Massachusetts, USA visited The NorthCap University on 14.03.2023 to explore partnership opportunities and guiding students on "Pursuing a STEM degree in the USA: Myths & Facts". She delivered an engaging talk covering the challenges and emerging opportunities that students should consider when deciding to study abroad in the US. Ms. Melissa is responsible for enrollment activities for all BS/MS and PhD graduate programs at WPI, as well as admissions for graduate studies and graduate student success. WPI ranks #60 on the US News Ranking of Best National Universities in the US, and offers a variety of programs mainly in the Engineering & Natural Sciences domains.

5. The following two Ph.D. Scholars viva-voce was conducted since last Academic Council Meeting held on 16 January 2023 (Monday):

| Sr. No. | Name of the Scholar | Dept./ School | Topic |
|------------|---------------------------|------------------|---|
| 1. | Deepika Gaur | APS | STUDY OF EFFECT OF INTERFACIAL LAYERS ON THE PERFORMANCE OF PEROVSKITE SOLAR CELLS |
| 2. | Vijayveer Singh | SOL | DETERMINATION OF COMPENSATION FOR LAND ACQUISITION IN INDIA WITH SPECIAL REFERENCE TO NATIONAL CAPITAL REGION (NCR) |

6. II International Conference on Law and Technology: Moving towards Digital Era

The Centre for Law and Technology, School of Law at The NorthCap University organized the II International Conference on Law and Technology: Moving towards Digital Era in association with Centre for Cyber laws, National law University, Delhi and Faculty of law, Central University of Brazil, on 3rd and 4th March, 2023.

The conference aimed to analyse how the legal system must respond to challenges caused by emerging technologies. This conference acted as a platform for academicians and students on a global level to come together and discuss interdisciplinary aspects of law, science, and technology.

The Inaugural Ceremony on 04.03.2023 was graced by Hon'ble Justice Manmeet Pritam Singh Arora, Judge, High Court of Delhi as the Chief Guest and Dr. Pavan Duggal, Advocate, Supreme Court of India and Chairman, International Commission on Cyber Security Law, as the Guest of Honour.

7. International Student Startup Idea Competition - 20.02.2023 to 25.02.2023

The NorthCap University hosted the International Student Start-Up Idea Competition with the theme of Impacting Community through Sustainable Innovations from 20th – 25th Feb. 2023.

Student teams from the following five Cintana Alliance Universities participated in the competition.

- i. Cintana Clubs from Universidad Internacional del Ecuador (Ecuador),
- ii. FOODEIT from Mapua University (Philippines),
- iii. Derma 360 from The NorthCap University (India),
- iv. PePiPow from Universitas Esa Unggul (Indonesia)
- v. GOpedal from University of Dinja Gorica (Montenegro)

The competition consisted of two rounds:

i. Intra-University start-up challenge: This round was conducted internally in each Cintana Alliance Institutes worldwide, including NCU. One team from each institute was selected for the Finale. Grand-Finale (Final Round) at NCU -The selected teams from each participating Cintana Alliance Universities visited NCU to participate in the final round.

The Grand Prize – Three students of the winning team (PePiPow from Universitas Esa Unggul, Indonesia) have been sponsored to attend the 2023 ASU-Cintana Summer Experience at Arizona State University, Phoenix, USA, at USD 2900 per student.

8. 2nd Edition Intra-Moot Court Competition – 03.02.23 – 04.02.23

The Second Edition of the Intra Law School Moot Court Competition was held at NCU on 03.02.2023 & 04.02.2023, conducted under the theme 'Crime and Technology'. The objective of the competition was to provide young minds with a platform to explore niche areas of law and to train them in mooting skills and court manners. Mr. Gurudatta Ankolekar, Mr. Purushottam Tripathi, and Mr. Nihant Panicker, Advocates-on-Record, Supreme Court of India judged the final rounds. 21LLB004 Aditya Yadav, 21LLB025 Udit Kumar Solanki, and 21LLB048 Chinmay Giri were the winners.

9. Workshop on "Developing Ideas, Innovations, and Inventions – 10.02.2023.

CIPRART, School of law in collaboration with IP India office, Ministry of Commerce and Industry organized a Workshop on "Developing Ideas, Innovations and Inventions" at the University on 10 February 2023. The main objective of the event was to implement the objectives of National IPR Policy 2016, and to safeguard the interest of the inventors by upgrading IP skills. The aim was to bring together Academicians, Researchers, Professionals, Practitioners, and Students of Law & allied disciplines on a single platform for deliberation over Patent and Design Filing. Mr. Yasir Abbas, Patent & Design Examiner, IP India, Government of India was the speaker.

10. RDIL Research Talk Series

a) 09.02.2023 – Prof. Manjula Batra from the School of Law while speaking on the topic 'Doctrinal and Non-Doctrinal Legal Research: Advantages & Limitations' shared her valuable insights on non-legal and legal aspects of laws and how it affects the society. The session was an eye-opener for everyone on how the laws affect the common man and how he can take the help of the judiciary if and when required.

- b) 02.02.2023 Under the RDIL Research Talk Series, our faculty members had the great opportunity of attending an incredible session delivered by Prof. Prem Vrat, Pro-Chancellor, Professor of Eminence and Chief Mentor at NCU. Speaking on the topic 'In Search of Rational Index for Evaluating Research Quality Through Citations An Overview and a Proposal', Prof. Vrat shared his invaluable insights on various research quality metrics such as h-Index, g- Index, i-10 Index, w-index. He even proposed two new metrics namely, p-index and v-index, for further improving the evaluation of research quality publications.
- c) 21.01.2023 Ms. Pooja Kumar, Founder and Director, Innove Intellects shared her expertise with our faculty members in an excellent RDIL Research Conclave session. Her insights on the subject of 'Patentable and Non-Patentable Inventions' were received well and will be of much use to research aspirants. Not only did this talk encourage the next cohort of inventors, but it also guided them in taking the right steps to find their way to academic research and development careers.
- d) 16.01.2023 Dr. Pratishtha Pandey (Scientist 'F') from the Department of Science & Technology (DST), Government of India, was invited for 'Research Talk Series 2023'. She shared her valuable insights on funding opportunities for research by funding agencies. The talk covered the mandate of DST in organizing, coordinating and promoting research activities and a glimpse of various funding schemes.

11. IPTSE Awards and IP Conclave

- a) Dr. Archana Sarma, Head, School of Law at The NorthCap University won an award under the 'IP Recognition' Category during the 5th Edition of the IPTSE Awards and IP Conclave. The award was presented by Hon'ble Justice Prathiba M. Singh, Judge Delhi High Court, Prof. (Dr.) Unnat Pandit, Controller General of Patent Designs and Trademark and Shri. B. B. Swain, IAS, Secretary, MSME. Having contributed significantly towards the IP ecosystem for years now, Dr. Archana is a huge inspiration for NCU students.
- b) 18LLB046 Srikant Shekhar, Final Year student of BBA LLB Hons., received the 1st Rank in the Start-Up category and the Youth Leader Award in the 5th Edition of the IPTSE Awards and IP Conclave.

This event was organised by IPTSE Academy in association with FICCI (Federation of Indian Chambers of Commerce & Industry), New Delhi.

12. MoU with PPS International

The NorthCap University signed an MoU with PPS International, Greater Noida on 10 February 2023. The MoU was signed in the presence of Mr. PK Agarwal, Managing Director & CEO, PPS International, Prof. Sharda Vashisth, Head of Department, Multidisciplinary Engineering (MDE) & Dy. Dean International Affairs, Prof. Anjali Garg, Professor MDE & Dy. Dean Examination and Dr. Satnam Singh, Associate Professor MDE. Through this, students can apply for industry internships, projects, placements, industrial visits and externships, thereby bridging the academia-industry gap.

13. MoU with University of North Florida, USA

The NorthCap University has signed a partnership agreement with the University of North Florida, USA on 3 March 2023. The purpose of this partnership is to enhance academic and research collaboration between UNF and NCU, enable faculty and student interchange and access to academic and research information. The partnership will also provide for both universities to develop and organise common educational programmes for our communities, co-author publications and promote the culture of both countries through student-led events.

14. MoU with Salem State University, Massachusetts, USA

The NorthCap University has signed an MoU with Salem State University, Massachusetts, USA on 28 March 2023. This MoU is signed to exchange information and experience regarding educational exchange programmes and make cooperative efforts, short and long term of exchange of faculty members and non-academic staff, impart dual / joint degree and some additional joint activities.

15. MoU with University of Regina, Canada

The NorthCap University has signed an MoU with the University of Regina, Canada on 13 April 2023 and effective from 1 May 2023. Dr. Raman Paranjape, Associate Dean (Research and Graduate Studies), Professor, Electronic Systems and Engineering, Faculty of Engineering and Applied Science from University of Regina visited The NorthCap University to explore future collaboration opportunities and areas of mutual cooperation.

16. MoU signed with ICT Academy

The Northcap University has entered into a collaboration with M/s. ICT Academy, New Delhi to offer services to the faculty members in the areas of Information & Communication Technology. It shall also provide domain specific training programs either drawn from industry or approved by the industry at no cost to the students based on their interest. Further it also provides access to various research journals on a quarterly basis free of cost.

The following activities have been organized under MoU with ICT Academy:

- i. Microsoft Azure AI Engineer Associate (AI-102) course of 100 hrs for B.Tech CSE Final Year students was successfully conducted by two Microsoft skilled trainers from 5th Jan to 21st Jan 2023 in Offline Mode at The NorthCap University in collaboration with ICT Academy.
- ii. Dr. Prachi Ahlawat, Dr. Yogita Gigras and Ms. Kanika attended and successfully completed the 5 days Faculty Development Program on Microsoft Cybersecurity Tools organised by ICT Academy from 5th Jan 2023 to 11th Jan 2023
- iii. Dr. Srishti, and Dr. Poonam Chaudhary, Assistant Professors, CSE, attended and successfully completed the 5 days Faculty Development Program on Cloud Practitioner (AWS) conducted by ICT Academy from 30th Jan 2023 to 03rd Feb 2023

17. MoU with Association of Business Women in Commerce & Industry

The NorthCap University has signed an MoU with Association of Business Women in Commerce & Industry (ABWCI) on 12 December 2023 to explore opportunities to jointly collaborate and work together on services related to women entrepreneurship, women economic empowerment with intention to take up projects on partnership basis.

The following activities have been organized under MoU with ABWCI:

 Expert Talk on Empowering Women: The case of modern-day organizations, organized by SOM&LS on 15.03.23 in the Seminar Hall

18. MoU signed with Gemini Solutions

The MOU signed between Gemini Solutions and The NorthCap University is to benefit our learned faculty with industry experience and our students with knowledge exchange, industrial visits, campus hiring, research work, and conducting workshops and seminars.

Further, following activities have taken place post the signing of MoU with Gemini Solutions:

Campus Hiring: 2 students were selected.

Guest Lectures: 1

19. Green Institutional Rankings 2023

The NorthCap University participated in the Green Institutional Rankings 2023, under the Sustainable Institutions of India and has been featured in Gold Band with an 'A' Grade. A Sustainable Higher Education Institution (HEI) is considered that creates, delivers, and captures value for all its stakeholders without depleting the natural, economic, and social capital it relies on.

The Academic Council took note of these items and complimented the team of NCU for their consistent performance and continuous growth.

ITEM NO. 9: ANY OTHER MATTER WITH THE PERMISSION OF THE CHAIR

The following agenda was discussed with the permission of the Chair:

Ratification of Articulation for Dual Degrees, Accelerated Masters, and Semester Exchange with International Universities.

Dr Sharda Vashisth, Dy Dean (International Affairs) presented an update on new MoUs signed with the international universities and shared the status of the existing MOUs. She gave an overview of the ongoing articulation for dual degrees, accelerated master's degrees, and semester exchange programs. The academic council empowered the Vice Chancellor to approve such articulations which would be done through forming of academic subcommittees for international programs, as and when required necessitated.

Members of the Academic Council examined the proposal and accorded approval for the same.

Commodore Diwakar Tomar (Retd.)

Member Secretary

Academic Council - The NorthCap University



MINUTES OF THE XXXI MEETING OF THE ACADEMIC COUNCIL OF THE NORTHCAP UNIVERSITY HELD ON 16 JANUARY 2023 (MONDAY) AT 2:30 PM.

THE NORTHCAP UNIVERSITY
SECTOR – 23A
GURUGRAM – 122 017

MINUTES OF XXXI MEETING OF ACADEMIC COUNCIL HELD ON 16 JANUARY 2023 (MONDAY) AT 2:30 PM

The following members attended the **XXXI** Meeting of Academic Council on **16 January 2023** at **2:30 PM** in the conference room of the University, is as under: -

| S. No | Name | Designation | Representing |
|-------|--|---------------------|---|
| 1. | Prof. (Dr.) Nupur Prakash | Chairperson | Vice-Chancellor |
| 2. | Prof. Prem Vrat | Member | Pro-Chancellor, Professor of Eminence and Chief Mentor |
| 3. | Prof. S D Joshi (Leave of Absence) | Member | Prof, Electrical Engineering Department, IIT, Delhi |
| 4. | Prof. V. G. Hegde (Leave of Absence) | Member | Professor, Centre for International Legal Studies, JNU, New Delhi |
| 5. | Prof. Rajesh Chadha (Leave of Absence) | Member | Senior Fellow, Energy, Natural Resources & Sustainability, Centre for Social and Economic Progress, New Delhi |
| 6. | Dr. Kumkum Garg | Member | Prof. of Computing (Ex IIT Roorkee) |
| 7. | Prof. (Dr.) Hari M. Gupta | Member | Ex Professor and Head, Department of Electrical Engineering, and Ex Dean (UGS), IIT, Delhi |
| 8. | Dr. Pratishtha Pandey | Member | Scientist 'F' and Head R&D Infrastructure Program, Department of Science and Technology, New Delhi |
| 9. | Dr. Kavita Khanna | Member | Campus Director, Delhi Skill and Entrepreneurship University, New Delhi |
| 10. | Dr. Agueda Benito (Leave of Absence) | Member | Representative of Cintana Education LLC |
| 11. | Prof. Manoj K Gopaliya | Member | Dean (Academics) |
| 12. | Prof. Swaran Ahuja | Member | Advisor Academic Affairs |
| 13. | Dr. Rita Chhikara | Member | HOD - CSE |
| 14. | Dr. Sharda Vashisth | Member | HOD – Dept. of Multidisciplinary Engineering |
| 15. | Dr. Rohit S. Lather | Member | Associate Head (MDE) |
| 16. | Dr. Nimit Gupta | Member | Officiating HOD – Management Programs |
| 17. | Dr. Sona Vikas | Member | Officiating HOD – Commerce & Liberal Studies |
| 18. | Dr. Archana Sarma | Member | HOD – SOL |
| 19. | Dr. Divyabha Vashisth | Member | HOD – CLL |
| 20. | Dr. Hukum Singh | Member | Officiating HOD – APS |
| 21. | Dr. Vaishali Sahu | Member | Associate Head (MDE) |
| 22. | Dr. Rekha Vig | Member | Dy. Dean - IQAC |
| 23. | Dr. Nitin Malik | Member | Dy. Dean – RDIL |
| 24. | Col. Bikram Mohanty (Retd.) | Member Secretary | Registrar |

MINUTES OF THE MEETING

The Chairperson welcomed all the members to the 31st Academic Council meeting held in offline mode on the campus of The NorthCap University after two years of pandemic situation. She welcomed the external members Prof. H M Gupta and Prof. Kumkum Garg who were attending the second academic council meeting of NCU but first time in offline mode. She welcomed the new, distinguished, renowned members and academicians who attended the Academic Council meeting for the first time.

External Members

- > Dr. Pratishtha Pandey Scientist 'F' and Head R&D Infrastructure Program, Department of Science and Technology, New Delhi
- Dr. Kavita Khanna Campus Director, Delhi Skill and Entrepreneurship University, New Delhi.

She welcomed all the new members for their guidance and expertise towards taking NCU to greater heights in times to come.

Internal Members

- Prof. Manoj K Gopaliya Dean (Academics)
- Dr. Nimit Gupta Officiating HOD Management Programs
- Dr. Sona Vikas Officiating HOD Commerce & Liberal Studies

She thereafter requested the member secretary to proceed with the agenda of the day.

The Member Secretary wished new year greetings to all the members and presented the agenda items.

ITEM NO. 1: CONFIRMATION OF THE MINUTES OF XXX MEETING OF ACADEMIC COUNCIL held on 25 January 2022, circulated by email on 17.02.2022 and is placed as Annexure 1.

(Member Secretary)

The Minutes of the XXX Academic Council Meeting were confirmed by the members of the Academic Council as there were no observations received on the circulated minutes by email.

ITEM NO. 2: RATIFICATION OF MINUTES OF MEETING OF THE ACADEMIC COUNCIL STANDING COMMITTEE HELD ON 22.11.2022.

(Member Secretary)

The member secretary apprised the members that there was a need to conduct the Standing Committee Academic Council meeting due to the following reasons: -

- To seek approval for conferring degrees to the graduated students in the XIth Convocation Ceremony scheduled on December 9, 2022.
- To seek approval to submit the proposal of the identified new post graduate programs to the Department of Higher Education, Haryana before December 31, 2022, to start these courses from the academic year 2023-24.

The Standing committee meeting that was held on 22nd November 2022 and the Minutes of the meeting vide email dated: 30th November 2022 was circulated to all members and is enclosed as **Annexure 2**.

Points discussed are as mentioned below:

i) Approval of the NorthCap University Degree to eligible students

The member secretary informed the members that the number of students as mentioned below were approved by the Standing Committee in the Academic Council meeting held on November 22, 2022, and the degree were awarded to them in the XIth Convocation ceremony held on December 9, 2022

A total of 734 students were awarded degrees in their respective disciplines, including 288 from BTech, 17 from BSc Maths (H), 09 from BSc Physics (H), 89 from BCom (H), 22 from BA Economic (H), 13 from BA Psychology (H), 120 from BBA, 90 from BBA-LLB (H), 16 from MTech, 34 from MBA, 18 from LLM and 18 awarded PhD. Gold, Silver and Bronze medals were awarded to 24 candidates who topped the list in their respective streams.

The members noted the same and congratulated the team for successfully hosting the Convocation.

ii) Approval of programs to commence from the Academic Year 2023-24

The member secretary invited the respective HOD to share the proposal to start the new programs from the academic year 2023-24 duly approved in their Board of Studies

a) Master of Computer Application

Prof. Rita Chikkara, HOD CSE shared the proposal to start a two-year post-graduate MCA degree programme with all the members. Details are enclosed as **Annexure 3**.

Points highlighted by the members:

- i. Prof. H M Gupta enquired whether the proposed program would offer any specialization, or if it is a general course. He suggested that we should offer elective courses related to new emerging technologies, and also suggested that since students seeking admission in this programme can be from any discipline, a bridge course must be offered.
- ii. Prof. Kumkum Garg enquired about the difference between the curriculum proposed for BCA and MCA level and suggested that advanced level electives should be offered to MCA students. Internship / Dissertation should be offered to all students in the final semester.
- iii. Dr. Pandey enquired regarding an elective course; Business Analytics proposed to be taught to MCA students.

Prof. Rita clarified that the curriculum framework proposed is of general nature and currently no specialization is offered. A pool of elective courses will be offered to students from the second semester onwards. In the first semester students will study the basics of computer language and advanced courses will be taught thereafter. She confirmed that as per AICTE model curriculum compulsory internship and dissertation has been incorporated.

Dean Academics, Prof. Gopaliya informed the members that all the core and elective courses proposed have the lab component, where the students will get a lot of practical knowledge and an opportunity for industry internship and live projects.

b) Master of Arts (Psychology)

Dr. Sona Vikas, Officiating HOD Dept. of Commerce & Liberal Studies shared the scheme of MA Psychology to be offered as a two-year full-time programme covered in 4 semesters. A minimum of 85 credits are required to be earned by a student to complete the course. Details are enclosed as **Annexure 4**.

Points highlighted by the members:

- i. Dr. Pratistha Pandey suggested to re-look at the proposed syllabi and to offer elective courses such as Organization Behavior, Counselling Psychology, Industrial Psychology and Child Psychology in the proposed program. She suggested that NCU should contact the Defence Institute of Psychological Research for seeking expert advice while designing the curriculum.
- ii. Prof. Kumkum Garg suggested that some of the elective courses of this programme can also be offered as Open Elective to students from other disciplines.
- iii. The chairperson suggested the HOD to incorporate changes before presenting the same to the Department of Higher Education, Haryana.

c) Master of Arts (English)

Dr. Divyabha, Officiating HOD shared the curriculum framework of MA English programme that has the exit option after one year as per NEP 2020. It also has an element of internship and dissertation. It will allow the students enrolled for the BA programme to pursue PG studies while staying within the familiar environment of NCU. They will be learning evolution of literature over complete Centuries instead of the individual authors in the proposed programme. She informed the members that the curriculum benchmarking is done with the syllabi of prestigious universities such as DU/ MDU/ Jamia Millia Islamia. Details are enclosed as **Annexure 5**.

Points highlighted by the members:

Prof. H M Gupta suggested to introduce an elective program related to comparative study of English language in terms of US/UK/ Britain where each word has a different pronunciation, spelling and at times different meaning. The Chairperson suggested that this suggestion can be taken as one of the research topics by the student pursuing Ph.D in English.

d) Bachelor of Technology in Automotive Technology with specialization in Electric Vehicle Engineering (NEP 2020 complied) from Academic Year 2023-24

Dr. Rohit Lather, Associate Head (MDE) presented the proposed four-year B.Tech in Automotive technology with a Specialization in Electric Vehicle Engineering in collaboration with Automotive Solutions Portal for Industry Research & Education – (ASPIRE), International Centre for Automotive Technology, Manesar. The proposed program is aligned with the New Education Policy 2020, offering multiple entry and exit after every year and two monthly project-based internships in the industry every semester. Details of the scheme are enclosed as **Annexure 6.**

Points highlighted by the members:

- i. Prof. H M Gupta congratulated the University for the launch of this new unique specialization. He said that well-developed labs are required for the success of this program. He suggested that these labs can be set up in collaboration with industries such as Maruti Suzuki or any other automobile companies.
- ii. Prof. Kumkum Garg suggested that embedded systems, artificial intelligence and IOT elective subjects can be included in the proposed syllabi.

Dr. Rohit Lather Associate Head (MDE) noted the suggestions and shared with the members that similar subjects are already part of the course structure.

After detailed deliberation it was agreed to in principle by the members to approve the above-mentioned programs after incorporating the proposed changes and to commence from the Academic Year 2023-24 as per Haryana Private University Act 32 of 2006 as amended by Haryana Private University Bill of 2012, the University will get the new programs approved by the Government of Haryana.

iii) Merger of EECE, ME & CE Departments

Prof. Sharda, HOD (MDE) informed the members regarding the merger of the three departments of School of Engineering & Technology i.e., Department of EECE, ME and CEE that was approved vide Item No. 3 of the Minutes of the 35th Board of Management meeting held on 30th August 2022. The new "Department of Multidisciplinary Engineering" (MDE) has started functioning w.e.f. 15 December 2022 vide IOM no.: SECR-01/IOM/220/2022 dated: 06 December 2022. This department will teach common engineering courses (Electrical, Civil and Mechanical) to first year CSE students and will share the responsibility of first year along with APS department and will also propose to offer certificate, PG Diploma and new programs in multidisciplinary areas as per market demand

The members of the Academic Council ratified the decision taken in BOM and congratulated the members of the new department. Prof. Gupta suggested them to explore options of starting courses in 5G & IOT disciplines.

ITEM NO. 3: RATIFICATION OF STUDENT ADMISSION FOR THE ACADEMIC YEAR 2022-23.

(Member Secretary)

The member secretary informed the members present that the admission process for the Academic Year 2022-23 started after the declaration of class XII results in July 2022. The admission processes thereafter began based on the intake, eligibility and selection criteria and it ended on 31 December 2022.

| INTAKE FOR THE ACADEMIC YEAR 2022-23 | | | |
|---|-----|-----|--|
| PROGRAMS INTAKE ADMITTED | | | |
| BACHELOR OF TECHNOLOGY (CSE) | 450 | 457 | |
| BACHELOR OF COMPUTER APPLICATIONS (BCA) | 120 | 121 | |

| TOTAL | 1045 | 1064 |
|--|------|------|
| LLM SPECIALIZATIONS CORPORATE LAW / HUMAN RIGHTS LAW / INTELLECTUAL PROPERTY RIGHTS | 10 | 9 |
| BBA LLB | 65 | 65 |
| MASTER OF BUSINESS ADMINISTRATION (MBA) DUAL SPLZ WITH (TWO MAJORS) SPECIALIZATIONS IN HR / FINANCE / MARKETING / BUSINESS ANALYTICS | 35 | 34 |
| B.A (HONS.) ENGLISH | 40 | 37 |
| B.A (HONS.) ECONOMICS | 15 | 15 |
| B.A (HONS.) PSYCHOLOGY | 50 | 54 |
| B.COM (HONS.) | 65 | 66 |
| BBA | 165 | 172 |
| B.SC (HONS.) MATHS | 10 | 11 |
| M-TECH FOR ALL DEPARTMENTS OF SCHOOL OF ENGINEERING | 20 | 23 |

Total No. of Ph.D. admissions in first semester 2022-2023 (July-Dec. 2022):

Some of the highlights of the admission for the academic year 2021 are as under:

> Total number of verified leads : 26,922 (approx.)

➤ Total number of applications received : 2710
 ➤ Maximum students are from Haryana : 74.62%
 ➤ Students from Delhi : 21.80%
 ➤ Other States : 35%

Maximum enrolments have been from Organic sources.

Following points were discussed:

- Prof. H M Gupta and Prof. Kumkum Garg expressed concern regarding no admission in other disciplines of engineering. Prof. Gupta added that if faculties from MDE disciplines will not teach their discipline specializations, they will either forget the concept or there will be no scope of innovation. He suggested that short term specialized courses can be developed and offered to students of other disciplines and programs under the multi-disciplinary and interdisciplinary approach as per NEP 2020.
- 2. The Chairperson summarizing the discussion highlighted the imbalance in the number of students admitted in various engineering departments and said this is a country wide phenomenon. She added that although programs like Civil Engineering, Electronics & Communication Engineering and Mechanical Engineering have great relevance in the progress of the nation, yet due to decline in admissions in these branches, merger has been done. Many IITs are offering Sustainability, E-mobility, and VLSI design as short-term programs.

The Academic Council members took note of the various suggestions and advised that HODs should roll out new programs in the Academic Year 2023-24. The members then noted the details of students admitted in the Academic Year 2022-2023.

ITEM NO. 4.: NEW APPROVALS

(Concerned HOD / Faculty Members)

MDE (DEPARTMENT OF MULTIDISCIPLINARY ENGINEERING)

- 1. Prof. Sharda, HOD (MDE) informed members that currently in the department of CSE, the B.Tech CSE is being offered with the following seven specializations.
 - B-Tech CSE Specialization in Full Stack Development
 - B-Tech CSE Specialization in Cyber Security & Forensics
 - B-Tech CSE Specialization in Cloud Computing
 - B-Tech CSE Specialization in Data Science
 - B-Tech CSE Specialization in Gaming, AR & VR
 - B-Tech CSE Specialization in Artificial Intelligence & Machine Learning
 - B-Tech CSE Specialization in Blockchain

And from the Academic Year 2023-24, the department MDE has now proposed to offer a new specialization track in IoT & 5G to the students seeking admission in B.Tech CSE. This specialization will expand its offerings and provide options to students to learn a new track in IoT & 5G technologies in BTech (CSE) program offered by CSE Department. Detailed PPT in this regard is enclosed as **Annexure 7.**

Points highlighted by the members:

- Prof. Gupta enquired about the total number of electives that will be offered to these students. Prof. Shardha informed that these specialized courses will be offered to students as elective courses from the 4th semester and there are 7 such elective courses that are designed and will be offered to students during the remaining semesters.
- 2. Prof. Kumkum enquired regarding the degree that will be offered to students post completion. Prof. Gopaliya, Dean Academics informed that all students will get the degree of B.Tech (CSE) and they will be awarded Certificate in their areas of specialization.

SOL (SCHOOL OF LAW)

1. Approval of Law Relating to Narcotic Drugs & Psychotropic Substances as Programme Elective (LBL 265)

Dr.Archana Sarma, HOD (SOL) presented the course of Law Relating to Narcotic Drugs & Psychotropic Substances that will enable students to understand the practical aspects of implementing the Narcotic Drugs & Psychotropic Substances Act, 1985 (NDPS Act). The course is based on up-to-date Judgements of the Hon'ble Supreme Court, High Courts & Trial Courts. It also features a step-by-step understanding of various nuanced concepts applied at various stages of the proceedings. Lastly, it features the application of the NDPS Act to the pharmaceutical industries.

She informed the members that a new course is proposed post the feedback received from the stakeholders such as Employer and Alumni. As a part of Action taken post the feedback received this new course will be offered to law students and can be offered to other students from the academic year 2023-24. This course will help students in preparing for litigation. Course Template is enclosed as **Annexure 8**.

2. Approval of "Introduction to Indian Constitution" as Open Elective (LBL 714)

Dr. Archana also proposed another course as Open Elective that aims to provide the students with a basic understanding of the Indian Constitution. Beginning with the fundamental rights and fundamental duties, salient features including Directive Principles of State Policy will also be covered. The judicial system will be discussed to build a sound foundation for aware citizens. Moreover, Citizenship and Emergency Provisions will also be covered for the purpose of a deeper understanding of the aim and thought process of the Constitution Makers.

She informed the member that this new course is also recommended to be taught to all students across all disciplines/ departments under interdisciplinary approach as per the NEP 2020 policy. A detailed proposal note & Course templates are attached as **Annexure 9**.

Points highlighted by the members:

Prof. Gopaliya enquired regarding the credits that are assigned to this course. He suggested that this course is the need of the hour and many students will be interested in pursuing this course so it should be offered as Open elective in both the semester. Dr. Archana informed the members that the credit proposed for this course is (3-0-0) and noted the suggestion for the necessary action.

Dr. Pratistha Pandey complimented the HOD for identifying and proposing to introduce this course in the coming semester. She suggested that industry involvement can be planned while delivering this course to students.

The Academic Council members after deliberation approved all the programmes as presented.

ITEM NO. 5: RESTRUCTURING OF THE SCHOOL OF MANAGEMENT & LIBERAL STUDIES

(Member Secretary)

The member secretary informed the members that during the NAAC peer team visit to the University in July 2022 the team had recommended the bifurcation of the School of Management & Liberal Studies.

He informed that the School of Management & Liberal Studies is conducting the following programs for the students:

| BBA / BBA (DIGITAL MARKETING) / BBA (FAMILY BUSINESS & ENTREPRENEURSHIP) | 411 |
|--|-----|
| B.COM (HONS.) / B.COM (H) FINANCIAL MARKETS | 183 |
| B.A (HONS.) PSYCHOLOGY | 109 |
| B.A (HONS.) ECONOMICS | 47 |
| MASTER OF BUSINESS ADMINISTRATION (MBA) DUAL SPLZ WITH (TWO MAJORS) SPECIALIZATIONS IN HR / FINANCE / MARKETING / BUSINESS ANALYTICS | 64 |
| TOTAL NO. OF STUDENTS COMPRISING OF ALL BATCHES | 814 |

It is proposed to align the School of Management & Liberal Studies with a model being followed by other leading B-Schools in the country and that is to segregate the MBA program and form a new standalone B-school. Currently Prof. Nimit Gupta is Officiating as Head of Management Programs and Dr. Sona Vikas is functioning as Head for Commerce & Liberal Studies. B.A. (Hons.) English continues to be under the Centre for Language Learning. The new School will focus on MBA programs, Consultancy work, Research, executive MBA Program for working professionals, Management Development Programs (MDP) & Executive Development Programs (EDP). The new school will focus on quality students intake with higher selectivity and entry through competitive exam mode like CAT, XAT, MAT, etc.

The following students intake and cadre ration was proposed.

Student Intake = 50 per year (max.)

Regular Faculty = As per criteria laid down by the regulatory authority

Cadre Ratio = 1:2:2 (1 Prof., 2 Asso. Prof. & 2 Asst. Prof.)

Domain = Includes HR, Finance, Marketing, Operations, Supply Chain

Management (SCM) & General Management

It was suggested that the new school should have a separate program officer with adequate secretarial support and that the CPAA should provide dedicated placement support, career counselling and guidance etc.

The new names for the stand-alone school suggested were as under:

- The NorthCap School of Management,
- The NorthCap Business School (NBS),
- ➤ The NorthCap School of Entrepreneurship and Management (NSoEM),
- NCU School of Business

All other details such as talent acquisition, compensation structure, eligibility and Emoluments shall be in conformity with the regulations by UGC / AICTE & will be finalized by HR in consultation with the Vice Chancellor & the Governing Body.

SOM & LS shall continue to have under its jurisdiction BBA, B.A. (Hons.) Economics, B.A. (Hons) Psychology, MA (Psychology) & B.Com (Hons).

After deliberation, Prof. Kumkum Garg suggested the name of new school as "NCU School of Business" (NSB).

The members of the Academic Council agreed to the new name suggested by Prof. Kumkum Garg and accorded approval.

ITEM NO. 6: APPROVAL OF PROPOSED ACADEMIC CALENDARS OF FIRST YEAR AND NON-FIRST YEAR FOR THE EVEN SEMESTER OF ACADEMIC YEAR 2021-22

(Dean Academics)

Dean Academics presented the Academic Calendars of first year and non-first year students for even semester of Academic Year 2021-22 for all three Schools during the meeting for inputs and ratification from the members.

All members of the Academic Council ratified this item.

ITEM No. 07: AMENDMENTS IN Ph.D RULES & REGULATIONS & UPDATE ON Ph.D RELATED MATTERS

(Dy. Dean - Ph.D)

Prof. Nitin Malik, Dy. Dean RDIL presented the amendment in Ph.D. rules & regulations that were last updated in 2019. He informed the members that post pandemic, a lot of suggestions were received, which are proposed to be incorporated in the NCU PhD rules & regulations.

Amendments in PhD rules and Regulations

1. MCA and MSc (Electronics / Computer Science / Information Technology) with minimum 8.5 CGPA or equivalent have been made eligible to take admission in PhD Program in Computer Science Engineering Department and Electronics, Electronics & Communication Engineering discipline

2. Direct Admission to PhD Program in SOM

Eligibility: Four-year undergraduate research degree / honours in any branch of Engineering, Management, Economics, Commerce, Operations Research or other relevant disciplines **subject to approval of School of Management & Liberal Studies** from IIM or the university and institution within 100 NIRF ranking in the academic year of consideration or NAAC grade A/A+/A++ with minimum 8.5 CGPA or 77.5% marks in aggregate.

3. Change in NCU PhD Entrance Test (NPET) component weightage

| | Earlier | Proposed |
|---|---------|----------|
| Research Methodology & Analytical reasoning | 20% | 50% |
| Dept./School specific technical topics | 50% | 50% |

4. Change in admission components weightage for NET / GATE / SLET qualified candidates

| | Earlier | Proposed |
|-------------------|---------|----------|
| NET/GATE/SLET | 50% | 0% |
| Qualifying Degree | 30% | 60% |
| Interview | 20% | 40% |

5. Revision in PhD Fellowship Awarded

| Existing | Revised w.e.f 2023 |
|-------------|--|
| Po 25 000/ | Rs 35,000/- [Qualifying degree + Interview >80%] |
| Rs 35,000/- | Rs 25,000/- [Qualifying degree + Interview 70-80%] |

6. Update on Doctoral Programs at NCU

a) Listing of journals in the database

It is proposed that at least 2 papers must be published/ accepted for publication in peer reviewed non-paid reputed refereed journals before submission of synopsis. These journals should be preferably listed under any of the following databases which include Web of Science, Scopus, UGC-Care (list-1 only) and ABDC (A, A*, B) only. Earlier it was Web of Science, Scopus and Google Scholar indexed journals

b) Time to resubmit the Thesis (only in those cases where the examiner has asked to do so) reduced from 9 months to 6 months. However, in exceptional cases or genuine reasons, the chairperson BDR may extend by another 3 months

c) Total No. of Ph.D. admission done in July-Dec. 2022

| Sr. No. | Dept./ School | No. of Candidates taken Admission | |
|---------|---------------|-----------------------------------|--|
| 1. | CSE | 06 | |
| 2. | CIVIL | 01 | |
| 3. | CLL | 00 | |
| 4. | APS | 05 (1 NET, 1CSIR) | |
| 5. | EECE | 02 | |
| 6. | ME | 02 | |
| 7. | SOL | 04 (1 NET) | |
| 8. | SOM | 04 (2 NET) | |
| | Total | 24 | |

- d) Applications received for Ph.D. admissions in second semester 2022-23 (Jan.-June 2023): 24
 - i. NPET held on 7 January 2023
 - ii. Number of applicants appeared for NPET 17
 - iii. Applicants with valid GATE score & NET qualification exempted from written exam.
- e) The eighteen Ph.D. Scholars were awarded PhD degrees during the Convocation Ceremony held on 09 December 2022.

Points highlighted by the members:

Prof. H M Gupta enquired about the credit level that was offered to students while completing Ph.D. as per the notified guidelines of UGC regarding the National Credit Higher Education Framework. He suggested that all recommendations of NEP 2020 to be incorporated in the revised regulation. Prof. Nitin informed that due deliberation of all the recent regulatory notification has been considered and proposed in the amendment above.

Prof. Prem Vrat suggested that in point 6(a) as recommended for amendment 2 papers must be published/ accepted for publication in peer reviewed non-paid reputed refereed journals before submission of synopsis, the word 'not paid' to be deleted and to include the Google Scholar Journal. He suggested that DRC can decide the list of Journals from time to time.

The Academic Council members took note of changes and proposed amendments in PhD regulation aimed at improving the PhD enrolments and approved the amendments in PhD rules and regulations w.ef. 2023-24.

ITEM NO. 8: REPORTING MATTERS/INFORMATION POINTS

(Member Secretary)

The members secretary informed the important matters / activities which have taken place since the last meeting held on 25.01.2022:

1.University awarded Grade 'A' in NAAC second cycle of accreditation

The second cycle of NAAC accreditation inspection was held when the NAAC peer team visited the campus from 25-27 July 2022, the University has been awarded **Grade 'A'**.

2. QS I-GAUGE award 2022

Through a rigorous and independent data collection and analysis against performance metrics as set out in the rating methodology QS I-GAUGE has awarded the School of Engineering and Technology a **Platinum rating** while both School of Management & Liberal studies and School of Law have been rated in the **Gold rating**.

3. Eleventh Academic Advisory Board Meeting – 11 March 2022

The Annual Eleventh Academic Advisory Board Meeting of the University was held on 11 March 2022 to review the progress made during the year and advise on future plans for the growth and development of the University. Honourable Board members exchanged views, presented new and refreshing ideas, and advised on actions to improve the academic life and other essential deliverables so that the University could achieve its ultimate aim of attaining a position of pre-eminence in India and have a global presence. The members discussed various key issues and their inputs on the same shall go a long way to help shape and enhance the overall academic quality, curriculum development and spectrum of services at this premier University. On the collaboration with ASU and its visible impact on the quality of education at NCU the members were of the opinion that the University should carry out an audit with the aim to realign and strategize in case our collaboration is not meeting our aspirations for which was intended while signing of the MoU.

4. 11th Fee Concession & Scholarship Distribution Ceremony – 18 April 2022 (Monday)

The NorthCap University held the 11th Fee Concession & Scholarship Distribution Award Ceremony for the students on 18 April 2022. Hon'ble Governor of Haryana, Shri Bandaru Dattatraya was the Chief Guest for this function. Of the students admitted in the current academic year, 278 Haryana domiciled students were given fee concessions amounting to Rs. 1.32 Cr. In addition, 93 students from the earlier semesters have been provided with financial assistance amounting to Rs. 84.32 Lakhs.

The University also awarded Merit scholarship to 55 students in the Dean's List, financial assistance to 7 students who lost their earning parents due to COVID19 last year. 6 students pursuing full time research were offered the position of University fellow and awarded a grant of Rs. 18 lakhs. A new scholarship was introduced this year to facilitate students to gain global experience and attend the Summer Immersion program conducted by Foreign Universities. 6 students were selected for this scheme and have been provided with 1000 dollars of financial assistance each for attending the immersion program in the United States of America. 12 girl students pursuing STEM education whose parents income is less than 10 lakhs / year were awarded Hatch associate Scholarships amounting to Rs. 26.67 lakhs.

During the Academic Year 21-22, the University has provided 493 students with fee concessions, Merit Scholarships, financial assistance amounting to a sum of Rs. 2.81 Cr. The Governor in his address complemented the University for this event and exhorted the students to do well in life.

5. Green Institutional Rankings 2022

The NorthCap University participated in the Green Institutional Rankings 2022, under the Sustainable Institutions of India and is ranked no. 25 across India in the Diamond Band. A Sustainable Higher Education Institution (HEI) is considered to create, deliver and capture value for all its stakeholders without depleting the natural, economic and social capital it relies on. Certificate received is enclosed as **Annexure 10**.

6. Technovation 2022

Technovation is the platform provided by our university where students can showcase their skills, judgment and critical thinking gained during the entire program duration with the spirit of healthy competition. Total of 18 teams from SOET & SOM & LS took part in the best project award. Besides the NCU Team the external members consisted of (i) Dr. Santosh K. Pandey – Scientist "D"/ Joint Director with Government of India, Ministry of Electronics & Information Technology (MeitY), New Delhi, (ii) Mr. Kavindra Kumar, CEO, Atal Incubation Centre, Jawaharlal Nehru University, Foundation for Innovation & (iii) Dr. N. R. Chauhan, HOD, Mechanical & Automation Engineering, IGDTUW, New Delhi.

The best projects were as under:

| Hritik Kumar | 18CVU003 | Man famous de accésional la | Ma Labash |
|--------------------|----------|--|------------------------------|
| Shaurya Lakra | 18CVU005 | Way forward to sustainable paver blocks | Mr. Lokesh Choudhary |
| Arun Vashist | 18CVU008 | pare. Bioone | |
| Piyush Bansal | 18csu156 | Rule The World CHESS | Dr. Neeti & Dr. Hitesh |
| Gaurav Arora | 18ECU006 | | |
| Pradeep Yadav | 18ECU017 | Design, Implementation, and | Dr. Vandana Khanna |
| Mimansha Mishra | 18ECU015 | Verification of 1X3 Router | |
| Vaibhav Sharma | 18CSU226 | | |
| Vibhuti Dahiya | 18CSU227 | DevSecOps: Securing the CI/CD Pipeline through | Dr. Shilpa |
| Yugansh Kumar | 18CSU238 | Automation | Mahajan |
| Ishaan Parmar | 18CSU251 | | |
| Amit | 18csu016 | | |
| Hitesh | 18csu086 | Gesture Controlled Robotic Arm | Dr Yogita and Dr Anuradha |
| Hrithik | 18csu088 | 7 | 2.7 |

The students involved in the projects were awarded Cash prize & Certificate during the 12th Convocation Ceremony held on 09 December 2022.

7. Institution of Happiness Award

QS-IGAUGE along with Assocham had conducted a survey to measure the happiness level of educational institutions across India. The University successfully completed the assessment process and became among the first set of institutions to be awarded the Distinctive Institution of Happiness Award. The award was presented to the University, during the QS-IGAUGE Academic Excellence Conclave held in New Delhi on 12 May 2022.

8. Conduct of CUET Exam on 17,18 & 20 August 2022

CUET exam was conducted in the University on 17, 18 & 20 August 2022 in various labs at the University. Further the examination will also be held on 30 August and from 1 to 11 September 2022, for which arrangements have been made by the University.

9. Lifetime Achievement Award to Prof. Prem Vrat, Pro Chancellor & Chief Mentor

IMT Ghaziabad has conferred Lifetime Achievement Award to Prof. Prem Vrat, Pro Chancellor & Chief Mentor in recognition of his dedication to research and teaching in the area of Operation Management & Industrial Engineering, during the Valedictory session of the International Conference on Emerging Trends in Supply Chain and Operations (ICESCO) online.

The members noted and congratulated Prof. Prem Vrat.

10. HOD-CSE participates in BW EduNext Summit 2022 on 'Future of Education"

Dr. Rita Chhikara, HOD-CSE participated in the panel discussion on 'Future of Education" in India on 9 August 2022.

11. Orientation Programme for newly admitted students held on 16 August 2022.

An Orientation Programme was held for newly admitted students on 16 August in the University Auditorium. Around 375 students participated and after the address by the Vice Chancellor, Registrar Director & HODs of Schools, the students were taken around the campus and shown the classrooms. Labs & other sports facilities available in the Campus. The three weeks Induction Programme for these students commenced from 17 August 2022. The Second Orientation Programme for the students who join subsequently was conducted in the first week of September 2022. The induction program was held for 3 weeks w.e.f. 17.08.2022.

12. Outreach Programme by School of Management & Liberal Studies

A School Out Outreach Programme by School of Management & Liberal Studies was conducted for Pathways world School and Ecole Design School in August for students of class 12 by Dr. Sona Vikas. Around 100 students attended this session.

13. Summer Immersion Programme at Arizona State University, USA

Following 4 students participated in the Summer Immersion Programme at Arizona State University, USA from 5-20 July 2022 for Student Exchange Programme.

- 20BBA036 Rivika Dalal i.
- ii. 20CSU045 Jahanvi Sachdeva
- iii. 21CSU127 Nishit Sangwan
- iv. 20CSU022 Arnav Saini

14. OBE Rankings 2022

The University has been ranked in the Diamond Band with A+ grade in the category of Higher Educational Institution of Excellence. Certificate from R World Institutional Ranking is enclosed as Annexure 11.

15. Best Faculty Awards.

The award was reintroduced after a gap of two years. Following faculty members received the award.

i. **Best Researcher Award**

First Prize : Prof. Hukum Singh - APS Second Prize : Prof. Rita Chhikara - CSE Second Prize : Dr. Mona Agarwal - EECE

ii. **Best Faculty Award**

First Prize : Dr. Poonam Chaudhary - CSE

First Prize : Dr. Srishti - CSE

Second Prize : Dr. Vandana Khanna - EECE : Dr. Nimit Gupta – SOM & LS Second Prize

Best Academic Administration Award iii.

> First Prize : Prof. Rita Chhikara – CSE Second Prize : Prof. Sharda Vashisth – EECE Third Prize : Dr. Shrutimita Mehta - CLL

16. MoU with the Association of Chartered Certified Accountants (ACCA)

The NorthCap University signed a Memorandum of Understanding (MoU) with The Association of Chartered Certified Accountants (ACCA) on July 19, 2022, intending to provide an opportunity for students to achieve professional qualifications along with their graduation. The MoU was signed by Prof. Nupur Prakash, Vice-Chancellor, The NorthCap University, and Mr. Kush Ahuja, Head of Business, ACCA. The Institute supports more than 162,000 members and 428,000 students in 173 countries, helping them to develop successful careers in accounting and business, with the skills required by employers.

17. One Week FDP on Capacity Building for Holistic Development

The Department of Civil and Environmental Engineering in collaboration with the Center for Languages and Learning at The NorthCap University organized a one-week FDP titled "Capacity Building for Holistic Development" from 12th July 2022 to 18th July 2022. The FDP was open to all the faculties and research scholars at NCU.

18. Dr. Aman Garg attended Regional Meet IIC-2022

Dr. Aman Garg, Assistant Professor from The Department of Civil and Environmental Engineering attended a one-day IIC regional meet held at Amity University, Jaipur on 28th July 2022.

19. Startup Pitch Event under The NorthCap Incubation Centre

The NorthCap University has organized the start-up pitch event under the incubation center and final presentations were held on 26.07.2022, where five teams competed for the cash prize money. The event was judged by Prof. N. R. Chauhan (Head; Prof. Mechanical Department, Indira Gandhi Delhi Technical University for Women). The results of the start-up pitch event are provided in the table below:

| S. | Name of | Lead Co-Founders | Prize Details |
|-----|------------|---------------------------------|-------------------|
| No. | the | | |
| | Startup | | |
| 1 | BigBoxo | Rohit Dalal and Rahul Arora | First Prize - Rs |
| | | | 8,000 |
| 2 | Flxclass | Aman Saini and Abahyuday Pujari | Second Prize |
| 3 | Playformee | Srikant Shekhar and Nikki Jha | (Shared) - Rs |
| | | | 6,000/- each team |
| 4 | LEEFEE | Jatin Dahiya and Sanjay Yadav | Third Prize |
| 5 | Magec | Shubham and Jatin Dahiya | (Shared) - Rs |
| | | | 5,000/- each team |

All five teams were declared the winner due to the novelty and scope of the startups.

20. Enactus Nationals 2021-22

Enactus Nationals is a worldwide competition where many teams, students, and industry experts all come together to witness the best projects on sustainability while working for the people. Students Enactus team from different colleges/institutions/universities participated in the Enactus India competition which was scheduled from 24 June - 02 July 2022. NCU Enactus team submitted entries on the Project "AAVARAN" which was the first initiative to eliminate textile waste and generate sustainable products and Project "SANRAKSHAN", a bioenzyme cleaner prepared with all-natural kitchen waste, which not only works efficiently but is cost-effective as well. 87 students from our team participated in Enactus Nationals under the guidance of Dr. Anshu Malhotra.

21. MoU between NCU and Software Technology Parks of India (STPI)

An MoU between NCU and Software Technology Parks of India (STPI), a premier S&T organization under Ministry of Electronics and Information Technology (MeitY) engaged in promoting IT/ITES Industry, innovation, R&D and start-ups has been successfully signed on 24th Aug 2022.

22. MOUs Signed with XR Game Tech Company:

NCU has signed an MoU with XR Central (XRC Studios, Inc) Gurugram to bridge the gap between the academics and industry. Members of faculty and students will get opportunities to know and work with the latest technological and management practices, prevailing in the country. This has also included:

- i. Joint project & Project development
- ii. Recruitment of Graduate Engineers
- iii. Mentoring of students trainee.

23. MoU Signed with Shri Vishwakarma Skill University

NCU has signed an MoU with Shri Vishwakarma Skill University on 28.09.2022 for joint certification and skill development programs.

Key area of cooperation:

- i. Joint Skill Development
- ii. Joint holding of Conferences / Seminars / Workshops / Symposia / FDP
- iii. Short Term course / D. Voc, B. Voc.
- iv. Industry exchange
- v. Exchange of Faculty

24. 'Visvesvaraya PhD Scheme for Electronics and IT' at The NorthCap University, Gurgaon.

NCU has received approval for financial support of around 72 lakh for five years for two full time PhD scholars under Visvesvaraya PhD Scheme for Electronics and IT: Phase-II. The estimated budget outlay of our institution for the PhD Scheme for 2 Full Time PhD candidates is Rs. 72,61,600/- (Rs. Seventy-Two Lakh Sixty One Thousand Six Hundred only). The duration of the scheme is 60 months.

25. MoU signed with ICT Academy

The Northcap University has entered into a collaboration with M/s. ICT Academy, New Delhi to offer services to the faculty members in the areas of Information & Communication Technology. It shall also provide domain specific training programs either drawn from industry or approved by the industry at no cost to the students based on their interest. Further it also provides access to various research journals on a quarterly basis at free of cost. Under this MoU a Motorola Centre of Excellence was established in CSE Department.

26. MoU with Association of Business Women in Commerce & Industry

The NorthCap University has signed an MoU with Association of Businesswomen in Commerce & Industry (ABWCI) to explore opportunities to jointly collaborate and work together on services related to women entrepreneurship, women economic empowerment with intention to take up projects on partnership basis.

27. MoU with Hero Moto Corp. Ltd.

The NorthCap University has signed an MoU with Hero Moto Corp. Ltd. to hold workshops on a monthly basis on road safety and also provide two-wheeler practical training. By this MoU Hero Moto Corp. intends to conduct & promote students related events in the campus.

28. MoU with Green Tree Global

The NorthCap University has signed an MoU with Green Tree Global, Gurugram, which shall entail green tree to provide consultancy services in the fields of energy efficiency, green building and renewable energy solutions. Key areas of cooperation shall include Career development programs, joint course developments and publishing & conduct workshops and Executive development programs.

29. MoU with ICAT Aspires

The NorthCap University has signed an MoU with International Centre for Automotive Technology (ICAT) to enhance the Industry-Academia partnership for conducting joint short-term and mid-term courses and research in the field EV and related emerging technology area as per Industry Requirements. ICAT, Manesar is one of the independent Testing Agencies under Central Motor Vehicle Rules (CMVR) notified by the Ministry of Road Transport and Highways (MoRTH), Government of India for Testing and Certification of Automobiles and their critical safety components.

30. MoU with Volkswagen Group Technology Solutions India Private Limited

CSE Department has held discussions for signing an MoU with Volkswagen Group Technology in the mutual areas of interest through its "Centre of Excellence" as under:

- Inputs on Curriculum Designs.
- Internship Program.
- Live Projects.
- Hands-on Training.
- Industry Visits.
- Guest Lectures.
- Joint Research and Development Projects.

31. Establishment of a Pro Bono club at the School of Law by the Ministry of Law & Justice.

School of Law (SOL) had established a Pro Bono club at SOL, which shall work directly under the ministry of Law & Justice. The ministry has provided a grant of Rs. 2 Lakhs over a period of two years, of which One Lakh has been received for the current year.

32. Convocation Ceremony - 09 December 2022

NCU, held its 11th Annual Convocation Ceremony for its various undergraduate and postgraduate programmes on 09 December 2022. The event was a memorable one and was presided over by Hon'ble Dr. Rajiv Kumar, Former Vice Chairman, Niti Ayog.

648 UG, 68 PG, 18 PhD degrees were awarded and 24 medals along with Best Project Award & Outstanding Student awards were conferred upon meritorious students of ongoing batch 2022. In addition, Star Alumni Achiever Awards also given to four Alumni.

33. Student class committee meetings

Student class committee meetings in respect of three schools i.e. SOET, SOM & LS and SOL were held on 03.10.2022 & 07.10.2022 respectively. Concerns and suggestions by the students, both academic & administrative nature were addressed. The meetings were attended by the Pro Chancellor, Vice Chancellor, Registrar & Dean Academics besides all the HODs. The University has now opened up the girls hostel for students after complying with all necessary Covid protocols and there are currently 27 girls students staying in the hostel.

34. HR Conclave 2022

Centre of Professional Attachment & Alumni engagement (CPAA) organized 'HR Conclave 2022' at The NorthCap University on 25 Nov 2022. The theme was "The Skills of Future: Preparing Gen Z for the times ahead" The event brought together eminent HR professionals from the industry on a common platform where they shared their experiences and best practices on the topic "Hiring trends of corporate for campus". HR professionals interacted with the faculties and students from the disciplines of Engineering and Management.

| Details of guest who attend the Conclave are as mentioned below | Details of quest | who attend the | Conclave are as | mentioned below |
|---|------------------|----------------|-----------------|-----------------|
|---|------------------|----------------|-----------------|-----------------|

| S. No. | Guest Name | Designation | Organization |
|--------|--------------------|-------------------------|--------------------|
| 1 | Mr. Mussarat | Head - Leadership | Maruti Suzuki |
| | Hussain | School | |
| 2 | Mr. Varinder Singh | Head HR | Fortum India |
| 3 | Mr. Ashoka Kumar | GM HR | Wipro |
| | Sangwan | | |
| 4 | Ms. Bhawna Gupta | Head HR | Airtel |
| 5 | Mr. Manoj Sharma | Director | HUQUO |
| 6 | Mr. Pushpesh | Group Head - HR & | Ambika Steel Ltd |
| | Ranjan | Admin | |
| 7 | Ms. Manika Sahni | Head Talent Acquisition | Exicom Telesystems |
| 8 | Ms. Poonam | AGM HR | R Systems |
| | Chhikara | | |

The conclave helped in

- a) Bringing the corporate world to NCU campus to nurture young minds of The NorthCap University.
- b) Created opportunities for students to get short-term projects, Internships, Placement and various campus engagements like skill development training and more.

35. Winner in i-Mobilothon, 2022

Team Datum Miners, comprising of third year CSE students - Dhruvarshi Das, Mridul Gupta, J. Vishwanath, Anant Tripathi, Devashish Soni and faculty mentors, Dr. Prachi and Ms. Kanika Gupta, secured 1st position in i-Mobilothon, an event jointly conducted by Volkswagen Group Technology Solutions, India, ŠKODA AUTO Volkswagen India Private Limited and Skoda Auto Digilab, India.

The event was focused on ideation of Transforming Mobility Solutions with Artificial Intelligence, Internet of Things, Holistic Sustainability and Mobility Solutions in the Metaverse. The event received 110+ idea submissions from participants across various categories including Startups, Employees and Students. The team developed a solution for Electric Vehicle mobility under the guidance of Dr. Prachi and Ms. Kanika Gupta and has been rewarded with a prize money of 1,00,000 INR and summer internship opportunity.

The members appreciated the MoUs signed by NCU and expressed their views on keeping all MoUs active by organizing events regularly under each MoU.

The Academic Council took note of these items and complimented the team of NCU for their consistent performance and continuous growth

ITEM NO. 9: ANY OTHER MATTER WITH THE PERMISSION OF THE CHAIR

The member secretary thanked the members for sparing out time and attending this meeting. The suggestions as suggested by all the members will be incorporated in each item as listed above.

Col. Bikram Mohanty. (Retd.)

Member Secretary

Academic Council - The NorthCap University

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MINUTES OF THE ACADEMIC COUNCIL STANDING COMMITTEE MEETING OF THE NORTHCAP UNIVERSITY HELD ON 14 MARCH 2023 AT 2:30 PM IN THE CONFERENCE ROOM

THE NORTHCAP UNIVERSITY SECTOR – 23A GURUGRAM – 122017

MINUTES OF ACADEMIC COUNCIL STANDING COMMITTEE HELD ON 14 MARCH 2023 (TUESDAY) AT 2:30 PM

The following members attended the Academic Council Standing Committee Meeting on Tuesday, 14 March 2023 at 2:30 PM in the University Conference Room:

| S. No. | Name | Designation | Representing | |
|--------|--------------------------------|------------------|---|--|
| 1. | Prof. Nupur Prakash | Chairman | Vice-Chancellor | |
| 2. | Prof. Prem Vrat | Member | Pro-Chancellor, Professor of Eminence and Chief Mentor | |
| 3. | Prof. Swaran Ahuja | Member | Academic Advisor | |
| 4. | Prof. Manoj K Gopaliya | Member | Dean Academics | |
| 5. | Prof. Anjali Garg | Member | Director - CDOE | |
| 6. | Prof. Nimit Gupta | Member | HOD-Management Studies | |
| 7. | Dr. Sona Vikas | Member | HOD-Com. & LS | |
| 8. | Prof. Rita Chikkara | Member | HOD-CSE | |
| 9. | Prof. Sharda Vashisth | Member | HOD-MDE | |
| 10. | Prof. Hukum Singh | Member | HOD-APS | |
| 11. | Prof. Archana Sharma | Member | HOD-SOL | |
| 12. | Dr. Divyabha Vashisth | Member | HOD-CLL | |
| 13. | Dr. Satnam Singh | Member | Special Invitee | |
| 14. | Cmde. Diwakar Tomar (Retd.) | Member Secretary | Registrar | |

WELCOME ADDRESS BY THE CHAIRMAN

Prof. Nupur Prakash, Vice Chancellor, The NorthCap University, chaired the Academic Council Standing Committee Meeting of The NorthCap University. She briefed the members about the establishment of Centre for Internal Quality Assurance (CIQA) and CDOE (Centre for Distance and Online Education) as discussed in the Academic Council Standing Committee Meeting held on 23rd September 2022.

She also appraised all the members on the successful completion of the "The International Student Start-Up Idea Competition", which was held from 20th Feb 2023 to 25th Feb 2023. This was an initiative of Cintana Education in collaboration with The NorthCap University and Universitas Esa Unggal on the theme of Sustainability, Innovation, and Entrepreneurship.

The Member Secretary then briefed the members about the agenda of the meeting, and appraised all the members about the progress made till date by CDOE and CIQA towards preparations for launch of ODL & OL programs. The following agenda items were discussed and deliberated upon:

ITEM No 1: CONFIRMATION OF THE MINUTES OF ACADEMIC COUNCIL STANDING COMMITTEE MEETING HELD ON 23 Sept 2022

(Member Secretary)

The Minutes of the Academic Council Standing Committee Meeting were confirmed by the members of the Academic Council as there were no observations received on the circulated minutes.

ITEM No 2: STATUS ON THE READINESS FOR APPLYING FOR ODL AND OL PROGRAMMES ON UGC-DEB PORTAL

(Director CDOE)

The Director, CDOE informed the members regarding the progress and readiness of CDOE to upload the data on UGC DEB portal from 15th March 2023. It was informed that the SLM contents for 4 semesters (ODL programmes) and 3 semesters (OL programmes) have been prepared in-house for the BBA and B.Com programs as per University Grants Commission (Open and Distance Learning Programmes and Online Programmes) Regulations, 2020. The course structure has already been approved in the previous Academic Council Meeting held on 23rd September 2022. The detailed programme with course and credit framework has been approved by the **Board of Studies** held on **06 March 2023** and placed at **ANNEXURE-I**. It was presented that each 4-credit course consists of 4 Units having 20 topics, 20 PPTs, 20 Videos, 2 Assignments and quizzes. The quality of ELM developed by faculty members was checked by Quality Assurance Cell (QAC) in accordance with the UGC guidelines of four quadrant approach, and was approved by Academic Council for all the courses. The approved course list for uploading on UGC-DEB portal is presented in **ANNEXURE-II**.

The Self Learning Material (SLM) along with PPTs and the recording of video lectures has been completed. It was brought out that 80% content for ODL and OL programmes have been developed in-house; whereas 20% courses are offered in the MOOCs form through SWAYAM platform (ANNEXURE-III presents the details and link of MOOCs courses). The contents prepared had already undergone quality check by duly constituted Quality Assurance Cell (QAC) before presenting in the Academic Council.

The Academic Council approved the content developed for BBA and B.Com programs to be offered in the ODL & OL modes.

The Academic council was informed that a dedicated URL www.ncuonline.edu.in has been created by IT cell, NCU. It was decided to use CANVAS LMS for all the programs offered by CDOE, since it has a built-in discussion board and assessment section suitable for offering programs using the 4-quadrant approach.

ITEM NO 3: APPROVAL OF NEW PROGRAMMES

(Dean Academic Affairs)

The Dean (Academic Affairs) of The NorthCap University proposed the following new programmes to be offered from the AY 2023-24, under various departments:

- B.Sc (Sound Engineering)
- B.Sc (Visual Communication)
- B. Sc (Visual Effects and Animation)
- BCA (Game Development)
- BCA (Media and Information Technology)

The detailed course curriculum needs to be approved by the respective Board of Studies for approval in the next Academic Council Meeting.

ITEM NO 4: ANY OTHER RELATED AGENDA WITH THE PERMISSION OF THE CHAIR.

The Academic Council advised the Director, CDOE to comply with all the statutory requirements laid down in the University Grants Commission (Open and Distance Learning Programmes and Online Programmes) Regulations, 2020, and complete the process of data uploading on the UGC-DEB portal within the stipulated timelines.

The meeting ended with the vote of thanks to the chair.

Cmde. Diwakar Tomar (Retd.)

Registrar (Member Secretary)

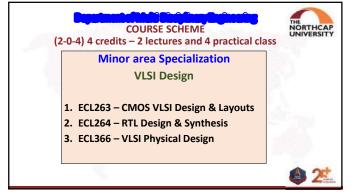
Academic Council, NCU





4

1



Minor area Specialization in VLSI Design Need



- VLSI Design domain has a very high demand and is being promoted greatly by the Government of India since few years.
- Lucrative packages (Starting Salary Package Offered to a UG fresher upto 16LPA) in these
 industries are a dream of many.
- There is a shortage of skilled persons in this domain. Enhancement of VLSI design skills is the only solution to fill the gap between demand and supply and to make this dream of lucrative packages a reality.
- Department of MDE has been running VLSI Design specialization for BTech ECE students for 5 years.
- As per the admissions trend in NCU, we propose to skill BTech CSE students in VLSI design skills to open up opportunities for these students on VLSI front as well.
- Technical knowledge of VLSI Design along with strong command on programming and data structures will make them good candidates for a VLSI industry.
- Opportunities are increasing for students of CSE background, if they have strong fundamentals of Digital Electronics and preferably have the knowledge of CMOS VLSI/Verilog/System Verilog etc.



Minor area Specialization in **VLSI Design USP & Highlights**



• Highest paying industry since years

5

- Year wise increment is highest among all industries.
- Once entered, the person has Learning /exposure like a private job and Job security like a Govt. job.
- NCU Students are getting placed in good VLSI companies in India and abroad at very good packages since more than a decade





6

Minor area Specialization in **VLSI Design Short Syllabus**



Pre-requisite - Digital Electronics & Computer Architecture

1) ECL263 - CMOS VLSI Design & Layouts (2-0-4) 4 credits

VLSI design styles, MOS transstor, Enhancement and Depletion MOS transstors, Threshold \(\) Modeling, MOS transstors, Threshold \(\) Modeling, MOS transstors, Threshold \(\) Modeling, MOS together, and the state of the stat

2) ECL264 - RTL Design & Synthesis (2-0-4) 4 credits
The Verliog HDL constructs are being used in sophisticated digital system designs. It starts for concepts to the more complex. The Verliog constructs interprets a design at various design is concept to the more complex. The Verliog constructs interprets a design at various design is being automation with Verliog. Design with Verliog, Combinational circuits in Verliog, Evaluential Language utilities, Test methodologies. The Logic Synthesis using Verliog HDL covers how to write desirable characteristics with a focus on common pitfals in the development of synthesis used.



Minor area Specialization in VLSI Design **Short Syllabus**



3) ECL366 - VLSI Physical Design (2-0-4) 4 credits

VISI physical design flow, Introduction to Libraries, Floorplanning, Placement & Routing, Technology File, Design planning, Clock and power planning, Clock tree synthesis, STA Concepts, Configuring the STA Environment, Clock Uncertainty, Clock Latency, Generated Clocks, Constraining Input Paths, Constraining Duttut Paths, Timing Verification, Setup Timing Check, Hold Timing Check, Multicycle Paths, Physical Verification, DRC, LVS, ERC



COURSE SCHEME



Minor area Specialization

Internet of Things

- 1. ECL479 Introduction to IoT
- 2. ECL481 Fundamentals of Cloud Computing
- 3. ECL352 Design for IoT



Minor area Specialization in **Internet of Things** Need



- If you think that the internet has changed your life, think again. The Internet of Things is about to change it all over again!" as said Mr. Brendan O'Bren, Chief Architect Co-bunder of Aria Systems, clearly sums up the story about the future and rightly explains why all this hype around the internet of Things.
- The IoT is when everyday products such as refrigerators, watches, speakers and more connect to the internet and to one another. B-Tech CSE with minor in Internet of Things(IoT) offers students with theory and practice to enable them to understand and implement IoT-based applications.
- The curriculum lays the foundation of IOT fundamentals covering all major three distinct stages
 - 1. Sensors which collect data (including identification and addressing the sensor/device)
 - 2. An application which collects and analyzes this data for further consolidation
 - 3. Decision making and the transmission of data to the decision-making server
- Analytical engines and Big data may be used for the decision making process.

9

With our regular industry-academia interaction, we provide appropriate tools, solutions and recommendations for understanding of Internet of Things (IoT)





10

Minor area Specialization in **Internet of Things USP & Highlights**



- Industry-oriented curriculum which enables the students prepare for technical careers in developing IoT applications with emphasis on various sensors, IoT Protocols, cloud infrastructure, performance and security in IoT, Hardware interfacing, kind of distributed system needed to support them.
- IoT design considerations, constraints and interfacing between the physical world and device.
- Integration of Artificial Intelligence, Big Data and IoT concepts to handle more tasks and make autonomous decisions.
- Provides a sound understanding of IoT Cluster network, responsive web design, system to communicate with external hardware and sensors.
- Industry aligned curriculum, designed by Industry Experts.
- · Well-trained and qualified faculty.
- Project Guidance & Mentoring by Industry Experts.
- Blended Learning 24 * 7.
- Well Equipped Labs for hands on learning.





Minor area Specialization in **Internet of Things Short Syllabus**

1) ECL479 - Introduction to IoT (2-0-4) 4 credits

Introduction to microcontrollers, difference between microprocessors and microcontrollers, classification of microcontrollers, their applications, Introduction and definition of Internet of things, IoT growth, Application areas, characteristics, IoT Stack, Baseline technologies, Communication protocols, Overview of Atmega 328P microcontroller & Node MCU, Interfacing digital & analogs sensors, display modules and actuators with Arduino Uno, posting data on cloud, creating a webserver, posting data on web page, interfacing modules like GPS, GSM and Bluetooth with node MCU, Raspberry Pi basics and programming in python, interfacing HaT, Camera module, display modules and sensors with Raspberry Pi.

2) ECL481 - Fundamentals of cloud computing (2-0-4) 4 credits

Parallel and Distributed System Models, Cloud & Fog enabling technologies, Cloud Platform Architecture, Service Oriented Architecture, Cloud Programming and Software environments, Performance Scalability and Consistency





Minor area Specialization in **Internet of Things Short Syllabus**



3) ECL352 - Design for IoT (2-0-4) 4 credits

Through this course, a high level view of IOTs, design of smart objects that provide collaboration and ubiquitous services will be explored. Architecture and configuration of Raspberry Pi, ESP32. Design and interfacing with Raspberry Pi and ESP32. RTOS, IOT Protocols, Messaging and Transport protocols, Wireless interfaces, and Design of Arduino Libraries and functions.





COURSE SCHEME (3-1-0) 4 credits - 3 lectures and 1 tutorial class **Minor area Specialization** Sustainability 1. CEL403 - Introduction to Sustainability 2. CEL404 - Professional Skills in Sustainability Practices 3. CEL405 - Society and Sustainability

Minor area Specialization in Sustainability Need



- Countries have been given targets for NET ZERO CARBON EMISSIONS and have specified strategies to attain sustainability.
- Certification can play an important role in enabling the existing regulatory system to adapt and support innovation.
- Under Corporate Social Responsibility (CSR), industries and companies are embedding sustainability concepts in their vision, mission and strategies.
- Companies are aiming for more sustainable designs and it is becoming a mandate to maintain sustainability standard books.
- · To fulfil the same, industry need sustainability taskforce having the basic understanding of these concepts.





14 13

Minor area Specialization in Sustainability **USP & Highlights**



- · This consists of 3 courses of 4 credits each and shall help a student to gain a broader understanding in the area of sustainability beyond the major discipline.
- The three courses can be proposed as an open elective and upon the successful completion of all the three courses, students shall be awarded with a certificate
- · Industry exposure shall be provided through expert sessions.

15

· Capstone project in collaboration of industry/ Cintana alliance universities.



16

Minor area Specialization in Sustainability **Short Syllabus**



1) CEL403 - Introduction to sustainability (3-1-0) 4 credits

This course introduces the academic approach of Sustainability and explores how today's human societies can endure in the face of global change, ecosystem degradation and resource limitations. The course focuses on key knowledge areas of sustainability theory and practice, including population, ecosystems, global change, energy, environmental economics and policy.

2) CEL404 - Professional skills in sustainability practice (3-1-0) 4 credits

Effective and compassionate communication for students, Complex problem solving, critical thinking and creativity-based teamwork. Project management tools to achieve quality product, innovation for improvisation using self-directed approach of students. Practicing professional skills in sustainability-based projects.



Minor area Specialization in Sustainability **Short Syllabus**



3) CEL405 - Society and Sustainability (3-1-0) 4 credits

This course discusses about need of sustainability for society, concept of sustainable cities through case studies, challenges in achieving sustainability using case studies, social dimensions involved in sustainability challenges, study of response of society towards sustainable development, concept of low carbon economy. Concepts of ESG and circular economy, CSR.







COURSE SCHEME

(3-0-2) 4 credits - 3 lectures and 2 practical class

- 1. MEL613-IP Project Management
- 2. MEL421 Project Leadership, Strategy and Scope
- 3. MEL422 Business Agile Project Management





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Minor area Specialization in **Project Management** Need





- As Per PMI, Project managers are versatile: IT field, business services, oil and gas, finance and insurance, manufacturing, construction, and utility industries—all over the world.
- High Salaries for project managers are highly competitive.
- According to Glassdoor, the national average <u>entry-level project manager salary</u> is \$59,680. Varied tasks and skills.
- There are plenty of opportunities for advancement. Project managers make a direct impact not only on morale but the company's bottom line.
- In addition to the lucrative salaries, that's a fairly nice reward. Project managers are always learning. For those who embrace change and love seeing what's new.
- Source: www.simplilearn.com

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- Inventory management: Managing inventory levels is essential to ensuring that a business has the right products available at the right time. Effective supply chain management can help businesses optimize their inventory levels to reduce the risk of stockoust or overstocking.
- Interiory levers to treude the risk of succours of overstanding.

 Logistics management: Logistics involves the movement of products from suppliers to customers, including transportation, warehousing, and distribution. Effective supply chain management can help businesses optimize their logistics operations to reduce costs and improve delivery times.
- Supplier management: Suppliers are a critical part of any supply chain, and managing relationships with suppliers is essential to ensuring a reliable and consistent supply of products. Effective supply chain management can help businesses select the right suppliers, negotiate favorable terms, and manage supplier performance.
- performance.

 Risk management: Supply chain disruptions can have a significant impact on a business, so effective supply chain management involves identifying and managing risks. This can include identifying alternative suppliers, developing contingency plans, and monitoring supply chain performance.

 Customer service: Ultimately, supply chain management is about delivering products to customers. Effective supply chain management can help businesses improve customer service by ensuring that products are delivered on time, in good condition, and with accurate tracking and communication.



Minor area Specialization in **Project Management**



Project Management
Short Syllabus

1) MEL613-IP - Project Management (30-02) 4 credits

Project Management Framework: Introduction, Definition of a Project Asilent Features of P5 (Projects, Programs, Porfolio, Processes and Products), Project Management Office (PMO), The Triple Constraints (Six in number): Stakeholder management, Organisation structure- Types and analysis; Project Life Cycle vs Project. Management Process: Introduction, Project Life Cycle vs Project. Management Process: Introduction, Project Life Cycle vs Project. Management Process: Introduction, Agenda for the session, Development of a Project Charles and its Key role, The key role of Project Management process are six sey role, The key role of Project Management project Times and project Sponsor Project Selection methods and Challenges, Benefit measurement and methods, Constrained optimization methods; Economic models, Nine management plans overview, The Integration Management Knowledge, Area Processes, Direct and Management Project Times Management Management





Minor area Specialization in **Project Management**



Project Management
Short Syllabus

2) MEL421 - Project Leadership, Strategy and Scope (3-0-2) 4 credits

Project Quality & Scope Management: Project Quality Management: Introduction, What is Quality Management and the key roles involved?, Quality Theorists and marginal analysis technique, Introduction to Six Sigma, The Project Quality Management Processes, Plan Quality, Perform Quality Assurance, Perform Quality Control, Seven Basics tools of Quality, Statistical sampling and few sample cases studies, Cost of Quality, Modern Theory, Product Scope, Enk Evel terms in Project Control Scope of Statistical Sampling and few sample cases studies, Cost of Quality, Modern Theory, Product Scope, St. Project Scope, Enk Evel terms in Project Human Resource Management Scope, Validate Scope, Control Scope Project Human Resource Management Human Resource Management Roles and Responsibilities of the Project Sponsor, Team and Stakeholders, Functional Manager Vs. Project Management Problem Soving Process, Develop Human Resource Plan, Acquire Project Team, Develop Project Team, Management Ender Management Project Communication Management Introduction to Communication Management Communication Management Rowelded Area, Plan Communication Management Knowledge Area, Plan Communication Management Knowledge Area, Plan Communication Management Rowelded Rea, Plan Communication Management Rowelded Read Responsibility Resurted Read Responsibility Resurted Read Responsibility Resurted Read Responsibility Resurted Read Resp





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Minor area Specialization in **Project Management Short Syllabus**



3) MEL422 - Business Agile Project Management (3-0-2) 4 credits

3) MEL422 - Business Agile Project Management (3-0-2) 4 credits
Project Stakeholder Management Introduction to Project Stakeholder Management, Importance of Stakeholder Management, Stakeholder Identification and Register, Stakeholder Classification and Analysis, Stakeholder Management Best Practices, Project Stakeholder Management Brocesses, Identify Stakeholder, Plan Stakeholder Management Management Stakeholder Engagement Project Procurement Stakeholder Engagement Project Procurement Management Introduction to Project Procurement Management, What is a Contract; Centralized Vs. Decentralized Contracting, Different types of Contracts and Comparison, How to choose contracts: A few sample case studies, Key terms in Procurement Management, Knowledge Area, Plan Procurements, Conduct Procurements, Administer Procurements, How is risk calculated, Utility Theory Introduction to Risk Categorization, Decision Tree, Risk Reserve Analysis, The Risk Management Knowledge Area Processes, Plan Risk Management, Identify Risk Perform Qualitative and Quantitive Risk Analysis, Perform Risk Analysis, Plan Risk Management Misk Analysis, Plan Risk Management Misk Monte Carlo Simulation and Sample Case Studies for Project Risk Management





COURSE SCHEME (3-0-2) 4 credits – 3 lectures and 2 practical class



Minor area Specialization

Supply Chain Management

- 1. MEL630-IP Fundamentals of Supply Chain Management
- 2. MEL423 Advanced Supply Chain Management
- 3. MEL424 Integrated Logistics Strategy and Supply Chain Performance



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Minor area Specialization in **Supply Chain Management** Need



- Supply Chain Management (SCM) has grown significantly in recent years due to the globalization of businesses and the need for efficient and effective supply chains.
- obsinesses and the need to elinicent and elineuve supply claims.

 In India, the SCM industry is expected to be at 32.5 billion by 2025, and a CAGR of 12.9%, driven by the increasing demand for SCM services from industries such as manufacturing, retail, healthcare, and others (Source: Khatabook).
- Supply Chain Management is the backbone of the Indian economy.
- It is important to build India's Supply Chain Competitiveness [Confederation of Indian Industries (CII)]. Asia's share in the world GDP exceeds that of the European Union & the US.
- snare in the world GDP exceeds that of the European Union & the US.

 Being the fastest-growing economy of the world, over the past 2 years, China & India contributed 73% to Asian growth and 38% to the World GDP growth [Source, Resilient Leadership & Change Masters]. Based on projected GDP growth of 8 percent per annum, the total freight traffic is likely to reach about 5,500 billion tonnie him by the year 2025, they times the level in the year 2026, they times the level in the year 2020, they times the level in the year 2020, they should be supported to the year 2020 on the percentage of the year 2020 on the ye
- Business leaders are yet to implement a robust technology solution in SCM with 85% of them expressed that they struggled with inefficient digital technologies in their supply chains [Source: Amercian Express].



Minor area Specialization in **Supply Chain Management USP & Highlights**



- Inventory management: Managing inventory levels is essential to ensuring that a business has the right products available at the right time. Effective supply chain management can help businesse optimize their inventory levels to reduce the risk of stockouts or overstocking.

 Logistic management: Logistic involves the movement of products from suppliers to customers, including transportation, warehousing, and distribution. Effective supply chain management can help businesses optimize their logistics operations to reduce costs and improve delivery times.
 Supplier management: Suppliers are a critical part of any supply chain, and managing relationships with suppliers is essential to ensuring a reliable and consistent supply of products are consistent supply of products.
 Supplier management: Suppliers is essential to ensuring a reliable and consistent supply of products are consistent supply of products.
 Supplier performance.
- Risk management: Supply chain disruptions can have a significant impact on a business, so effective supply chain management involves identifying and managing risks. This can include identifying alternative suppliers, developing contingency plans, and monitoring supply chain performance.
- Customer service: Ultimately, supply chain management is about delivering products to customers. Effective supply chain management can help businesses improve customer service by ensuring that products are delivered on time, in good condition, and with accurate tracking and communication.





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Minor area Specialization in **Supply Chain Management Short Syllabus**



Pre-requisite if any: For Advanced Supply Chain Management: Fundamentals of Supply Chain Management/ Integrated Logistics Strategy and Supply chain Performance Measurement (Either of the two courses) is a pre-requisite.

1) MEL630-IP - Fundamentals of Supply Chain Management (3-0-2) 4 credits

1) MEL630-IP - Fundamentals of Supply Chain Management (3-0-2) 4 credits

Concepts, Structure, and Overview. Importance of SCM and Enablers, Supply chain
Performance in Indian Context. Types of Supply Chains, Improving the Supply chain
Performance. Analysis and Material Flow through Supply Chain: Modes of Transportation.
Managing Information flow in Supply Chains: Bullwhip Effect. Supply chain Integration
Strategies. Supply Chain Restructuring: Postponement, strategy, Advancement of Custome
Ordering Point, Change in Shape of Value-Addition Curve. Restructuring of Supply Chain
Architecture. Introduction to Agile Supply Chains. Introduction to Green/Reverse Supply Chain.
Case studies Services and Supply Chain Management: Scope of supply chain management and
application to services, Comparison of traditional and service-based supply chain management.
Economic and societal trends driving services. Role of IT in Supply chain Management.





Minor area Specialization in **Supply Chain Management Short Syllabus**



2) MEL423 - Advanced Supply Chain Management (3-0-2) 4 credits

2) MEL423 - Advanced Supply Chain Management (3-0-2) 4 credits

Demand and Inventory: Demand Forecasting methods. Introduction to Inventory
Management, Types of Inventories, Just-in-Time Strategy, Inventory Models, Estimation of
Inventory-related cost parameters. Need for Selective Inventory Management, Pareto's Law of
Maldistribution, ABC Analysis, VED Manalysis, ABC-VED Matrix and Service levels, FSN Analysis,
GOLF Analysis, Strategies to select Appropriate Inventory Models. Just-in-Time and Lean
Supply Chain Management. Materials Planning Under JII Environment, Key requirements for
Supply Chain Management. Materials Planning Under JII Environment, Key requirements for
Management. Strategies for Inventory Reduction in Lean Supply Chain. Storage: Functions of
Storage and Warehousing, Performance indicators for Efficient stores Management, Storage
Methods, Units of Issue: Bulk V/s Item Control, Physical Stock Verification: The need, Process
and Control Measures, Stock Accounting methods. Warehousing: Warehouse Management
System, Freight Consolidation & Forwarding, Storage - Picking, Put away, and Cross Docking,
Warehouse location Planning, CFS, ICD, Dry Port Operations, C & F Operations, Yard
Management, Insurance, Supplier Relationship Management, Customer Relationship
Management, Green Logistics.



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Minor area Specialization in Supply Chain Management Short Syllabus



3) MEL424 - Integrated Logistics Strategy and Supply chain Performance Measurement (3-0-2) 4 credits

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(3-0-2) 4 credits
Logistics, Material Handling and Packaging: Functional perspective on logistics measures, Direct reflection of logistics performance, Measurable benefits of using third party logistics provider (SPL). Success factors in optimal 3PL relationships. Material handling systems and the role of packaging, Overview of handling technologies, the rationale and impact of packaging in the supply chain. Transportation Management: Review transportation basics: functionality, modal structure, and participants, Evaluate transportation economy and its impact on pricing. Explore transportation administration practices and key documentation. Introduction to National Logistic Policy 2022. Performance Measurement: Benchmarking, assessment and analysis practices, six specific measures providing insight into supply chain operations, accounting tools critical to overall performance of the supply chain. Supply Chain Risk Management: Evolving responsibilities of supply chain professionals, Examples of security best practices, Six Dimensions of a sustainable supply chain strategy, Changing dynamics of supply chain management.





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Minor area Specialization in Nanotechnology Need



- This module's primary objective is to introduce students to nanoscale science and its ramifications.
- Students from a variety of academic fields will find this session interesting since it will provide them the chance to consider critically how this emerging technology may affect a variety of facets of our life
- The connections between the basic sciences of physics, chemistry, and molecular biology as well as real-world applications in industries like biotechnology and materials engineering will also be taught to them.





Minor area Specialization in Nanotechnology

COURSE SCHEME

(3-0-2) 4 credits - 3 lectures and 2 practical class

Minor area Specialization

Nanotechnology

1. PYL321 - Nanotechnology - Principles and Application

PYL322 – Advanced Nanotechnology
 PYL323 – Nanotechnology: Beyond the Basics



- USP & Highlights

 How can we create nano-structures that are 10,000 times smaller than the diameter of a human hair?
- How can we "see" at the nano-scale?
- Through instruction and lab demonstrations, in this course you will obtain a rich understanding of the capabilities of nanotechnology tools, and how to use this equipment for nanoscale fabrication and characterization.



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Minor area Specialization in Nanotechnology **Short Syllabus**



otechnology- Principals and Applications: 4 Credit Course (3-0-2)

Students are introduced to the core concepts of nanotechnology in this course, which also covers the methods and procedures used for the synthesis and characterization of nanomaterials, as well as the physical and chemical characteristics of materials at the nanoscale. The course will cover a variety of subjects, such as the different types of nanostructures, their characteristics and behaviour, and how they are used in industries including electronics, optics, energy, and biology.

Introduction to Nanotechnology.

Nanostructures

- Synthesis of Nanostructures/Nanomaterial's
 Characterization of Nanostructures
- · Applications of Nanotechnology





Minor area Specialization in Nanotechnology **Short Syllabus**



2) PYL322-Advanced Nanotechnology: 4 Credit Course (3-0-2)

The advanced issues in nanotechnology are covered in this interdisciplinary course, which expands on the core concepts of the subject. Students are introduced to the core concepts of nanotechnology in this course, which also covers the methods and procedures used for the synthesis and characterization of nanomaterial's, as well as the physical and chemical characteristics of materials at the nanoscale.

- Properties of Nanostructures
 Advanced Nanostructures
 Optical and Luminescence Properties of Nanomaterial's
- Synthesis and Characterization of Nanomaterial's
- · Nano electronics and Nano mechanics



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Minor area Specialization in Nanotechnology **Short Syllabus**



3) PYL323-Nanotechnology: Beyond the Basics: 4 Credit Course (3-0-2)

Design, manufacturing, and use of materials and devices with nanoscale structures and properties are the focus of the rapidly expanding science and engineering subject known as nanotechnology. At this scale, materials display special characteristics that set them apart from their bulk counterparts. These characteristics can be used to develop novel materials, gadgets, and systems with unheard-of features and capabilities.

- Functional Nanomaterial's
- Hybrid Nanomaterial's
- Nanolithography
- Introduction to Nanocomputer Architectures
- Nanoscale Devices



1. PCL332 - Stress Management

2. BSL655 - Leadership: Past, Present & Future

3. BSL665 – Cross Cultural HRM & Inclusive Workplace Management

COURSE SCHEME

(3-1-0) 4 credits - 3 lectures and 1 tutorial class

Minor area Specialization

People Management



THE NORTHCAP UNIVERSITY

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Minor area Specialization in People Management Need



- Courses under People Management can help a student develop a strategic approach to leadership, recruitment, training, analysis, managing stress and every other intricacy of HR.
- Moreover, students will gain exposure to the design, process, and execution of such strategies in a global scenario.
- Students will learn about Create, Comprehend, Communicate, Collaborate, and Confront. These are the framework for a successful approach to people management.





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Minor area Specialization in People Management USP & Highlights



- The courses are industry-oriented and strengthens the standardizing practicalities.
- Cutting Edge Curriculum.
- · People Management enables the students to understand all stakeholders.



Minor area Specialization in People Management Short Syllabus



1) PCL332-Stress Management (3-1-0) 4 credits

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This course will help student understand the causal factors of stress, the consequences of stress and the measures to reduce stress with an overall objective to empower them with the means to tackle the stressful situations and times of personal as well as professional life.

2) BSL655-Leadership: Past, Present & Future (3-1-0) 4 credits

Leadership Fundamentalis; Evolution of the Leadership Concept; Traits Approach to Leadership; Skills Approach to Leadership; Behavioural Approach to Leadership and Situational/Contingency Approach to Leadership, Servant Leadership, Servant Leadership, and Adaptive Leadership, Psychodynamic Approach; Leadership Ethics; Team Leadership; Gendar and Leadership and Culture and Leadership. VUCA Suited Leadership Traits, Attributes and/or competencies.





Minor area Specialization in People Management Short Syllabus



3) BSL665-Cross Cultural HRM & Inclusive workplace management (3-1-0) 4 credits

Recent definitions concern IHRM with activities of how MNCs manage their geographically decentralized employees in order to develop their HR resources for competitive advantage, both locally and globally. The role and functions of IHRM, the relationship between subsidiaries and headquarters, and the policies and practices are considered in this more strategic approach. IHRM is also defined as a collection of policies and practices that a multinational enterprise uses to manage local and non-local employees it has in countries other than their home countries.





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Minor area Specialization in Law and Technology Need



- The need for interdisciplinary education is captured succinctly in the National Education Policy, 2020.
- The minor specialization is designed to chiefly assist the engineering students to expand their perspective. For instance, whenever a new software or technology is developed it will inevitably raise questions of data capturing and legal principles surrounding it.
- Commercialization of the software would mandate a basic understanding of Intellectual Property legal regime.
- Yet another important aspect of legal compliance is law relating to digital forensics.
- The courses are carefully chosen from three diverse areas of law to namely Constitutional Law, Intellectual Property Rights Law, and Criminal Law.





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Minor area Specialization in Law and Technology USP & Highlights



- Inter-disciplinary perspective on law and technology
- The courses are industry-oriented and strengthens the normative foundations
- Cutting Edge Curriculum
- Opportunity to analyse technology policy and know-how from legal perspective.



Law and Technology Short Syllabus



1. LBL110 - Privacy Law (3-1-0) 4 credits

The course is built around various concept of privacy with a special emphasis on privacy and data protection issues that are a constant companion to technology. The course begins with a basic understanding of what and why of privacy and its consequent translation into legal right. The course further delves into the Indian landscape of privacy covering its various facets and reasonable restrictions that can be imposed. Thereafter, particular issues of Data Protection, Data Localization and Data Decentralization including concepts like blockchain technology, biometric technology, cross-border server storage, and gender privacy and cyberspace associated with it would be examined. Any technology developed cannot be sustained without adequately factoring into account privacy issues and data protection concerns of the end-users.

Minor area Specialization in





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Minor area Specialization in Law and Technology **Short Syllabus**



2. LBL120 - Intellectual Property and Technology (3-1-0) 4 credits

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Intellectual Property and Technology Law is one of the most important core sectors of any business. It deals with some of the most critical legal areas like protection of technologies, brands, products etc. of a company. This field is one of the fastest-growing techno-legal sectors throughout the whole world. This also includes the copyright protection of every single thing manufactured, released or showcased by a company. The students, through this course will be able to expand their career options in legal fields related to business. All types of companies today are looking for legal advisors for their work protection, and this course would help the students to open a path for different types of career paths.





Minor area Specialization in Law and Technology **Short Syllabus**



3. LBL130 - Digital Forensics and Law (3-1-0) 4 credits

3. IBL130 - Digital Forensics and Law (3-1-0) 4 credits
The use of computers in committing crimes have become a common phenomenon and the law enforcement agencies have started using computers to fight against such crimes through digital forensics. Law enforcement agencies are integrating the collection and analysis of digital evidence, also known as computer forensics, into their infrastructure to combat e-crime and gather pertinent evidence for all types of offenses. Keeping up with fast-evolving technologies such as computer operating systems presents a challenge for these agencies, as they need to train their officers to efficiently collect digital evidence. This course on digital forensics and law provides students with an in-depth understanding of the legal and technical aspects of digital oriensics. Students will explore the principles of digital evidence collection, preservation, and analysis, as well as the legal implications of this evidence in various legal settings. Topics covered include the rules of evidence, search and seizure, data recovery, network and email investigations, and electronic discovery. Through lectures, case studies, and hands-on exercises (use of open-source forensic tools), students will develop practical skills in digital forensic investigation and gain a solid foundation in the legal framework surrounding digital evidence.





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COURSE SCHEME



(3-1-0) 4 credits - 3 lectures and 1 tutorial class

Minor area Specialization Business Law

- 1. LBL140 Law of Contracts
- 2. LBL150 Competition Law & Practice
- 3. LBL170 Corporate Law



Minor area Specialization in **Business Law** Need



- The need for interdisciplinary education is captured succinctly in the National Education Policy.
- The minor specialization is bundled to augment the finer legal skills in students to build
- Business managers who possess knowledge regarding business laws can tackle a variety of legal issues and make better judgment calls once they understand the crux of the matter.
- They are capable of managing decision making roles on a day-to-day basis without constant help from the legal department.
- It helps managers understand business ethics and how to run an authentic and proper



Minor area Specialization in **Business Law USP & Highlights**



- Awareness of legal environment in which businesses operate
- Sounding understanding of legal principles governing contract
- Understanding legal expectations of product and services offered to end-consumers either physically or virtually
- Enhanced legal competence of students.





Minor area Specialization in **Business Law Short Syllabus**



1. LBL140 - Law of Contracts (3-1-0) 4 credits

In day-to-day life every individual makes a variety of promises. Every promise gives rise to an expectation in the minds of other party that, the promisor would perform certain obligation and fulfil the promise towards him/her. However, all promises are not enforceable by law. Only those promises which are meant for enforcing through law are termed as contracts. The law of contract is a branch of law which deals with regulation of all types of promises which are meant to be enforced through law. In India, the general principles of contract laws are codified under the Indian Contract Act, 1872. This course is designed to acquaint a student with the conceptual and operational parameters of various general principles relating to contract law. It aims to equip the students with the basics of contract law so as to enable them to deal effectively with the various disputes related to contracts.





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Minor area Specialization in **Business Law Short Syllabus**



2. LBL150 - Competition Law & Practice (3-1-0) 4 credits

Competition plays a key role in ensuring productive, efficient, innovative and responsive markets. It is recognized that through free and fair competition the consumers are ensured availability of goods and services in abundance of acceptable quality at affordable prices. This course is designed to give students a thorough understanding of the Competition Law in India with related case studies to understand the economics of law.



Minor area Specialization in **Business Law**

Short Syllabus



3. LBL170 - Corporate Law (3-1-0) 4 credits

This course conventionally deals with The Companies Act, 2013 which mainly governs the rules and regulations of setting up of the company. The importance of incorporation of a company is accompanied with its constitutional documents like Prospectus, Memorandum of Association and Articles of Association. The course contains Rights and Duties of Promoters and Directors. It will highlight the Importance of corporate social responsibility of the companies and the consequences of winding up of the companies, present course will cover a study of importance of control to the companies of adjudicatory body governing company law. The course is designed to impart the fundamental notions of consumerism, rights of consumer and dispute resolution mechanism.



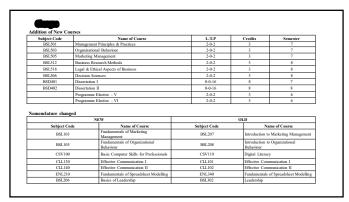










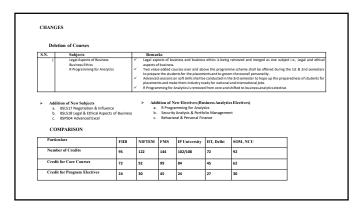


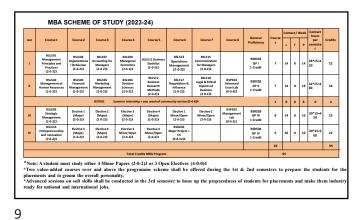
| Course Code | Course Name | 2 | | | Old | New |
|----------------------------|---|-----|---|--------------|-----|-------------|
| BSL103 | Fundamentals of Marketing Management | | | | 3 | 1 |
| BSL105 | Fundamentals of Organizational Behavior | | | | 4 | 1 |
| CLL130 | Effective Communication I | | | | 1 | 2 |
| CLL140 | Effective Communication II | | | | 2 | 3 |
| BSL101 | Entrepreneurship | | | 2 | 3 | |
| BSL104 | Introduction to Human Resource Management | | | | 3 | 2 |
| CML110 | Communication and Documentation in Business | | | | 1 | 3 |
| CML107 | Introduction to Banking | | | 2 | 3 | |
| | Category | | | redits CU | | edits FP |
| Programme Core | | 78 | | 80 | N | EP |
| Ability Enhancement | | 15 | | 8 | | |
| Summer Internship + Mino | r Project | 13 | 8 | | | 2.4 |
| Project/ Dissertation | | 22 | - | 12 | | |
| Skill Enhancement | | 8 | + | 9 | | |
| General Proficiency | | 6 | | - | | |
| Program Electives | | 18 | | | | 32 |
| Open Electives/Multidiscip | linary | | 9 | | 9 | |
| Community Service | | 6 | | - | | |
| Total Credits | | 170 | | 160 | | |

| Semester | | | Semester Con | rse Code, Course Name (I | L-T-P) Credits | | | Community Service | GP | | Her. | | Contact Hours per Sem | Cr |
|----------|---|--|---|--|---|---|---|--|------------------------------|----|------|-----|--------------------------|----|
| 1 | BSL002 Principles of Management (2-0-2)3 | BSL103 Fundamentals of Marketing Management (2-0-213 | CML101 Professional Accounting (2-0-2)3 | CML109 Business Laws (2-0-2)3 | BSL105 Fundamentals of Organizational Behavior (2-0-2)3 | CSV100 Basic Computer Skills for Professionals (9-0-6)2 | CLL120 Human Values & Professional Ethics (2-0-0)2 | BSS101 CS-I | BSR101 GP-1 1 Credit | 12 | | 14 | 26°15-390 | Ī |
| 2 | CLL130 Effective Comm-1 (1-0-2)2 | CHL100 Environmental Studies (3-0-0)3 | ENLIN2 Principles of Economics (2-0-2)3 | ENLIST Statistics & Research Methodology-1 (2-0-2)3 | BSL104 Introduction to Human Resource Management (2-0-2)3 | CML165 Financial Management- I (2-0-2)3 | | ESS102 CS-II (140 IIrs)* 2 Credit | BSR102 GP-II I Credit | 13 | | , | 22*15-338 | Ī |
| Summers | BST201 Internel | | # OR BSD21 | | (0-0-5)- | | | | | | | | | 1 |
| | | | | EXIT W | THE CERTIFICATE IN BE | SINESS ADMINISTR | RATION | | | _ | _ | | | |
| 3 | BSL201 Fundamentals of Operations Management (2-0-2)3 | BSL204 Fundamentals of Consumer Behavior (2-0-2)3 | CML110 Communication & Documentation in Business (2-0-2)3 | CML208 Financial Management- II (2-0-2)3 | ENL204 Statistics and Research Methodology-II (2-0-2)3 | CLL149 Effective Comm-II (1-0-2)2 | BSL101 Entrepreneurship (2-0-2)3 | RSS201 CS-III | BSR201 GP-III I credit | 14 | | 13 | 27*15~465 | |
| 4 | CML107 Introduction to Ranking (2-0-21) | BSL209 Ecommerce (2-0-2)3 | BSL206 Busics of Leadurship (2-0-2)3 | Open Elective-1 (2-0-2)3 | Programme Elective-I (2-0-2)3 | Foreign Language Elective (1-2-0)3 | | ESS202 CS-IV (140 Hrs)* 2 Gredit | BSR202 GP-IV 1 credit | 11 | 2 | 10 | 23*15=345 | |
| Summers. | | INT301 Sun | mer Interachip | | (0-0-5) | | | | 8 | | _ | - 4 | | т |
| | | | | EXIT V | ATTH UG DILPOMA IN BU | SINESS ADMINISTR | ATION | | | | | | | |
| s | ENL210 Fundamentals of Spreadshort Modelling (2-0-2)3 | BSL303 International Business (2-0-2)3 | BSV301 Creative thinking and Negotiation Skills (2-0-2)3 | BSL301 Business Policy & Strategy (2-0-2)3 | Programme Elective-II (2-9-2)3 | Programme Elective-III (2-0-2)3 | | ESSUE CS-V | BSR301 GP-V 1 credit | 12 | | 12 | 24*15-368 | Ī |
| 6 | BSL384 Investment Management (2-0-2)3 | Programme Elective-IV (2-0-2)3 | Programme Elective-V (2-0-2)3 | Programmo Elective-VI (2-0-2)3 | BSD302 Major Project (0-0-12)6 | | | ESS382 CS-VI (140 Hrs) 2 Credit | BSR302 GP-VI I credit | s | 0 | 8 | 16*15-240 | |
| | | | | EXIT V | OTTH UG DEGREE IN BU | SINESS ADMINISTR | ATION | | | _ | _ | _ | | _ |
| 7 | BSL501 Management Principles & Practices (2-0-2)3 | BSL503 Organizational Behaviour (2-0-2)3 | BSL565 Marketing Management (2-0-2)3 | Open Elective-II (2-0-2)3 | RSD401 Dissertation I (0-0-16)R | | | | | | | | 16*15-240 | |
| | BSL512 Business Research Methods (2-0-2)3 | BSL518 Logal & Ethical Aspects of Business (2-0-2)3 | BSL506 Decision Sciences (2-0-2)3 | Open Elective-III (2-0-2)3 | BSD402 Dissertation II (0-0-16)8 | | | | | s | 0 | | 16*15-240 | |
| | | | | TOTAL | | | 170 | | | | | | | |
| | | | | EXIT WITH HE DECRE | E (HONOURS) WITH RES | EARCH IN BUSINES | S ADMINISTRATION** | | | _ | _ | | | _ |
| ii. The | constity development. University shall conduct | pecial sessions in the 4 | th somester to reinforce th | e learnings of introductor | inforable skills and key pers y training sessions conducts emesters to impart special s | d in the first year. | | | | | | | | |

5









| Shifting of Courses I | om one Semester to another | | | | | |
|--|--|-----------|-----------|-----------------------------|------------------|----------|
| Course Code | Course Name | | | | Old | New |
| CLL130 | Effective Communication I | | | | | 2 |
| CLL140 | Effective Communication II | | | | 2 | 3 |
| CMLI10 | Communication and Documentation in Business | | | | 2 | 1 |
| CSV100 | Basic Computer Skills for Professionals | | | | 1 | 2 |
| | Program Elective I | | | 4 | 5 | |
| | Program Elective III | | | 1 | - | |
| BSL301 | Business Policy and Strategy | | | | 4 | 5 |
| | Foreign Language Elective | | | 3 | 1 | 4 |
| CML206 | Security & Investment Management | | | | 4 | PE |
| Deletion of Courses | | | | | | |
| Subject Code | Name of Course | | L-T-P | | Credits | Semester |
| | Program Elective V | | 2-0-2 | | 3 | 6 |
| Addition of New Cou | rses | | | | | |
| Subject Code | Name of Course | | L-T-P | | Credits | Semester |
| | | | | | 3 | 4 |
| ENI212 | Corporate governance and sustainability | | 3-0-0 | | , | |
| | | | 3-0-0 | | , | |
| ENI212 | | | 3-0-0 | 0 | LD | |
| ENI212 | changed | Subject (| | 0 | | ourse |
| ENI212 Code/ Nomenclature | changed NEW | Subject 6 | Code | O Nigital Lite | LD Name of Co | ourse |
| ENI212 Code/ Nomenclature Subject Code | Changed NEW Name of Course | | Code | | Name of Co | ourse |
| ENI212 Code/ Nomenclature Subject Code CSV100 | NEW Name of Course Basic Computer Skills for Professionals | CSVI | Code 19 1 | Nigital Lite Effective C | Name of Co | ourse |

| ecsect | | | Semester Cou | rse Code, Course Name(L-T-P) Cre | ndits | | | COMMUNITY SERVICE | GP. | 9 | Hrs. er wee | , L | Hours per Semester | Credits |
|--------------------------|---|---|---|--|--|---|---|--|-----------------------------|------|----------------|--------|-----------------------|---------|
| 1 | CHL100 Environmental Studies (8-0-6)8 | RSL 102 Principles of Management (2-0-2)8 | ENLISE Statistics & Research Methodology-I (2-0-2)8 | OMLEG? Introduction to Ranking (2-0-2)3 | OMLIB1 Professional Accounting (2-0-2)3 | CMILIO Communication & Documentation in Business (2-0-2)3 | | CMS101 CS-I | CMR101 GPI 1 Credit | 11 | | 12 | 22*15-245 | 18-1-19 |
| 2 | CLL190 Effective Comm - I (1-0-2)2 | BSLEEL Entrepreneurship (2-0-2)3 | Principles of Economics (2-0-2)8 | CL120 Human Values & Professional Sthics (2-0-0)2 | CSV900 Basic Computer Skills for Professionals (0-0-4)2 | CML109 Business Laws (2-0-2)3 | CML108 Financial Management - (2-0-2)3 | CMS102 CS-II (160 HRS) 2 Credit | CMR102 GP-I 1 Credit | 13 | ۰ | 12 | 25*15-075 | 18-2-21 |
| rs emme | | | | CM0201 I | Minor Project (0-0-8) 4 | | | | 4 | | | | | |
| 3 | CML208 Financial Management -6 (2-0-2)8 | ENLIDE Statistics & Research Methodology -0 (2-0-2)8 | ENLISH Business Mathematics (2-0-2)B | 851203 HRM (2-0-2)3 | 85L209 5-Commerce (2-0-2)3 | CL160 Effective Comm-II (3-0-2)2 | CML202 Fundamentals of Auditing (2-0-2)3 | CMS201 CS-III | CMR201 GP-II 1 Credit | 13 | 0 | 16 | 27*15=405 | 20-1-21 |
| 4 | CM1202 Income Tax & Practice (2-0-2)2 | CMI204 Corporate Accounting (2-0-2)8 | ENL 212 Corporate Governance & Sustainability (2-0-0)8 | 85L207 Introduction to Marketing Management (2-0-2)8 | Foreign Language Sective (1-2-0)3 | Open Elective I (2-0-2)3 | | CMS202 CS-IV (160 HRS) 2 Credit | CMR202 GP-IV 1 Credit | 11 | 2 | 10 | 21*15-205 | 18+3++2 |
| rs rs | | | | CMT201 | Summer Internable | (0-0-6) 4 | | | 4 | | | | | |
| s | CMLSOS Cost Accounting (2-0-2)2 | CMC203 Indirect Taxation (GST) (2-0-2)3 | RSV201 Creative Thinking &Negotiation Skills (2-0-2)8 | Program Elective I (2-0-2)3 | Program Elective II (2-0-2)3 | Open Elective II (2-0-2)3 | Business Policy & Strategy (2-0-2)3 | CMSI01 CS-V | CMR301 GP-V 1 Credit | 12 | | 14 | 26*15-290 | 21+1:22 |
| | CML302 Management Accounting (2-0-2)3 | CME204 Micro Finance (2-0-2)3 | Program Clective II (2-0-2)8 | Program Declive N (2-0-2)3 | Open Elective III (2-0-2)3 | CMD302 Major Project (0-0-12)6 | | CMS302 CS-VI (160 HRS) 2 Credit | CMR202 GP-VI 1 Credit | 12 | ۰ | 12 | 24*15-260 | 21+3:24 |
| | | | | | TOTAL | | | 136 | | | | | | |
| * A v. * Adv jobs. | alue-added course (| over and above the soft skills shall be co | programme schem inducted in the 5 th | semester on soft skills, e shall be offered duri Semester to hope up t | ng the 4th Seme the preparedne | ester to impart spe | cial skills to stude | nts for enhanci | ng their er | nplo | yabi | ility. | | |



| Nomenclat | ure changed | | | | |
|-----------------|-----------------------------|-------------------|--------------|---------|------------------|
| | NEW | | | OLD | |
| Subject Code | Name of Co | urse | Subject Code | | Name of Course |
| CSV100 | Basic Computer Skills for P | rofessionals | CSV119 | | Digital Literacy |
| Deleted Co | ourses | | | | |
| | Name of Course | | | Credits | |
| | PE-V | | | 3 | |
| | | | | | |
| Shifting of C | Courses from one Semo | ester to another | | | |
| Course Cod | le | Course Nan | ne | Old | New |
| CLL101 | Effective Communicat | ionI | | 1 | 2 |
| C1L102 | Effective Communicat | ionII | | 2 | 3 |
| CML110 | Communication and D | ocumentation in B | usiness | 2 | 1 |
| CSV100 | Basic Computer Skills | for Professionals | | 1 | 2 |
| | Program Elective I | | | 4 | 5 |
| | Program Elective III | | | 5 | 6 |
| BSL301 | Business Policy and St | rategy | | 4 | 5 |
| | Foreign Language Elec | tive | | 3 | 4 |
| CML206 | Security & Investment | Management | | 4 | PE |

| Sections | | | Semester Course | Code, Course Name(L | T-P) Credits | | | COMMUNITY SERVICE | a | | lre. week | | Contact Hours per Semester | Credits |
|------------------|---|---|---|--|--|---|---|--|------------------------------|------------|--------------|------|-------------------------------|--------------|
| 200 | | | | | | | | | | L. | T . | ř | | |
| 1 | CHL100 Environmental Studies (3-0-0)3 | BSL 102 Principles of Management (2-0-2)3 | ENLISE Statistics & Research Methodology-1 (2-0-2)3 | CML107 Introduction to Banking (2-0-2)3 | CML101 Professional Accounting (2-0-2)3 | CML110 Communication & Documentation in Business (2-0-2)3 | | CMS101 CS-I | CMR101 GP-1 1 Credit | | | 12 | 23*15-345 | 15+1-19 |
| 2 | CLL130 Effective Comm - 1 (1-0-2)2 | BSL101 Entropeonourship (2-0-2)3 | ENL102 Principles of Economics (2-0-2)3 | CLL120 Hannan Values & Professional Ethics (2-0-0)2 | CSV100 Basic Computer Skills for Professionals (8-8-6)2 | CML109 Business Laws (2-0-2)3 | CML105 Financial Management-1 (2-0- 2)3 | CMS102 CS-II (140 HRS) 2 Credit | CMR102 GP-II 1 Credit | ы | | 12 | 25*15-375 | 18+3=21 |
| Series Series | CMD201 | Minor I | raject (0-0-5)-4 | | | | | | | | | | | 4 |
| 3 | CMI208 Financial Management -II (2-0-2)3 | EN1284 Statistics & Research Methodology -E (2-8-2)3 | ENL104 Business Mathematics (2-0-2)3 | BSL263 IRM (2-0-2)3 | BSL209 E-Commerce (2-0-2)3 | CLL140 Effective Comm-II (1-0-2)2 | CMIL203 Fundamentals of Auditing (2-0-2)3 | CMS201 CS-III | CMR201 GP-III 1 Credit | ы | | 14 | 27*15~465 | 20+1-21 |
| 4 | CML202 Income Tax & Practice (2-0-2)3 | CMI204 Corporate Accounting (2-0-2)3 | ENL 212 Corporate Governance & Santainability (3-8-0)3 | BSL207 Introduction to Marketing Management (2-8-2)3 | Foreign Language Elective (1-2-0)3 | Open Elective I (2-9-2)3 | | CMS202 CS-IV (140 HRS) 2 Credit | CMR292 GP-IV 1 Credit | | 2 | 10 | 21+15-305 | 15+3+=2 1 |
| Sam | CMT301 | Summer he | ornship (0-0-5)-6 | | | | | | | | | | | 4 |
| s | CMI301 Cost Accounting (2-0-2)3 | CML565 Indicact Tauxion (GST) (2-0-2)3 | BSV301 Creative Thinking &Negotiation Skills (2-0-2)3 | Program Elective I (2-0-2)3 | Program Election II (2-0-2)3 | Open Elective II (2-0-2)3 | BSL301 Business Policy & Strategy (2-0-2)3 | CMS301 CS-V | CMR301 GP-V 1 Credit | 12 | | 14 | 26*15-398 | 21+1=22 |
| 6 | CMI362 Management Accounting (2-0-2)3 | CMIJH Micro Finance (2-0-2)3 | Program Electiva III (2-0-2)3 | Program Elective IV (2-0-2)3 | Open Elective III (2-0-2)3 | CMB002 Major Project (0-0-12)6 | | CMS302 CS-VI (140 HRS) 2 Credit | CMR302 GP-11 1 Credit | 12 | | 12 | 24*15-369 | 21+3=24 |
| | | | | | | TOTAL | | | | 136 | _ | | | |
| * 1 | The Universit | ty shall condi | et introducte | ny sessions | in the 1st se | mester on s | oft skills w | hich are a se | et of transfer | ahle skill | s and | Lkon | norconal | traits |

* The University shall conduct introductory sessions in the 1st semester on soft skills, which are a set of transferable skills and key personal traits essential for personality development.

* A value-added course over and above the programme scheme shall be offered during the 4th Semester to impart special skills to students for enhancing their employability.

* Advanced sessions on soft skills shall be conducted in the 5th Semester to hope up the preparedness of students for placements and make them industry ready for national and international jobs.

* Students shall complete the required 140 community service hours across the year.



| | | Nomenclature ch | anged | | |
|--------------|------------------|---------------------------------------|-----------------------|-------------------|---------------------|
| | | NEW | | OI | |
| Subject Code | | Name of Course | Subject code | | Name of Course |
| CLL130 | Effective Comm | | CLL101 | Effective Commun | |
| CLL140 | Effective Comm | | CLL102 | Effective Commun | |
| ENL106 | Intermediate Mis | | ENL205 | Advanced Microec | |
| ENL216 | Intermediate Ma | | ENL207 | Advanced Macroe | |
| ENL210 | | f spreadsheet modelling | ENL340 | | readsheet modelling |
| CSV100 | Basic Computer | skills for Professionals | CSV119 | Digital Literacy | |
| ENL103 | History of Econo | omic Thoughts | ENL201 | History of Econom | ic Thoughts |
| ENL104 | Business Mather | natics | ENL203 | Business Mathema | tics |
| ENL211 | Fundamentals of | f Money and Banking | ENL305 | Fundamentals of N | loney and Banking |
| ENL213 | Mathematical Ec | conomics | ENL336 | Mathematical Ecor | omics |
| ENL215 | Public Finance | | ENL301 | Public Finance | |
| ENL212 | Corporate Gover | nance &Sustainability | ENL302 | Corporate Governa | nce &Sustainability |
| | Changes in Co | ontact Hours and Credits: L-T-P of fo | flowing courses has b | een revisited | • |
| | Code | Subjects | N- | ew | Old |
| E | ND3012 | Major project | (0-0- | -12)6 | (0-0-8)4 |
| E | ND201 | Minor project | (0-0 | 1-8)4 | (0-0-10)5 |
| E | NT301 | Summer internship | (0-0 | 1-8)4 | (0-0-6)3 |
| | | Shifting of Courses from one Sen | nester to another | | |
| | Code | Subjects | N. | cw | Old |
| (| LL130 | Effective Communication I | 7 | II | I |
| - | LL140 | Effective Communication II | 1 | III | II |
| E | NL103 | History of Economic Thoughts | | I | II |
| | Eomigr | Language Elective | | V | III |

| Particulars | 2 | 023 (NEW) | 2022 (OLD) |
|---|-----------------------|-----------------|-----------------------|
| Number of Courses | | 39 | 39 |
| Number of Credits | | 136 | 134 |
| Credit for Core Courses | | 72 | 69 |
| Credit for Program Electives Credit for Training Projects/ Internship | | 12 | 12 |
| | | DU | Economics |
| Particulars | NCU | | |
| Number of Courses | 39 | 22 | 26 |
| Number of Courses Number of Credits | 39 136 | 148 | 26 142 |
| Number of Courses Number of Credits Credit for Core Courses | 39 136 72 | 148 84 | 26 142 84 |
| Number of Courses Number of Credits Credit for Core Courses Tredit for Program Electives | 39 136 72 12 | 148 84 24 | 26 142 84 24 |
| Number of Courses Number of Credits Credit for Core Courses | 39 136 72 | 148 84 | 26 142 84 |

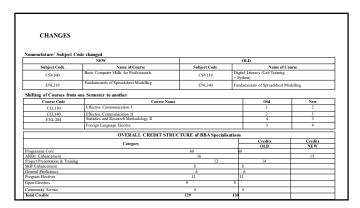
| | | | Semeste | r Course Code, Cours | ie Name | | | Community | GP. | Hrs. | Per | week | Credits |
|-------------------------|--|--|---|---|--|---|---|--|------------------------------|----------|-----|------|---------|
| Semester | | | | (L-T-P) Credits | | | | Service | 5 | L | T | P | Credita |
| 1 | ENLIO3 History of Economic Thoughts (3-0-0)3 | CHL100 Environmental Studies (3-0-0)3 | FNL102 Principles of Economics (2-0-2)3 | FNL101 Statistics & Research Methodology-I (2-0-2)3 | Principles of Management (2-0-2)3 | CSV100 Basic Computer skills for Professionals (0-0-4)2 | | ENS101 CS-I | ENR101 GP-I 1 Credit | 12 | 0 | 10 | 17+1=18 |
| 2 | CLL 190 Effective Comm! (1-0-2) 2 | ENL104 Business Mathematics (2-0-2)3 | ENL106 Intermediate Microeconomics (2-0-2)3 | CLL120 Human Values & Professional Ethics (2-0-0)2 | BSL101 Entrepreneurship (2-0-2)3 | CML110 Communication and Documentation in Business (2-0-2)3 | | CS-II (140 Hrs) * 2 Credit | ENR102 GP-II 1 Credit | 11 | 0 | 10 | 16+3=19 |
| Summers | | | END201 Mir | or Project (0-0-8)4 | | | | | | 0 | 0 | 8 | 4 |
| 3 | ENL211 Fundamentals of Money & Banking (4-0-0)4 | ENL213 Mathematical Economics (2-0-2)3 | ENL209 Behavioral Economics (4-0-0)4 | ENL215 Public Finance (4-0-0)4 | Ctt 140 Effective Comm II (1-0-2) 2 | Open Elective 1 (2-0-2)3 | | ENS201 CS-II | ENR201 GP-III 1 Credit | 17 | 0 | 6 | 20+1=21 |
| 4 | ENL212 Corporate Governance &Sustainability (3-0-0)3 | ENL204 Statistics and Research Methodology-II (2-0-2)3 | ENL216 Intermediate Macroeconomics (2-0-2)3 | ENL208 Environmental Economics (2-0-2)3 | ENL210 Fundamentals of Spread Sheet Modelling (2-0-2)3 | Open Elective 2 (2-0-2)3 | Foreign Language Elective (1-2-0)3 | ENS202 CS-IV (140 Hrs) * 2 Credit | ENR202 GP-IV 1 Credit | 14 | 0 | 10 | 21+3=24 |
| Summers | | | ENT301 Summ | er Internship (0-0-8) | 4 | | | | | 0 | 0 | 8 | - 4 |
| 5 | ENL206 Introduction to Econometrics (2-0-2)3 | ENL337 Financial Economics (2-0-2)3 | ENL304 Indian Economy (4-0-0)4 | Programme Elective -i (2-0-2)3 | Programme Elective-II (2-0-2)3 | Open Elective 3 (2-0-2)3 | | ENS301 CS-V | ENR301 GP-V 1 Credit | 14 | 0 | 10 | 19+1=20 |
| 6 | ENL202 International Trade (4-0-0)4 | ENL342 Advanced Econometrics (2-0-2)3 | ENL306 Economics of Growth & Development (4-0-0)4 | Programme Elective-III (2-0-2)3 | Programme Elective –IV (2-0-2)3 | END302 Major Project (0-0-12)6 | | CS-VI (140 Hrs) * 2 Credit | ENR302 GP-VI 1 Credit | 14 | 0 | 18 | 23+3+26 |
| | | | | Total | | ferable skills and key per | | Total Credit | | | | | |
| | | | | | | mpart special skills to stu | | | ., | | | | |
| Adv | anced sessions on so | ft skills shall be con: | ducted in the 5th Semi | ester to cope up the | preparedness of stude | ents for placements and | make them in | dustry ready for na | tional and internatio | naliobs. | | | |
| | | | | | | | | | | . , | | | |
| • Stu | dents shall complete t | ne required 140 co | mmunity service hou | irs across the year. | | | | | | | | | |
| | | | | | | | | | | | | | |



| | | | | | | Nome | nclature cha | nged | | | | |
|-----------------|--|-----------|------|----------------|-----------------|-------------------|---|-------------|-----------------|-------------------------------|----------|------|
| | CHANGES | | | | | NI | W | | | OLD | | T |
| | CHANGES | | | | Subject Code | N | ame of Course | Credit | Subject Code | Name of C | ourse | Cres |
| | Addition of New Course | | | | PCL108 | | ection to logical Psychology | 4 | PCL109 | Physiological Psychology | | 4 |
| Subject Code | Name of Course | L-T- P | Cred | i Semest er | CSV100 | | Computer Skills fessionals | 2 | CSV119 | Digital Literas | y | 2 |
| PCL104 | Academic Reading and Writing | 2-2-0 | 4 | 1 | PCL106 | Positiv | e Psychology | 4 | PCL208 | Positive Psycl | ology | 4 |
| PCL112 | Statistical Methods and Psychological Research-I | 2-2-0 | 4 | 1 | PCI 105 | Evolut | ion of | 4 | PCI 203 | Evolution of Psychological | | 4 |
| PCL 211 | Introduction to Developmental Psychology | 3-1-0 | 4 | 3 | | | ological Thought | 4 | | Thought Introduction to | _ | 3 |
| PCL213 | Statistical Methods and Psychological Research.II | 2-2-0 | 4 | 3 | PCL130 | Psych | ology | | PCL103 | Psychology | | _ |
| PCL212 | Introduction to Cognitive Psychology | 3-1-0 | 4 | 4 | PCL214 | Well-b | | 4 | PCL303 | Psychopathole Well-being | | 3 |
| | Deleted Courses | | | | PCL104 | Introde Psychi | ection to Social | 4 | PCL205 | Introduction to Psychology | o Social | 3 |
| Course | Course Name | С | redi | Semester | Shiftin | g of C | ourses from | one S | emester | to another | r | |
| Code | | | t ' | | Course | Code | | Course | Name | | Old | New |
| BSL101 | Entrepreneurship | | 3 | 2 | CLL | 31 | Effective Commu | nication I | | | 1 | 2 |
| BSL102 | Principles of Management | | 3 | 1 | CLL | 42 | Effective Commu | nication II | | | 2 | 3 |
| ENLI01 | Statistics and Research Methodology-I | - | 3 | 1 | PCL: | 102 | Industrial and Org | | ıl Psycholog | у | 4 | - 5 |
| PCL102 | Psychology for Living | + | 3 | 2 | PCL: | :06 | Counselling Psycl | nology | | | 4 | - 5 |
| PCLI02 | Statistical Methods and Psychological | | 4 | 3 | PCL: | 14 | Psychopathology | | being | | - 5 | 4 |
| PCL207 | Research | | 4 | 3 | CHL | | Environmental St | | | | 1 | 2 |
| PCI 301 | Lifespan Approach to Developmental | | 4 | 5 | PCL | | Evolution of Psyc | | | | 3 | 1 |
| PCI 339 | Psychology Human Cognition-I | _ | 3 | elective | PCL | | Introduction to So Positive Psycholo | | hology | | 3 | 2 |
| | riuman Cognition-i | - 1 | 3 | elective | PCL | 06 | Posttive Psycholog | gy | | | 3 | 1 4 |
| | L340 Human Cognition-II | | | | PCL | | Applied Social Ps | | | | 4 | 3 |

| Semester | | | Semester | Course Code, Co | arse Name (L-T-P) Cred | its | | Community Service | GP | Р | Hrs. | k | Contact Hours per Sem | Cred |
|-----------------------------------|---|--|--|--|---|---|----------|---|------------------------------|----|------|-----|-----------------------------|------|
| | | | | | | | | | | L | т | P | | |
| 1 | CLL120 Human Values & Professional Ethics (2-0-0)2 | PCL130 Introduction to Psychology (4-0-0)4 | PCL108 Evolution of Psychological Thought (3-1-0)4 | PCL111 Understanding Individual Differences (3-1-0)4 | PCL107 Academic Reading and Writing (2-0-2)3 | CHL100 Environmental Studies (3-0-0)3 | | PCS101 CS-I | PCR101 GP-I 1 Credit | 17 | 2 | 2 | 21°15-315 | 21 |
| 2 | CLL120 Effective Comm- I (1-0-2)2 | PCL104 Introduction to Social Psychology (2-2-0)4 | PCL106 Positive Psychology (3-1-0)4 | PCL108 Introduction to Physiological Psychology (3-1-0)4 | PCI.112 Statistical Methods and Psychological Research - I (2-2-0)4 | CSV100 Basic Computer Skills for Professionals (0-0-4)2 | | PCS102 CS-II (140 Hrs)* 2 Credit | PCR102 GP-II 1 Credit | 11 | 6 | 6 | 23*15=345 | 23 |
| Summers | | PCD | 201 | | | Minor Project | (0-0-3)4 | | | | | - 8 | | - 4 |
| 3 | CLL140 Effective Comm- II (1-0-2)2 | PCL204 Applied Social Psychology (2-2-0)4 | PCL211 Introduction to Developmental Psychology (3-1-0)4 | PCL201 Cultural Psychology (2-0-2)3 | PCL213 Statistical Methods and Psychological Research - II (2-2-0)4 | PCP201 Psy Practical (Experiment) (2-0-2)3 | | PCS201 CS-III | PCR201 GP-III 1 credit | 12 | 5 | 4 | 23*15=345 | 21 |
| 4 | PCL212 Introduction to Cognitive Psychology (3-1-0)4 | PCL214 Psychopathology and Well Being (2-2-6)4 | Programme Elective - I (2-0-2)3 | Open Elective – I (2-0-2)3 | Foreign Language (1-2-0)3 | PCP202 Psy Practical (Testing) (2-0-2)3 | | PCS202 CS-IV (140 Hrs)* 2 Credit | PCR202 GP-IV 1 credit | 12 | 5 | 6 | 23*15-345 | 23 |
| Summers | | PCT: | 301 | | S | ummer Internship | (0-0-3)4 | | | | | 8 | | - 4 |
| 5 | PCL202 Industrial and Organizational Psychology (3-1-0)4 | PCL206 Connelling Psychology (3-1-0)4 | Programme Elective-II (2-0-2)3 | Programme Elective-III (2-0-2)3 | Open Elective-II (2-0-2)3 | PCP301 Psy Practical (Survey) (0-0-4)2 | | PC301 CS-V | PCR301 GP-V 1 credit | 12 | 2 | 10 | 24*15-368 | 20 |
| 6 | PCI.302 Applied Clinical Psychology (3-1-0)4 | PCD302 Major Project## (0-0-12)6 | Open Elective-III (2-8-2)3 | Creative thinking | ISV301 and Negotiation Skills 2-0-2)3 | PCP302 Psy Practical (Qualitative Analysis) (1-0-4)3 | | PCS302 CS-VI (140 Hrs) 2 Credit | PCR302 GP-VI 1 credit | 8 | 1 | 8 | 17*15-255 | 22 |
| _ | | | | TO | TAL. | | | 70 21 | 42 | | | 38 | | |
| ii. Th iii. To *Stu ** H | e University shall o we value-added con dents shall complet the student is not | enduct introductory conduct special sessions ares over and above to the required 140 co andertaking any rese ter one year has to di | vear. | | | | | | | | | | | |





| Samuetar | | | Samanarin | urse Code, Course Name B-1 | SAL COMPA | | | Community | | | Hrs. Per week | | Contact | Confire |
|----------|---|---|---|---|--|--|--|--|-----------------------------|----|------------------|----|---------------|---------|
| | | | | | | | | Service | - | L | T | | Hours per Sem | |
| | Principles of Management (2-0-2)3 | Principles of Economics (2-0-2)3 | CLL120 Human Values & Frafessional Ethics (2-0-6)2 | CML 101 Professional Accounting (2-0-2)3 | Eusiness Laws (2-0-2)3 | CML 110 Communication & Documentation in Business (2-0-2)2 | CSV 188 Basic Computer Skills for Professionals (8-0-4)2 | 655101 CS-I | 1 Credit | 12 | ۰ | 14 | 26*15+ 190 | 20 |
| 2 | CIL 190 Effective Comm-I (1-0-2)2 | OHLIGO Environmental Studies (8-0-0)8 | Estrepreneurship (2-0-2)k | ENLIST Statistics & Research Methodology- I (2-0-2)3 | CMLSE? Introduction to Banking (2-0-2)3 | CMI: 128 Financial Management- I (2-0-2)2 | | 855102 CS-II (160 Hrs)* 2 Credit | ESR182 GP-II 1 Credit | 12 | ۰ | 10 | 22*15+ 230 | 20 |
| Summers | | | 850201 Minor Proje | | | -6)4 | | | î | | _ | | _ | |
| 3 | 951201 Fundamentals of Operations Management (2-0-2)3 | Human Resource Management (2-0-2)3 | CML 208 Financial Management- II (2-0-2)3 | SNL204 Statistics and Research Methodology-II (2-0-2)2 | 851289 Ecommerce (2-0-2)8 | Introduction to Marketing Management (2-0-2)2 | CIL 140 Effective Comm-H (1-0-2)2 | CS-III | GP-III 1 credit | 12 | ۰ | 14 | 27*15+ 405 | 21 |
| • | Introduction to Organizational Behavior (2-0-2)8 | BSL284 Fundamentals of Consumer Behavior (2-0-2)8 | 851382 Leadership (2-0-2)8 | Fint 210 Fundamental s of Spreadsheet Modelling (2-0-2)3 | Foreign Language Elective (1-2-8)8 | Open Elective 1 (2-0-2)2 | | 855202 CS-IV (360 Hirs)* 2 Credit | GP-IV 1 credit | 11 | 2 | 10 | 22*15+ 245 | 21 |
| Summers | | | ST201 Summer Inten | | | 5-836 | | | | | | | ı | 4 |
| s | 951303 International Business (2-0-2)3 | 85V201 Creative Thinking and Negotiation Skills (2-0-2)8 | Business Policy & Strategy (2-0-2)3 | Open Slective 2 (2-0-2)2 | Programme Slective - I (2-0-2)3 | Programme Elective-8 (2-0-2)2 | | GS-W | GP-V 1 credit | 12 | | 12 | 26*15+ 160 | 19 |
| | ascase investment Management (2-0-2)3 | Major Project (0-0-12)6 | Open Elective 2 (2-0-2)2 | Programme Elective -III (2-0-2)2 | Programme Slective – N (2-0-2)3 | | | BSSB02 CS-VI (140 Hrs)* 2 Credit | GP-VI 1 credit | | ۰ | | 16*15+ 240 | 21 |
| | | | | | | | | | | | | | | |

Note: The University shall conduct introductory sessions in the 1st semester on soft skills, which are a set of transferable skills and key personal traits essential for personality development.

* A value-added course over and above the programme scheme shall be offered during the 4th Semester to impart special skills to students for enhancing their employability.

* Advanced sessions on soft skills shall be conducted in the 5th Semester to hone up the preparedness of students for placements and make them industry ready for national and international jobs. * "Students shall complete the required 140 community service hours across the year."



25

| CHANGES | | | | | | |
|-------------------------------|---|-------------------------|--------------|---------------------------------------|---------|--|
| Nomenclature/ Subject | Code changed NEW | | | OLD. | | |
| Subject Code | Name of Course | Subject Code | | Name of Cor | urse | |
| CSV100 | Basic Computer Skills for Professionals | CSV119 | Digi + Pv | ital Literacy (Lab Training ython) | | |
| ENL210 | Fundamentals of Spreadsheet Modelling | ENL340 | Fun | damentals of Spreadsheet Moo | delling | |
| Shifting of Courses from | one Semester to another | | | | | |
| Course Code | Course Na | me | | Old | New | |
| CLL130 | Effective Communication I | | | 1 | 2 | |
| CLI 140 | Effective Communication II | | | 2 | 3 | |
| ENL 204 | Statistics and Research Methodology II | | 4 | | | |
| | Foreign Language Elective | | 3 | | | |
| | OVERALL CREDIT STI | RUCTURE of BBA Speciali | isations | | | |
| | | | | Credits | Credits | |
| | Category | | | OLD | NEW | |
| Programme Core | | 60 | 61 | 0 | | |
| Ability Enhancement | · | 16 | | | 15 | |
| Project Presentation & Traini | ng | 12 | | 14 | | |
| Skill Enhancement | | 8 | _ | 8 | | |
| General Proficiency | | 6 | | 6 | | |
| Program Electives | | 12 | | 12 | | |
| Open Electives | | 9 | 9 | | | |
| Community Service | | 6 | | 6 | | |
| Total Credits | | 129 | 130 | | | |

27

| Semester | | | Semester Co | urse Code, Course Name | (L-T-P) Credits | | | Community Service | GP | | Hrs. Per wee | ık D | Contact Hours per Sem | Credit |
|----------|--|--|---|---|--|---|--|---|---------------------------------|----|-----------------|---------|-----------------------------|--------|
| 1 | BSL102 Principles of Management (2-0-2)3 | ENLID2 Principles of Economics (2-0-2)3 | CLL120 Human Values & Professional Ethics (2-0-0)2 | CML 101 Professional Accounting (2-0-2)3 | CML109 Business Laws (2-0-2)3 | CML 110 Communication & Documentation in Business (2-0-2)3 | CSV 100 Basic Computer Skills for Professionals (0-0-4)2 | 855101 C5-I | BSR101 GP- I 1 Credit | 12 | ۰ | 14 | 26*15= 390 | 20 |
| 2 | CIL 130 Effective Comm-I (1-0-2)2 | CHL300 Environmental Studies (3-0-0)3 | 851301 Entrepreneurship (2-0-2)3 | ENLIGI Statistics & Research Methodology-1 (2-0-2)3 | CML107 Introduction to Banking (2-0-2)3 | CML 108 Financial Management-1 (2-0-2)3 | | 855102 CS-II (140 Hrs)* 2 Credit | BSR102 GP- II 1 Credit | 12 | ۰ | 10 | 22*15= 330 | 20 |
| Summers | | | 850201 Minor Proj | | (0-0 | 1-8)4 | | | | | | | 8 | 4 |
| 3 | BSI201 Fundamentals of Operations Management (2-0-2)3 BSI202 | BSI203 Human Resource Management (2-0-2)3 | CML 208 Financial Management-II (2-0-2)3 | ENL204 Statistics and Research Methodology-8 (2-0-2)3 ENL210 | ESIZO9 Ecommerce (2-0-2)3 | BS1207 Introduction to Marketing Management (2-0-2)3 Open Elective 1 | CLL 140 Effective Comm-II (1-0-2)2 | 855201 CS-III | BSR201 GP-III 1 credit | 13 | ۰ | 14 | 27*15= 405 | 21 |
| 4 | Introduction to Organizational Behavior (2-0-2)3 | Fundamentals of Consumer Behavior (2-0-2)3 | Leadership (2-0-2)3 | Fundamentals of Spreadsheet Modelling (2-0-2)3 | Elective (1-2-0)3 | (2-0-2)3 | | CS-IV (140 Hrs)* 2 Credit | GP-IV 1 credit | 11 | 2 | 10 | 23*15= 345 | 21 |
| Summers | | | 301 Summer Inter | | | 53 4 | | | | | | | | - 4 |
| | BSL303 International Business (2-0-2)3 | BSV301 Creative Thinking and Negotiation Skills (2-0-2)3 | BSL301 Business Policy & Strategy (2-0-2)3 | Open Elective 2 (2-0-2)3 | Programme Elective -I (2-0-2)3 | Programme Elective-II (2-0-2)3 | | CS-V | GP-V 1 credit | 12 | ۰ | 12 | 24*15= 360 | 19 |
| 6 | BS:304 Investment Management (2-0-2)3 | BSD302 Major Project (0-0-12)6 | Open Elective 3 (2-0-2)3 | Programme Elective – III (2-0-2)3 | Programme Elective -IV (2-0-2)3 | | | 855302 C5-VI (140 Hrs)* 2 Credit | BSR302 GP-VI 1 credit | | ۰ | | 16*15= 240 | 21 |

* The University shall conduct introductory sessions in the 1st semester on soft skills, which are a set of transferable skills and key personal traits essential for personality development.

* A value-added course over and above the programme scheme shall be offered during the 4th Semester to impart special skills to students for enhancing their employability.

* Advanced sessions on soft skills shall be conducted in the 5th Semester to hone up the preparedness of students for placements and make them industry ready for national and international jobs.

*"Students shall complete the required 140 community service hours across the year."

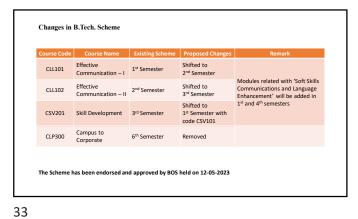
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| CHANGES Nomenclature/ Subject O | Code chanced | | | | |
|--|---|------------------------|----------------|------------------------------------|----------|
| vomenciature/ Subject C | NEW NEW | | | OLD | |
| Subject Code | Name of Course | Subject Code | | Name of Co | ourse |
| CSV100 | Basic Computer Skills for Professionals | CSV119 | Digit + Pyt | al Literacy (Lab Training thon) | |
| ENL210 | Fundamentals of Spreadsheet Modelling | ENL340 | Fund | amentals of Spreadsheet M | odelling |
| | one Semester to another | | | | |
| Course Code | Course Nam | e | | Old | New |
| CLL130 | Effective Communication I | | | 1 | 2 |
| CLL140 | Effective Communication II | | | 2 | 3 |
| ENL 204 | Statistics and Research Methodology II | | | 4 | 3 |
| | Foreign Language Elective | | | 3 | 4 |
| | OVERALL CREDIT STR | UCTURE of BBA Speciali | sations | | |
| | | | | Credits | Credits |
| | Category | | | OLD | NEW |
| rogramme Core | · | 60 | 60 | | |
| Ability Enhancement | | 16 | \rightarrow | | 15 |
| Project Presentation & Training | 8 | 12 | _ | 14 | |
| Skill Enhancement Seneral Proficiency | | 8 | | 6 | |
| rogram Electives | | 6 | 12 | | |
| | | 9 | 9 12 | | |
| Open Electives | | 9 | 9 | | |

| Semester | | | Semester Course | | made T to Condition | | | Community | | | Per week | | Contact | Credits |
|-------------------------------------|--|---|--|--|--|---|---|---|------------------------------|--------------|--------------|--------------|---|---------|
| 201001001 | | | Jennette Course | COSE, COSTIETAS | me (C-1-P) Cresics | | | Service | " | L | T | P | Hours per Sem | Creams |
| 1 | BSL102 Principles of Management (2-0-2)3 | ENLIG2 Principles of Economics (2-0-2)3 | CLL120 Human Values & Professional Ethics (2-0-0)2 | CML 101 Professional Accounting (2-0-2)3 | CML109 Business Laws (2-0-2)3 | CML 110 Communicatio n & Documentatio n in Business (2-0-2)3 | CSV 100 Basic Computer Skills for Professionals (0-0-4)2 | B55101 C5-I | BSR101 GP-I 1 Credit | 12 | ۰ | 14 | 26*15= 190 | 20 |
| 2 | Ctt. 130 Effective Comm-I (1-0-2)2 | CHL100 Environmental Studies (3-0-0)3 | BSL101 Entrepreneurs hip (2-0-2)3 | ENLIGI Statistics & Research Methodology- (2-0-2)3 | CML107 Introduction to Banking (2-0-2)3 | CML 108 Financial Management- I (2-0-2)3 | | 055102 CS-II (140 Hrs)* 2 Credit | BSR102 GP-II 1 Credit | 12 | ۰ | 10 | 22*15= 330 | 20 |
| Summers | | | 201 Minor Pro | | (0-0 | -8)4 | | | | 6 | | 3 | | |
| 3 | BSI201 Fundamentals of Operations Management (2-0-2)3 | BSI203 Human Resource Management (2-0-2)3 | CML 208 Financial Management- II (2-0-2)3 | ENIZON Statistics and Research Methodology- II (2-0-2)3 | 851209 Ecommerce (2-0-2)3 | BSL207 Introduction to Marketing Management (2-0-2)3 | CIL 140 Effective Comm-II (1-0-2)2 | 855201 CS-III | BS9201 GP-III 1 credit | 13 | ۰ | 14 | 27*15= 405 | 21 |
| 4 | BSL202 Introduction to Organizational Behavior (2-0-2)3 | BSI204 Fundamentals of Consumer Behavior (2-0-2)3 | 851302 Leadership (2-0-2)3 | ENL 210 Fundamental s of Spreadsheet Modelling (2-0-2)3 | Foreign Language Elective (1-2-0)3 | Open Elective 1 (2-0-2)3 | | 055202 CS-IV (140 Hrs)* 2 Credit | BSR202 GP-IV 1 credit | 11 | 2 | 10 | 23*15+ 345 | n |
| Summers | | 85730 | | | (0-0 | | | | | 1 | - | 5 | | |
| 5 | BS:303 International Business (2-0-2)3 | BSV301 Creative Thinking and Negotiation Skills (2-0-2/3 | BSLS01 Business Policy & Strategy (2-0-2)3 | Open Elective 2 (2-0-2)3 | Programme Elective -I (2-0-2)3 | Programme Elective-E (2-0-2)3 | | 855301 CS-V | BSR301 GP-V 1 credit | 12 | ٠ | 12 | 24*15= 160 | 19 |
| 6 | BS:304 Investment Management (2-0-2)3 | BSD302 Major Project (0-0-12)6 | Open Elective 3 (2-0-2)3 | Programme Elective – II (2-0-2)3 | Programme Elective -IV (2-0-2)3 | | | BSS302 CS-VI (140 Hrs)* 2 Credit | BSR302 GP-VI 1 credit | | ۰ | | 16*15= 240 | n |
| | | | | TOTAL | | | | | 110 | | | | | |
| * A value-ac * Advanced jobs. | ded course | over and above soft skills sha | e the program | nme scheme ed in the 5 th | shall be offer Semester to | ed during the hone up the | 4th Semeste | r to impart s | pecial skills to | students for | enhancing th | eir employab | development. ility. iational and in | |



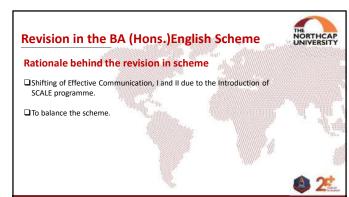


| Som | | | Secretar C | ourse Code, Coc | arse Mamo | | riio. | Community | HPS. | PAC | MORK. | Cradits |
|--------|---|--|---|---|---|---|--------------------------|---|------|-----|-------|-------------|
| - | MALIST | CISL 108 | T CHE150 | MEP 110 | CSLHO | CSVINI | 110000 | Services | - | 1 | | |
| 1 | (3-0-3)4 | FDGP-1 (2-0-4)4 | Chemistry (2-0-2)3 | Engineering Graphics & Drawing (1-8-4)3 | Problem Setting and Design Thirming (2-0-2)3 | Sell Development (1-0-2)2 | CSR118 GP 1 Credit | CSS101 | 10 | D | 16 | +20 |
| - | MAL152 Excus Mostra-6 CS-0-2)4 | CSL106 FOCF-II (Z-6-4)4 | Engineering Physics (3-0-2)4 | MEL180 Black of Mechanical Engineering (2-0-2)3 | ect.110 basic of electronics Engineering (2-0-213 | CLE-130 Effective Communicatio n-1 (1-0-2)2 | CBRT19 GP 1 Credit | C88102 C8-II (149 Histr* 2 Credits | 13 | 00 | 14 | 20+3 +23 |
| Summer | | | | | | | | | | | | |
| 3 | CSL209 Date Structures (3-0-2)4 | ECL255 DC & CA (3-0-2)4 | CSL240 Computer Networks (3-0-2)4 | CSL223 Obscrete Mathematics (3-0-0)3 | Program Elective - I (2-0-4)4 | CLL140 Effective Communicatio n-8 (1.0.2)2 | CSP2+6 GP 1 Credit | C88261 CS-III | 15 | | 12 | 21+1 +22 |
| • | CSL422 Cyber Security (2-0-2)4 | CSL214 DBMS (3-0-2)4 | CSL230 Analysis and Dusign of Algorithms (3-0-2 H | Program Elective 2 (2:0-4)4 | SML300 Entreprenaur ship (3-0-0)3 | Open Decive - 1 (MODO) (3-0-0)3 | CSR219 GP 1 Credit | CSS203 CS-IV (146 Hsur 2 Credits | 12 | | 10 | 22+3 +25 |
| Summer | 0000000 | | | shanfried Trainingsh | ntamahip. | | | | | | | 21 |
| | CSL256 Introduction to AL & ML / CSL262 Al for Games (3-6- 234 | CSL303 Operating System (3-0-2)4 | Program Electro-1 (2-0-1)1 | Program Elective- d (2-0-4)4 | Open Siective – 2 (WODC) (3-8-9)3 | (3-0-0-)2 | CSR318 GP 1 Credit | C\$\$301 C8-V | 15 | | 12 | 21+1 =32 |
| | CSL329 SEPM (3-0-2)4 | Program Elective-5 (2-0-4)4 | Program Elective-6 (2-0-4)4 | CSLTEE Theory of Corputation (2-0-2)4 | Open Elective-3 (3-0-0)3 | CSC301 Seniner 1 Credit | CSR119 GP 1 Credit | CSSIRU CS-VI C140 Hest** 2 Crediti | 13. | | 12 | 19+3 =24 |
| Summer | | | CSTO | 24 Industrial Tree | | | | | | _ | | 03 |
| | Program Elective- 7 (2-0-4)4 | Frogram Elective- 8 (2-0-4)4 | CSD401 Project # 1 4 Crecks | Open Elective - 4 (MOOC) (3-0-0)3 | CHE 100 EV8 (3-0-0)3 | Foreign Language (3-0-0)3 | | C88401 C8-VII | 13 | | 8 | 21 |
| | Liberal Arts Elective (3-0-0-)3 | Open Elective - S (MODC) (3-0-010 | CSD402 Project # 2 Arrienrofrp 6 Credito | | | | | CSS402 CS-VIII (149 252) 2 Credito | 6 | | | 12-2 |
| | | | | Total | | | | | 100 | 2 | 00 | 100-14- |

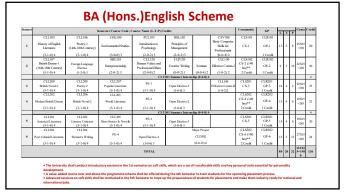
| Course Code | Course Name | Existing Scheme | Proposed Changes | Remark |
|-------------|--|--------------------------|--|---|
| CLL101 | Effective Communication – I | 1st Semester | Shifted to 2 nd Semester | Modules related with 'Soft Skills Communications and Language Enhancement' will be added in 1st |
| CLL102 | Effective Communication – II | 2 nd Semester | Shifted to 3 rd Semester | and 4 th semesters • Minimum 40 credits after each |
| BCV201 | Skill Development | 4 th Semester | Shifted to 1st Semester with code BCV101 | year required for exit option as pe NEP2020 |
| BCL110 | Problem Solving and Design Thinking | 2 nd Semester | Shifted to 1st Semester | 2540) 14 1 21 5 |
| MCD603 | Dissertation – I | - | Added to 7 th Semester | BCA(H)- Mapped with first year MCA courses(03 in each semester - research work (10 credit in each |
| MCD604 | Dissertation – II | - | Added to 8 th Semester | semester) offered for BCA (Honours) in alignment with UGC guidelines |

| | | | Somerier Course | | | | Community | GP. | | res. | | 5200 |
|---------|---|--|---|---|--|---|--|--------------------------------|------------|-------|-----|------|
| Sees. | | | | Cherten | 96 | | Service | Las . | | NI ME | 17 | Cred |
| 1 | MAL153 Mulhematica-I (3-1-0).4 | BOL 100 Programming Pundamentation of (2-0-d) 4 | Principles of Metagoment (2-6-2) 3 | CLL120 Human Values & Professional Effect G1-9-0-12 | DCV101 Skill Doveroprient -1 (1-0-2) 2 | BCL110 Problem Solving and Design Thinking (2-8-200 | 905101 G94 | SCRISE OF -1 1 Credit | 12 | , | 10 | 19 |
| 2 | Blacks of Statistics (3-1-0) & | CHL100 Environmental Studies (3-0-(0.3) | 8CI.104 Programming Functorectate 6 (2-0-4) 4 | Foreign Language Elective 1 (1-2-013 | Open Elective - 1 (3-0-0) 3 | CILT38 Effectivo Commenciation ((1-8-2) 2 | 0841 11406402 2 CIHHI | GP 2 1 Credit | 13 | 3 | -8 | 22 |
| | and the second second | | OCT: | NT Sammer Interes | nig-1 | 20.17 | | | | | - | - 4 |
| | | | | | n-1 DG CHISCH | (a) | | | | | | |
| 3 | 90:201 Data Strudence (3-0-2)4 | BCL203 DBMS (3-0-2) 4 | PCI, IIIQ Paychology for living (2-14) 3 | BCL295 Digital Electronice & Computer Architecture (3-0-2) 4 | Program Electro-1 (2-0-4) 4 | CILL140 Editective Communication III (19-2)-2 | 905001 08-8 | 9CR218 9P - 3 1 Credit | 14 | t | ú | 26 |
| (d) | BCL202 Computer Mativorts (3-8-2)-4 | 901,294 Operating System (3-0-2) 4 | Open Enclis - 2 (3-0-0) 3 | Program Election-2 (2-0-4) 4 | BCL208 Analysis and Design of Asporterro (3.0.2) 4 | | 908202 094V (140962) 2 Credit | BCR 219 0F-4 1 Credit | 14 | U | 10 | n |
| Sumerer | | | Botto | CT Surrener treatmen | Rap III | | | | | | | - 4 |
| | | 1 | - | 200.046 | on = 2 this button | BCD361 | | | | | 6 1 | |
| | 881,101 Entrepreneurati (2-0-2) 3 | BCL303 introduction to AL&ML (3-0-2) 4 | Schotze Softcare Engineering (3-02-) 4 | Program Electror-3 (2-8-4-) 4 | BCV991 Shill Divelopment -2 (1-9-2) 2 | Project - 1 Secrector of Industry/Startop Project (0-4-8) d | BCSD01 CSV | SCRIM OF 8 1000H | 110 | æ | 30 | z |
| 8 | Program Elective-1 (2-0-4) 4 | Oper Elective-3 (3-0-0) 1 | #CC301 Project - 2. Benesite of Industry Startus Project (0.0-12) 6 | | | | 808902 09-91 (148993) 2 09-91 | BCR319 GP-4 TCN/df | 6 | n | 16 | 16 |
| | MICHEL | - | | 1 | BCA Degree | | | | 17 | 7 | | |
| 7 | Data Construction and Networking (3.0.2) 4 | CLL513 Professional Convenientication (2-1-0) 3 | MAL616 Research Methodology (2-1-9) 3 | MCD903 Desertation – I (0-0-20) 10 | | | | | T) | 2 | 22 | 21 |
| 4. | MCL502 Sustrees Analytics (3-0-2) 4 | Program Election - 5 (3-0-2) 4 | Program Elective - 6 (3-0-2)-4 | MCD6)4 Diccentation - ti (0-0-20) 10 | | | | | 0 | ×. | 36 | 31 |





Points Discussed in the BOS meeting The Board of Studies meeting of CLL was conducted 10th May 2023 to discuss the new scheme of BA (Hons,)English. Apart from internal BOS members, Prof Harish Narang, Professor JNU was the external expert. Poetry I CLL 106 was earlier taught in II semester but we realized that History of English Literature being a tough and an elaborated course of literature needs supplementary course like Poetry to make students understand the history better. Poetry I was shifted from II semester to I semester. To balance the entire scheme one compulsory course is shifted from III semester is like Compulsory Foreign Language Elective. Effective Communication I CLL 101 and II CLL 102 have been shifted from the First and Second semester to Second and Third Semester. The codes of Effective Communication I CLL 101 and II CLL 102 are respectively changed as CLL 130 and CLL 140. Indian Writing in English has been shifted to Programme electives to balance the scheme. 4-4 Credits of Summer Internships CTC 201 and CTC 301 have been introduced as new UGC guidelines after the II and IV semesters. Revision took place in Effective Communication I and II as per the requirement of SCALE regarding content and delivery.



39 40

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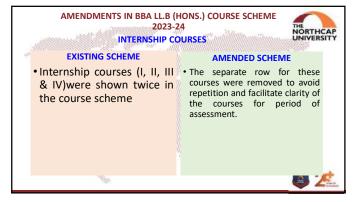
AMENDMENTS IN BBA LL.B (HONS.) COURSE SCHEME
2023-24
IMPLEMENTATION OF SCALE

EXISTING SCHEME

• Effective Communication for Law – in Semester I & II
• Introductory & special sessions on soft skills – semesters III & IV as value added course (beyond scheme and highlighted as footnote).

• Advanced sessions on soft skills for placement – Semesters VII & VIII

41 42



| Students can utilize the entire year including the summer and winter break for completing 340 Community Service hours The University shall conduct introductory & special sessions on soft skills, which are a set of transferable skills and key personal traits essential for personality elegenment during 3 of 4.8 th semesters. |
|---|
| Monous 2/3 (4-1-0) Honous |
| C- Foreign Language Courses are Voluntary Non-Credit. Certificate of completion of foreign language course shall be provided to the students. Students can utilize the entire year including the summer and winter break for completing 140 Community Service hours The University shall conduct introductory & special sessions on soft skills, which are a set of transferable skills and key personal traits essential for personality redipported skirling of a 41 sh semesters. |
| Students can utilize the entire year including the summer and winter break for completing 340 Community Service hours The University shall conduct introductory & special sessions on soft skills, which are a set of transferable skills and key personal traits essential for personality elegenment during 3 of 48 the ementions. |
| ir employability. Advanced sessions on soft skills shall then be conducted in the 7 th & 8 th semesters to hone up the preparedness of students for placements and make them in dy for national and international jobs. |

| SEM | COURSE 1 | COURSE 2 | COURSE 3 | COURSE 4 | COURSE 8 | GENERAL PROFICIENCY VALUE ADDED COURSES | COMMUNITY SERVICES | TOTAL COURSES | MOOT COURT HRS | L | т | P | Project Work Hours | Contact Hours per week | Credits |
|-----|---|--|---|---|--|--|---|---------------|----------------------|-----|----|---|--------------------------|---------------------------------|---------|
| ı | 1.B1.321 Logal Methods (3 Y) (4-1-0) 4 | LBL323 Law of Contract I (3 Y) (4-1-0) 4 | LBL325 Law of Teets (3 Y) (4-1-0) 4 | LBL327 Law of Crimes 1 (3 Y) (4-1-0) 4 | LBL329 Family Law- 1 (3 Y) (4-1-0)-4 | IBRIOS GP-1 (3 Y) 1 Codit | LCS903 CS-I (3-Y) | 5 | 5 | 21 | s | 0 | 5 | 36 | 21 |
| п | 1.BL.322 Junisprudence (3 Y) (4-1-0) 4 | LBL324 Family Law II (3 Y) (4-1-0) 4 | LBI-326 Law of Crimes II (3 Y) (4-1-0) 4 | LBI.328 Environmental Law (3 Y) (4-1-0) 4 | LBI 332 Law of Contract-II (3 Y) (4-1-0)4 | LBT104 Intenship-1 (3 Y) (0-0-6) 3 | LCS304 CS-II (3 Y) (140 Hours) 2 Credit* | 5 | 5 | 20 | 5 | 0 | 5 | 35 | 25 |
| ш | LBL415 Company Law (3 Y) (4-1-0) 4 | LBL417 Law of Evidence (3 Y) (4-1-0)4 | LBL419 Constitutional Law-1 (3 Y) (4-1-0) 4 | LBL423 Public International Law (3 Y) (4-1-0) 4 | LBL425 Interpretation of Statutes (3 V) (4-1-0)-4 | LBR403 GP-II (3 Y) 1 Cudit | LCS403 CS-III (3 Y) | 5 | 5 | 21 | 5 | 0 | 5 | 36 | 21 |
| IV | LBL416 Property Law (3 Y) (4-1-0)4 | LILAB Civil Procedure Code (I Y) | LBL422 Constitutional Law-II (3 Y) (4-1-0) 4 | LBL424 Administrative Law (3 Y) (4-1-0) 4 | LBI.436 Human Rights Law & Practice (3 Y) (4-1-0)-4 | LBT294 Intendip-II (3 Y) (0-0-6) 3 | LCS694 CS-IV (3 Y) (140 Hours) 2 Credit* | 5 | 5 | 20 | 5 | 0 | 5 | 35 | 25 |
| v | LBC523 Drafting, Pleading and Convoyance (3 Y) (4-1-0).4 | LBL5D Labour Law-1 (3 Y) (4-1-0) 4 | LBC525 ADR (3 Y) (4-1-0) 4 | LBL515 Intellectual Property Rights (3 Y) (4-1-0) 4 | (3 Y) (4-1-0)4 | LBR503 GP-III (3 Y) 1 Codit | LCX903 CS-V(3 Y) | 5 | 5 | 21 | 5 | 0 | 5 | 36 | 21 |
| VI | LBC524 Most Court (3 Y) (0-0-6) 3 | LBL514 Labour Law-II (3 Y) (4-1-0) 4 | LBC526 Professional Ethics (3 Y) (4-1-0) 4 | (3 Y) (4-1-0) 4 | LBL516 Law of Taxation (3 Y) (4-1-0)-4 | | LCX504 CS-VI (3 Y) (140 Hours) 2 Credit* | 5 | 5 | 20 | s | 0 | 5 | 35 | 22 |
| | | | | | | | | 39 | 30 | 123 | 30 | 0 | 30 | 213 | 135 |

Minutes of the Board of Studies

- Department of Computer Science Engineering (CSE)
- Department of Multidisciplinary Engineering (MDE)
- Centre for Language Learning (CLL)
- School of Management & Liberal Studies (SOM&LS)
- School of Law (SOL)



The NorthCap University School of Engineering and Technology

Board of Studies Meeting, Dept. of CSE&IT

From: Member Secretary

BOS, CSE Dept.

To: Hon'

Hon'ble GB, Pro-Chancellor,

VC, HODs, Faculty members(CSE)

Date: 07-Oct-2022

Minutes of the meeting of Board of Studies (BOS) of CSE&IT Department held at The NorthCap

University, Gurugram on 07-Oct-2022 at 03:00PM in room no. 124.

The following members attended the meeting:

| 1. | Prof. Rita Chhikara | Professor and Head, CSE&IT Deptt., (Chairperson) |
|-----|---------------------|--|
| 2. | Prof. B. Chandra | External Academics Expert, Adjunct Professor at IT school, IIT, Delhi |
| 3. | Mr. Surendra Gupta | External Industry Expert. Principal Consultant, Technology Innovation Group, TCS |
| 4. | Prof. Rekha Vig | Professor (Member) (Leave of absence) |
| 5. | Prof. Nitin Malik | Professor (Member) |
| 6. | Dr. Vidhi Khanduja | Associate Professor (Members) |
| 7. | Dr. Prachi | Associate Professor (Members) |
| 8. | Dr. Meghna Sharma | Associate Professor (Members) |
| 9. | Dr. Shilpa Mahajan | Associate Professor (Members) |
| 10. | Dr. Shaveta Arora | Associate Professor (Members) |
| 11. | Dr. Mehak Khurana | Assistant Professor (Special Invitee) |
| 12. | Dr. Nidhi Malik | Assistant Professor (Special Invitee) |
| 13. | Prof. Prabha Sharma | Emeritus Professor (Special Invitee) |
| 14. | Dr. Sandeep Singh | Assistant Professor (Members Secretary |

The Chairperson welcomed all the external experts and members of BOS meeting. Member Secretory started the meeting at 3:00PM with the following agenda point presentation and discussion:

- Confirmation of the minutes of the last BoS meeting of CSE&IT department held on 25th Jan 2022 in online mode, the minutes of the meeting is enclosed as Annexure - I.
- Discussion and approval for four elective courses to be added in B.Tech. CSE 2019 onwards schemes.

The courses are:

- a. CSE 565: Software Verification, Validation, and Testing
- b. IFT 510: Principles of Computer Information Technology Architecture
- c. CSE 566: Software Project, Process and Quality Management
- d. FSE 501: Technology Entrepreneurship
- Dr. Mehak Khurana presented this point and explained the necessity for adding these electives. Inclusion of these electives will help the students to choose MS program in Software Engineering from ASU under 1+1 scheme. The students who opt or this program will get the exception of these courses at ASU for MS-SE program since they complete them in their undergraduate study. The course templates of all four courses are attached as Annexure II (a, b, c and d).
- 3. Discussion and approval of revised COs of all current courses
 - Dr. Vidhi Khanduja presented this point and explained the requirement of outcome based learning. For that reason the COs of all the existing courses have been revised in-line with blooms taxonomy. With the help of external expert and department academic review committee members have verified the changes in COs of all the courses. All the members approved the suggested changes in course outcome of courses from the 2021 batch.
- 4. Discussion and approval of revised CO-PO articulation matrix of all current courses
 This point was also presented by Dr. Vidhi Khanduja, she explained the requirement of
 mapping scale in the articulation matrix. In past practices, we have used 1, 2 or 3 as mapping
 scale (1 weakly to 3 strongly) to map the Program Outcomes with the Course Outcomes.
 During the workshop on 'Outcome based Education' held in March'22, the experts
 suggested to use '-' also if the mapping is not there in articulation matrix. All members
 agreed for this modification and implementation for all the courses starting from batch 2021.
- 5. Discussion and approval of changes in CSL223 Discrete Mathematics course template Subject expert Prof. Prabha Sharma and faculty members teaching the course CSL223 Discrete Mathematics suggested some changes in the course template which is in alignment

with the latest requirement. These changes were presented by Prof. Prabha Sharma in front of all the members. Members agreed for the changes in the course template. Expert suggested to remove graph theory, spanning tree and binary search part to give more time to other relevant topics which have some practical applications as these topics are covered as part of Data Structure and Algorithms course. The updated course template is attached as Annexure – III.

Discussion and approval for the value added courses for B.Tech. CSE and BCA students

Some of the courses have been identified to be given to the B.Tech. students under value added course. Expert suggested to review the AWS academy machine learning course and asked to add social media analytics topics. The topics of the courses for current semester and upcoming semester are attached as Annexure – IV.

7. Discussion and approval for introducing MCA program.

Dr. Nidhi Malik presented this point and showed the new scheme of MCA. This is proposed PG program and will start in 2023-24 academic session. The salient features of the program will be:

- (a) This will be two year PG program with career option in the field of computer technology
- (b) Total credits of the program will be 80 which is in-line to the program running in various reputed engineering colleges and institutes
- (c) The non-science background bachelor degree holders can opt for this program
- (d) Basic computer science courses have been added to give exposure to non-computer science background students

Expert suggestions was to review the eligibility criteria, and to exclude the BA and BSc students. Bridge courses need to be reviewed. Cloud computing may be replaced with deep learning course in elective list. The new MCA scheme and related documents are attached as Annexure – V.

8. New list of other electives in the existing scheme

Member secretary presented this point to update the courses of 'other electives'. These courses are added in the existing scheme to give the option to choose electives other than the specialization electives. These courses are from Maths department and could help those students who would like to pursue higher education from international University/ Institute. All the members agreed for the changes in the courses. The list of courses and outline syllabus are attached as Annexure – VI.

With no other point, member secretary ended the meeting at 5:30pm with vote of thanks to all the attendees.

Thank and regards

Dr. Sandeep Singh Member Secretary – BoS Dept. of CSE The NorthCap University, Gurugram

| | Prof. Rita Chhikara | Rulicaes |
|-----|---------------------|------------------|
| 2. | Prof. B. Chandra | Benonder |
| 3. | Mr. Surendra Gupta | Suredur. |
| 4. | Prof. Rekha Vig | Leave of absence |
| 5. | Prof. Nitin Malik | Mualde |
| 6. | Dr. Vidhi Khanduja | Olah |
| 7. | Dr. Prachi | Vachi |
| 8. | Dr. Meghna Sharma | |
| 9. | Dr. Shilpa Mahajan | Shelk |
| 10. | Dr. Shaveta Arora | Sarch |
| 11. | Dr. Mehak Khurana | Livar |
| 12. | Dr. Nidhi Malik | Willi |
| 13. | Prof. Prabha Sharma | 2. Shawa |
| 14. | Dr. Sandeep Singh | de dut |

Attachment: Annexure - 1 MoM of last BoS meeting held on 25th Jan 2022

Annexure -II a, II b, II c and II d Course templates of the added electives

Annexure III Updated course template CSL223 Discrete Mathematics

Annexure IV List of value added courses

Annexure V Proposed scheme of MCA

Annexure VI List of 'other elective' courses and outline syllabus

Annexure – II

Bachelor of Technology in 'Computer Science and Engineering- (2023-24)

| | | | | ourse Code, Cours | se Name | | | GP | Community | Hrs. | Per v | veek | Credits |
|--------|---|--|---|---|--|---|---|--------------------------|---|------|-------|------|----------------|
| Sem | | | | (L-T-P)Credits | | | | GP | Services | L | Т | Р | Credits |
| 1 | MAL151 Engg Maths-I (3-0-2)4 | CSL106 FOCP-I (2-0-4)4 | CHL150 Engg Chemistry (2-0-2)3 | MEP110 Engineering Graphics & Drawing (1-0-4)3 | CSL110 Problem Solving and Design Thinking (2-0-2)3 | CSV101 Skill Development (1-0-2)2 | | CSR118 GP 1 Credit | CSS101 CS-I | 11 | 0 | 16 | 19+1 =20 |
| 2 | MAL152 Engg Maths-II (3-0-2)4 | CSL108 FOCP-II (2-0-4)4 | PYL150 Engineering Physics (3-0-2)4 | MEL160 Basic of Mechanical Engineering (2-0-2)3 | ECL110 Basic of Electrical & Electronics Engineering (2-0-2)3 | CLL130 Effective Communicatio n-I (1-0-2)2 | | CSR119 GP 1 Credit | CSS102 CS-II (140 Hrs)** 2 Credits | 13 | 0 | 14 | 20+3 =23 |
| Summer | | | | | | | | | | | | | |
| ω | CSL209 Data Structures (3-0-2)4 | ECL255 DE & CA (3-0-2)4 | CSL240 Computer Networks (3-0-2)4 | CSL223 Discrete Mathematics (3-0-0)3 | Program Elective - I (2-0-4)4 | CLL140 Effective Communicatio n-II (1-0-2)2 | | CSR218 GP 1 Credit | CSS201 CS-III | 15 | | 12 | 21+1 =22 |
| 4 | CSL422 Cyber Security (3-0-2)4 | CSL214 DBMS (3-0-2)4 | CSL230 Analysis and Design of Algorithms (3-0-2)4 | Program Elective- 2 (2-0-4)4 | SML300 Entrepreneur ship (3-0-0)3 | Open Elective – 1 (MOOC) (3-0-0)3 | | CSR219 GP 1 Credit | CSS202 CS-IV (140 Hrs)** 2 Credits | 17 | | 10 | 22+3 =25 |
| Summer | | | CST201 In | dustrial Training/int | ernship | | | | | | | | 2 |
| 5 | CSL236 Introduction to AI & ML / CSL242 AI for Games (3-0- 2)4 | CSL303 Operating System (3-0-2)4 | Program Elective-3 (2-0-4)4 | Program Elective- 4 (2-0-4)4 | Open Elective – 2 (MOOC) (3-0-0)3 | CLL120 HVPE (2-0-0-)2 | | CSR318 GP 1 Credit | CSS301 CS-V | 15 | | 12 | 21+1 =22 |
| 6 | CSL229 SEPM (3-0-2)4 | Program Elective-5 (2-0-4)4 | Program Elective-6 (2-0-4)4 | CSL318 Theory of Computation (3-0-2)4 | Open Elective-3 (3-0-0)3 | CSC301 Seminar 1 Credit | | CSR319 GP 1 Credit | CSS302 CS-VI (140 Hrs)** 2 Credits | 13 | | 12 | 19+3 =24 |
| Summer | | <u> </u> | CST301 Ind | lustrial Training/ in | nternship | | T | | | | 1 | T | 04 |
| 7 | Program Elective- 7 (2-0-4)4 | Program Elective- 8 (2-0-4)4 | CSD401 Project # 1 4 Credits | Open Elective – 4 (MOOC) (3-0-0)3 | CHL100 EVS (3-0-0)3 | Foreign Language (3-0-0)3 | | | CSS401 CS-VII | 13 | | 8 | 21 |
| 8 | Liberal Arts Elective (3-0-0-)3 | Open Elective – 5 (MOOC) (3-0-0)3 | CSD402 Project # 2 /Internship 6 Credits | | | | | | CSS402 CS-VIII (140 Hrs) 2 Credits | 6 | | | 12+2 =14 |
| | | | | Total | | | | | | 106 | 2 | 80 | 160+14= 174 |

^{**} Students can utilize the summer/winter break period to complete the remaining 140 Community Service hours every year.

- The University shall conduct introductory sessions in the 1st semester on soft skills, which are a set of transferable skills and key personal traits essential for personality development.
- The University shall conduct special sessions in the 4th semester to reinforce the learnings of introductory training sessions conducted in the first year.
- Two value-added courses over and above the programme scheme shall be offered during the 5th & 6th semesters to impart special skills to students for enhancing their employability.
- Advanced sessions on soft skills shall be conducted in the 7th semester to hone up the preparedness of students for placements and make them industry ready for national and international jobs.

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Program Electives for each track

| Tracks | Data Science | Cloud Computing | Full Stack | Game Tech | Cyber Security | Blockchain | AI & ML | IoT & 5G | Other Electives |
|-----------------------|---|--|---|--|---|---|--|---|--|
| Program Elective-1 | CSL 225 Programming for Data Science | CSL225 Programming for Data Science | CSL273 Enterprise Web Applications | CSL243 Game Design & Asset Creation | CSL 281 Secure Communication and Cryptography | CSL239 Mathematics of Modern Cryptography | CSL 225 Programming for Data Science and Al | ECL256 Embedded Systems | MAL270 Numerical Methods |
| Program Elective-2 | CSL227 Applied Computational Statistics | CSL238 Introduction to Cloud Computing | CSL274 Middleware Frameworks and ORM | CSL245 Programing for Games | CSL 283 Secure Coding and Vulnerabilities | CSL247 Intro. to blockchain technologies | CSL227 Applied Computational Statistics | CSL238 Introduction to Cloud Computing | CSL223 Web Development Technologies |
| Program Elective-3 | CSL234 Data Engineering | CSL337 Cloud Architecture | CSL276 No SQL Databases | CSL244 Advanced Programming for Games | CSL 284 Digital Forensics and Malware Analysis | CSL355 Bitcoin and Cryptocurrency Technologies | CSL347 Applied Artificial Intelligence and Expert Systems | ECL252 Micro Controllers & Sensors | MAL280 Linear Algebra and its Applications |
| Program Elective-4 | CSL232 Business Intelligence and Data Visualization | CSL338 Virtualization & Cloud Computing | CSL253 Web Frameworks | CSL343 Designing Human Computer Interfaces | CSL 383 Network security | CSL356 Smart Contracts | CSL348 Reinforcement Learning | ECL316 Wireless & Mobile Communication | MAL260 Probability and Statistics |
| Program Elective-5 | CSL313 Machine Learning | CSL339 Big Data on Cloud | CSL371 Mobile Application Development | CSL246 Cross Platform Game Development | CSL387 Web and Mobile Security | CSL357 Blockchain for Cyber Security | CSL349 Artificial Intelligence for Robotics | ECL352 Design for IOT | |
| Program Elective-6 | CSL311 Big Data | CSL346 Artificial Intelligence & Machine Learning on Cloud | CSL373 Devops | CSL341 AR Development | CSL385 Risk Analysis and Assessment | CSL358 Blockchain Technology in Web Development | CSL312 Deep Learning | ECL367 Introduction to 5G Technologies | |
| Program Elective-7 | CSL316 Introduction to Image Processing and Recognition | CSL445 Cloud Application Development & Deployment | CSL311 Big Data | CSL345 VR Development | CSL384 Cloud Security Essentials | CSL449 Security and Privacy for Big Data Analytics | CSL447 Computer Vision | ECL368 Security in IoT | |
| Program Elective-8 | CSL312 Deep Learning | CSL446 Cloud Security | CSL374 Micro service Based Applications | CSL342 XR Studio | CSL382 Blockchain | CSL455 Cloud Infrastructure and Services | CSL448 Computational Linguistics and Natural Language Processing | ECL482 Mobile Networks | |

| | Semester Course Code, Course Name | | | | | | | GP | Hrs. Per week | | Credits | |
|--|--|---|--|--|--|---|--|--------------------------------|------------------|-----|---------|-----------|
| Sem. | (L-T-P) Credits | | | | | | Service | <u> </u> | L | T | Р | C. Sano |
| 1 | MAL153 Mathematics-I (3-1-0) 4 | BCL103 Programming Fundamentals -I (2-0-4) 4 | BSL102 Principles of Management (2-0-2) 3 | CLL120 Human Values & Professional Ethics (2-0-0-) 2 | BCV101 Skill Development -1 (1-0-2) 2 | BCL110 Problem Solving and Design Thinking (2-0-2) 3 | BCS101 CS-I | BCR118 GP – 1 1 Credit | 12 | 1 | 10 | 19 |
| 2 | MAL112 Basics of Statistics (3-1-0) 4 | CHL100 Environmental Studies (3-0-0) 3 | BCL104 Programming Fundamentals-II (2-0-4) 4 | Foreign Language Elective 1 (1-2-0) 3 | Open Elective – 1 (3-0-0) 3 | CLL130 Effective Communication-I (1-0-2) 2 | BCS102 CS-II (140Hrs)* 2 Credit | BCR119 GP- 2 1 Credit | 13 | 3 | 6 | 22 |
| BCT201 Summer Internship - I | | | | | | | | | | | 4 | |
| Exit Option – 1 (UG Certificate) BCL205 | | | | | | | | | | | 1 | |
| 3 | BCL201 Data Structures (3-0-2) 4 | BCL203 DBMS (3-0-2) 4 | PCL102 Psychology for living (2-1-0) 3 | Digital Electronics & Computer Architecture (3-0-2) 4 | Program Elective-1 (2-0-4-) 4 | CLL140 Effective Communication-II (1-0-2) 2 | BCS201 CS-III | BCR218 GP – 3 1 Credit | 14 | 1 | 12 | 22 |
| 4 | BCL202 Computer Networks (3-0-2) 4 | BCL204 Operating System (3-0-2) 4 | Open Elective – 2 (3-0-0) 3 | Program Elective-2 (2-0-4) 4 | BCL206 Analysis and Design of Algorithms (3-0-2) 4 | | BCS202 CS-IV (140Hrs)* 2 Credit | BCR 219 GP-4 1 Credit | 14 | 0 | 10 | 22 |
| Summer | BCT301 Summer Internship - II | | | | | | | | | | | 4 |
| Exit Option – 2 (UG Diploma) | | | | | | | | | | | I | |
| 5 | BSL101 Entrepreneurshi p (2-0-2) 3 | BCL303 Introduction to AI & ML (3-0-2) 4 | BCL305 Software Engineering (3-0-2-) 4 | Program Elective-3 (2-0-4-) 4 | BCV301 Skill Development -2 (1-0-2) 2 | BCD301 Project – 1 Semester at Industry/Startup Project (0-0-8) 4 | BCS301 CS-V | BCR318 GP-5 1Credit | 11 | 0 | 20 | 22 |
| 6 | Program Elective-4 (2-0-4) 4 | Open Elective-3 (3-0-0) 3 | BCD302 Project - 2 Semester at Industry/Startup Project | | | | BCS302 CS-VI (140Hrs) 2 Credit | BCR319 GP-6 1Credit | 5 | 0 | 16 | 16 |
| | | (0 0 0) 0 | (0-0-12) 6 | | | | | | | | | |
| | | (0 0 0) 0 | (0-0-12) 6 | E | BCA Degree | | | | | | l I | |
| 7 | MCL501 Data Communication and Networking (3-0-2) 4 | CLL513 Professional Communication (2-1-0) 3 | MAL616 Research Methodology (2-1-0) 3 | MCD603 Dissertation – I (0-0-20) 10 | BCA Degree | | | | 7 | 2 | 22 | 20 |
| 7 | Data Communication and Networking | CLL513 Professional Communication | MAL616 Research Methodology | MCD603 Dissertation – I | BCA Degree | | | | 7 9 85 | 2 0 | 22 26 | 20 22 173 |

^{*} Students can utilize the summer/winter break period to complete the remaining 140 Community Service hours every year.

For BCA degree with honours, students have to undergo the courses of MCA first year. In place of three courses – (MCL501, MCL505, MCL504 and MCL507) student can opt for research work. Equivalent credits can be transferred on successful completion of the research work. In place of MCD603 Dissertation-I and MCD604 Dissertation-II, students can opt for the courses of MCA first year or equivalent MOOC course.

- The University shall conduct introductory sessions in the 1st semester on soft skills, which are a set of transferable skills and key personal traits essential for personality development.
- The University shall conduct special sessions in the 4th semester to reinforce the learnings of introductory training sessions conducted in the first year.
- Two value-added courses over and above the programme scheme shall be offered during the 5th and 6th semesters to impart special skills to students for enhancing their employability.
- Advanced sessions on soft skills shall be conducted in the 7th semester to hone up the preparedness of students for placements and make them industry ready for national and international jobs.



COURSE TEMPLATE

| 1. | Departme | nt: | Department | Department of Computer Science and Engineering | | | | | | |
|---------------------------------------|--|--|-----------------|--|--------|-------------|--------------|----------|-------------------|------------------|
| 2. | Course Na | ame: Web Fr | ameworks | | 3. | Course (| | | 4. L-T-P | 5. Credits |
| | | | | | | CS | SL253 | | 2-0-4 | 4 |
| 6. | Type of C (Check or | | | | | | | | | |
| 7. | Pre-requis | site(s), if any | : None | | | | | | | |
| 8. | Frequenc | cy of offering (check one): Odd Even Either semester Very semester | | | | | | | | |
| 9. | Brief Sylla | abus: | | | | | | | | |
| with Jav Rea con | This course is designed for beginners who have little programming expertise to develop interactive web pages with minimum effort. It covers basic HTML tags, CSS2, CSS3, Bootstrap, type of scripting, client side scripting with JavaScript along-with security flaws. Further, it includes server-side scripting with database connectivity and React.js library. By the end of this course, students acquire knowledge and Skills for creation of Web Site considering both client- and server-side Programming, learn database connectivity perform create, read, update & delete operations in a Website using React.js and importance of single page application and technology behind it. | | | | | | | | | |
| | Total lect | ure, Tutorial | and Practical | Hours fo | r thi | s course | (Take 15 te | achin | g weeks per se | mester): 90 |
| | | | | | | | Pr | actice | | |
| Lec | ctures: 30 | hours | | T | utori | als: 0 hou | ırs | | Lab Work: 6 |) hours |
| 10. | Course O | utcomes (CC | Os) | - | | | | | | |
| | Possible u | | this course aft | er its com | pletio | on i.e. hov | w this cours | e will b | oe practically us | eful to him once |
| СО | 1 | Design a ba | sic page by us | ing HTML | 5, C | SS2and C | SS3 and re | sponsi | veness using B | ootstrap. |
| СО | 2 | Understandi | ing the design | of single- | page | application | ons, MVC ar | chitect | cure and JavaSc | ript. |
| СО | 3 | Developing : | single page ap | plications | and | designing | front-end u | ising R | eact.js library | |
| СО | 4 | Implementin | g React hooks | and unde | erstar | nding state | e managem | ent usi | ing Redux | |
| СО | 5 | Implementin | g server-side s | scripting u | sing | Node.js. | | | | |
| 11. UNIT WISE DETAILS No. of Units: 5 | | | | | | | | | | |
| U | Unit Number: 1 Title: Basics of HTML5, CSS2, CSS3 and Bootstrap No. of hours: 4 | | | | | | | | | |
| And Ter Typ | Content Summary: Angular Introduction, Single Page Application, Angular-cli, Binding, Directives, Controllers, Services, DOM, Templates, Angular application architecture overview, Model View-View Model (MVVM) Typescript Introduction: Benefits, Environment Setup, Examples, Data Types and Variables: Basics, Arrays, Tuples, Enum and Void, Type inference, Type Casting, Destructuring and Spread: Array destructuring, Objects | | | | | | | | | |



destructuring, Mixed destructuring, Property renaming, Default values, Interfaces: Declaration and Initialization, Duck Typing, Excess Property check, Indexable Types, Extending Interfaces, Classes: Writing and Using classes, Constructor method, Inheritance, Type casting, Type assertion, Static Properties, Abstract Class, Modules, Functions, Events, Generics: Functions, Types, Interfaces, Classes

Unit Number: 2 Title: Introduction to JavaScript and MVC framework No. of hours: 6

Content Summary:

App structure understanding, how angular app executes (Flow of execution), Creating a new project, Project setting – bootstrapping, Building and Serving, Component based architecture, Angular Building blocks. Create first component using CLI, Selectors, Decorators, Directives, Model, Property and event binding, Life Cycle Hooks, Role of App Module and Component declaration, Registering Components, using multiple components and passing data, Understanding component selector.

Unit Number: 3 Title: Introduction to React.js No. of hours: 4

Content Summary:

Introduction and overview, Setting up React environment, Role of Babel, Role of Webpack & ESlint, Single Page Applications, Codebase setup, JSX, Injecting data using {}, React.createElement(), Rendering elements into DOM, Components, Styling, Props, Event Handling, State, Component lifecycle, smart vs dumb components, Routing

Unit Number: 4 Title: React Hooks & Redux No. of hours: 10

Content Summary:

Introduction to React Hooks, useState() hook, useEffect() hook, Forms & Routing, Form validations, useContext() hook, useCallback() & useMemo() hook, useReducer() hook, Redux, custom hooks, testing in React

Unit Number: 5 Title: Express js and Node js No. of hours: 6

Content Summary:

Introduction to Express Framework, Introduction to Nodejs , What is Nodejs, Getting Started with Express, and first Express App using JSON, Express Routing, and Implementing MVC in Express, Middleware, Using Template Engines, Error Handling, API Handling, Debugging, Developing Template Engines, Using Process Managers, and Security & deployment.

12. Brief Description of Self-learning components by students (through books/resource material etc.):

OOPs principles, Reactive programming support using RxJS

13. Books Recommended:

Textbooks:

1. Anthony Accomazzo & others, Full Stack React, Version 1

Reference Books:

- Alex Banks, Learning React: Functional Web Development with React and Redux, O'Reilly Media, 1st Edition
- 3. Eric Freeman, Head First JavaScript Programming, O'Reilly Media, 1st Edition

Reference Websites: (nptel, swayam, coursera, edx, udemy, lms, official documentation weblink)

- https://react.dev/
- https://react.dev/reference/react



Practical Content

| Sr. No. | Title of the Experiment | Software/ Hardware based | Unit covered | Time Required | | | | |
|---------|---|--------------------------------|-----------------|---------------|--|--|--|--|
| 1. | Typescript: Checking data types, declaration and operators (Mathematical, logical, comparison) | Software | 1 | 4 hours | | | | |
| 2. | Typescript Looping constructs: Prime number, Fibonacci sequence generator | Software | 1 | 4 hours | | | | |
| 3. | Typescript arrays: Array traversal for searching and sorting | Software | 2 | 4 hours | | | | |
| 4. | Typescript Module and object-oriented programming: manipulation of object, mathematical operation on object properties | Software | 2 | 4 hours | | | | |
| 5. | Node.JS: Program to show non-blocking mechanism | Software | 3 | 4 hours | | | | |
| 6. | Node.JS: Asynchronous method for file read and write. | Software | 3 | 4 hours | | | | |
| 7. | Angular component: Creating first project and adding component. Restaurant menu generator based on the successive choices | Software | 4 | 9 hours | | | | |
| 8. | Angular API call: Calling crickinfoAPI and create a dynamic app | Software | 4 | 6 hours | | | | |
| 9. | Angular Project: Folder structure and root components setup for inventory management system | Software | 5 | 9 hours | | | | |
| 10. | Angular Project: Routing of components for project Inventory management system | Software | 5 | 4 hours | | | | |
| 11. | Angular Project deployment: Deployment of inventory management system project | Software | 5 | 4 hours | | | | |
| Value A | Value Added Experiments | | | | | | | |
| 1. | Building own API and uploading on Github | Software | 5 | 4 hours | | | | |

Project (To be done as individual/in group): Yes

Evaluation Scheme

| PARTICULAR | ALLOTTED RANGE | PASS CRITERIA | | |
|--|---|---|--|--|
| | OF MARKS | | | |
| End Term Project | 40% | Must Secure 30% Marks Out of | | |
| Major Test | 35% | Combined Marks of End Term | | |
| Class Test/ Assignment | 15% | Project Plus Major Test with Overall | | |
| Class Participation Evaluation Through | 10% | 40% Marks in Total. | | |
| | End Term Project Major Test Class Test/ Assignment Class Participation | OF MARKS End Term Project 40% Major Test 35% Class Test/ Assignment 15% Class Participation 10% | | |



| Class | |
|---|--|
| Tests/Practice/Assignme nts/Presentation/Quiz | |
| | |

Mapping of PO's and CO's

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| CO1 | 2 | 3 | 1 | 2 | 3 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 2 | 2 |
| CO2 | 2 | 1 | 3 | 2 | 2 | 1 | 1 | 3 | 3 | 2 | 2 | 1 | 3 | 2 |
| CO3 | 1 | 3 | 3 | 2 | 2 | 1 | 2 | 3 | 2 | 3 | 1 | 2 | 2 | 3 |
| CO4 | 2 | 3 | 2 | 3 | 1 | 3 | 2 | 3 | 1 | 3 | 2 | 2 | 3 | 3 |
| CO5 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 1 | 3 | 2 | 1 |



COURSE TEMPLATE

| 1. | Departme | nt: | Department | of Comp | uter Science | and Engine | ering | | | | |
|---------------------------------------|---|---|------------------|------------|------------------|---------------|------------|-----------------|-------------------|--|--|
| | | ame: Middlev | ware Framewo | rks and | 2. Course | | 3. | L-T-P | 4. Credits | | |
| | ORM | | | CSL274 | | | | 2-0-4 | 4 | | |
| 5. | Type of Co (Check on | | | | | | | | | | |
| 6. | Pre-requis | Pre-requisite(s), if any: Enterprise Web Applications | | | | | | | | | |
| 7. | Frequency of offering (check one): Odd Even Figure Either semester Every semester | | | | | | | | | | |
| 8. | Brief Sylla | ıbus: | | | | | | | | | |
| ser of a of S | This course covers the programming topics that help design modular and scalable java applications based on REST services using Spring Framework. This course will help in Identifying contrast between traditional and modern ways of application development, thereby recognizing their applications and develop the understanding of core architecture of Spring Framework. By the end of this course the students will have sound knowledge of the concepts that will enable them to simplify development and reduce code complexity with Spring while designing and developing java based interactive modular web applications. | | | | | | | | | | |
| | Total lecti | ure, Tutorial | and Practical | Hours fo | or this course | (Take 15 te | aching w | eeks per sen | nester): 90 | | |
| | | | | | | Pr | actice | | | | |
| Lec | ctures: 30 | hours | | Т | utorials: 0 ho | ırs | l | _ab Work: 60 | hours | | |
| 9. | | | • | er its com | pletion i.e. hov | v this course | will be pr | actically usefu | ıl to him once it | | |
| | | Identifying of | contrast between | en tradit | ional and mo | dern ways | of applic | ation develor | oment, thereby | | |
| | CO 1 | recognizing | their applica | tions and | d develop the | understan | ding of (| core architec | ture of Spring | | |
| | | Framework. | | | | | | | | | |
| | CO 2 | Implementa | tion of RESTfu | l web ser | vices with Spri | ng Boot for o | reating w | eb APIs. | | | |
| | CO 3 | Understand | and apply the | concepts | the basics of | Object Relati | onal Map | ping in Spring | Framework. | | |
| | CO 4 | Understand | and Apply the | Aspect O | riented progra | mming Meth | odology i | n Spring Fram | nework. | | |
| | CO 5 | Understand | the Server Si | de conce | pts for the de | velopment o | f java ba | sed interactive | e modular web | | |
| | CO 5 | application ι | using Spring Fi | amework | | | | | | | |
| 10. UNIT WISE DETAILS No. of Units: 5 | | | | | | | | | | | |
| U | Unit Number: 1 Title: Introduction to Spring Boot No. of hours: 8 | | | | | | | No. of hours: 8 | | | |



Content Summary:

Spring Boot Introduction, Spring Boot Basics, Why Spring Boot, Spring Boot Features, Main Goal of Spring Boot Creating Project- Spring Initializer, Spring Boot Hello World Application, Spring Boot Devtool Dependency- Spring Boot – How to Reload Changes Without Restarting the Server, Spring Boot Actuator, Spring Boot Build Systems Spring Boot Code Structure, Spring Boot Runners, Spring Boot Tomcat Port Number, Deploy Spring Boot Applications on External Tomcat Server, Spring Boot – Common Application Properties (application.properties), Integration with relational database using JdbcTemplate

Unit Number: 2 Title: RESTful Web Services No. of hours: 6

Content Summary:

REST web services, JSON basics, Spring boot REST API, @RestController, JSON data binding, serialization & deserialization, Path Variables, REST Exception Handling, REST API design, REST CRUD operations

Unit Number: 3 Title: Hibernate & JPA No. of hours: 8

Content Summary:

Hibernate Introduction, Basics, Hibernate Architecture, Session, SessionFactory, Hibernate Configuration, Configuration Offline, Hibernate with HBM, Hibernate with Annotation, Hibernate Validator, Hibernate CRUD, Hibernate Association Mapping, One to One Mapping, One to Many Mapping, Many to One Mapping, Many to Many Mapping, Hibernate Aggregation, Hibernate Named Queries, Hibernate Native SQL, HQL- Hibernate Query Language, Hibernate HCQL- Criteria Query Language, Hibernate Application with Mysql DB-CRUD, Diff. save(), saveOrUpdate(), update(), persist() and merge(), Diff. get() and load(), Hibernate vs. JPA, Hibernate Application with Mysql DB, JSP-User Interface-CRUD

Unit Number: 4 Title: Aspect Oriented programming, No. of hours: 4

Content Summary:

Overview, AOP vs OOP, AOP vs AspectJ, Advice Types, Point cuts, combining Pointcuts Ordering Aspects, Join Points, @Before, @AfterReturning, @Around advices

Unit Number: 5 Title: Unit Testing & Logging No. of hours: 4

Content Summary:

Introduction to unit testing, Overview of Junit: Installation Steps, Junit 5 Architecture, Environment setup, Creating Test Cases, Logging: What is logging, Introduction to SLJ4, Environment Setup, When and how to use SL4J, Parameterized Logging, SL4J Profiler

11. Brief Description of Self-learning components by students (through books/resource material etc.):

Spring Testing and Spring Web Services

12. Books Recommended:

Textbooks:

Iuliana Cosmina, Rob Harrop, Chris Schaefer, Clarence Ho, "Pro Spring 5", Apress Publisher, 5th Edition, 2017.

Reference Books:

Craig Walls, "Spring in Action", Manning, 5th Edition, 2018

Reference Websites: (nptel, swayam, coursera, edx, udemy, lms, official documentation weblink)

- https://maven.apache.org/guides/getting-started/
- 3





Experiential Learning Component

| S No. | Topic | Type of Submission/Assessment Mode | Cos Covered |
|-------|--|---|-------------|
| 1 | Real time case studies on implementation of Injections, Singelton and Prototype scopes | Evaluation in Tutorial Class through a one or two page write up | CO1 |
| 2 | Case Study to analyze the statement: As the number of aspects in a feature grows, there is a noticeable decrease in code readability and maintainability, Also document where AspectJ is unsuitable for implementing features of refactored legacy applications and explain why. | Evaluation in Tutorial class with practical assessment through group presentation | CO2 |
| 3 | Guest lecture by Industrial Expert "Spring Framework: a recent demand of market" | Attended Certificate submission | CO1-CO5 |
| 4 | Online Quiz | Online Submission | CO1-CO5 |
| 5 | Mini Project Submission | End- term project submission evaluation | CO1-CO5 |

Practical Content

| Sr. No. | Title of the Experiment | Software/ Hardware based | Unit covered | Time Required |
|---------|--|--------------------------------|--------------|---------------|
| 1. | Loosely coupled and tightly coupled | Software | 1 | 2 hours |
| 2. | DB Factory | Software | 1 | 2 hours |
| 3. | LOS(Loan Origination System) | Software | 1 | 2 hours |
| 4. | Create Singleton Bean | Software | 1 | 2 hours |
| 5. | Effect of singleton and prototype | Software | 2 | 2 hours |
| 6. | Create a Loan management system | Software | 2 | 5 hours |
| 7. | If first bean is singleton and another is prototype and viceversa what will be happen | Software | 3 | 5 hours |
| 8. | Implementation of Injections: Constructor, Setter | Software | 3 | 5 hours |
| 9. | Create a Maven Project | Software | 4 | 5 hours |
| 10. | Implementation of auto wiring: ByType, ByName Create two classes A &B and do the DI of A with B using By Type. Create another class C and do its DI with A using By Name. Create one more class i.e. Caller class which is main class of the project | Software | 4 | 5 hours |
| 11. | Collection Injection:LIST,SET,MAP | Software | 5 | 5 hours |
| 12. | Implement Loosely Coupled app using Annotation. | Software | 5 | 5 hours |
| | Value Added Experiments | | | |

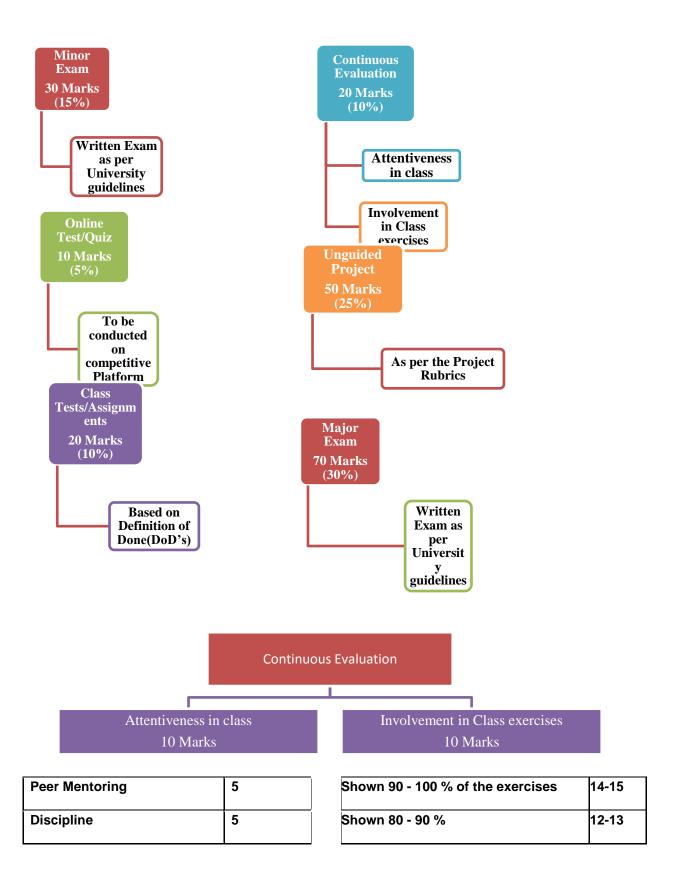


| 1. | Think how to inject the static members using spring xml approach and also try to find out the way by which we can make the object of Scanner class without using new keyword using xml only. | Software | 5 | 5 hours |
|----|---|----------|---|---------|
| 2. | Write a program to make a Loan class and the condition is that it's object will be formed only once and every time when user need object of Loan class then it is referencing to the same instance of Loan class. Hint:- Singleton | Software | 5 | 5 hours |
| 3. | Make a loosely coupled JAVA program for making DAO (Data Access Object) POJO Class. For this make an Interface which contains the CRUD (Create/Read/Update/Delete) methods. And then make three classes which implements the interface for CRUD with OracleDAO class, MySQLDAO class and the PosGresDAO class. Consume DAO in Loosley Coupled Manner. | Software | 5 | 5 hours |

Project (To be done as individual/in group): Yes (List of projects with their Definition of Done (DoDs) will be provided by faculty and will be evaluated by external faculty teaching the same course in the department)

Evaluation Scheme







| Participation in class discussions | 5 | Shown 70% - 80 % | 9-11 |
|------------------------------------|----|------------------|------|
| • | • | Shown 60 - 75 % | 6-8 |
| Total | 15 | Shown <60% | 5 |

| Component | | Total Marks | | | | | | | | |
|----------------------------|------------|------------------------|-------|-------|-------|----|--|--|--|--|
| | DoD 1 | DoD 2 | DoD 3 | DoD 4 | DoD 5 | | | | | |
| Assignment 1 | 3 | 3 3 5 5 4 | | | | | | | | |
| Online course | Online Tes | Online Test Completion | | | | | | | | |
| Competitive Programming | Badges / S | Stars Earned | i | | | 20 | | | | |

Evaluation Scheme

| S. No. | TYPE OF COURSE | PARTICULAR | ALLOTTED RANGE OF MARKS | PASS CRITERIA | |
|--------|---|------------------------|-------------------------------|---|-----------------------------|
| | | Minor Test | 15% | | |
| | Project Based Course (L-T-P/L-T- 0/L-0-P/L-0-0) | Major Test | 35% | | |
| 1 | | Unguided Project | 25% | Must Secure 30% Marks Out of Combined Marks of End Term Project Plus Major Test & Minor Test with | |
| | | 0/L-0-P/L-0-0) | Continuous Evaluation | 10% | Overall 40% Marks in Total. |
| | | Class Test/ Assignment | 10% | | |
| | | Online Test/Quiz | 5% | | |



Mapping of PO's and CO's

| | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 | PO 9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|------|------|------|------|------|------|
| CO1 | 1 | 3 | 3 | 3 | 5 | 3 | 3 | 4 | 4 | 3 | 2 | 2 | 4 | 1 | 3 |
| CO2 | 1 | 2 | 2 | 2 | 4 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 1 | 3 |
| CO3 | 3 | 3 | 3 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 1 | 3 |
| CO4 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 4 | 4 | 3 | 3 | 3 | 5 | 1 | 3 |
| CO5 | 2 | 3 | 5 | 2 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 1 | 3 |

List of Case Studies

- 1. Think how to inject the static members using spring xml approach and also try to find out the way by which we can make the object of Scanner class without using new keyword using xml only.
- 2. When working with enterprise applications, you often want to refer to modules of the application and particular sets of operations from within several aspects. Design a suitable solution to solve this problem.
- 3. Create a spring project implementing Restful API -
 - The program shall contain a controller class with proper annotation along with the implementation class.
 - There must be proper Database connection.
 - i. To validate the logged in user.
 - User shall provide username and password in the input json.
 - These username and password shall be retrieved in Controller class and passed onto implementation class where it shall be validated with the details present in database.
 - On successful validation, the output shall be JSON format with value as valid user else Invalid user. along with role of the user
 - ii. Program shall get all the details of the users stored in the database along with their role.
- 4. If I want to design my software application that is adaptable to various languages then what are the changes do I need to incorporate into my application, write all the changes that are needed with an example.



COURSE TEMPLATE

| 13. Departme | ent: | | Department | t of Computer Science and Engineering | | | | |
|--|--|-----------------------------|----------------|---------------------------------------|--------------------------------|------------|---------------------|----------------------|
| 14. Course N | ame: | Enterpri | se Web Applic | ations | 15. Course Code | 1 | 16. L-T-P | 17. Credits |
| | | | | | CSL273 | | 2-0-4 | 4 |
| 18. Type of C (Check or | | • | Programme (| Core | Programme Elective | e _ | Ope | en Elective |
| 19. Pre-requi | site(s |), if any | : FOCP-II (Jav | /a) | | | | |
| 20. Frequency of offering (check one): Odd 🗸 Even 📗 Either semester 📗 Every semester | | | | | | | | |
| 21. Brief Syll | abus: | | | | | | | |
| This course is on Advanced Java with engineering tools. The course is designed as an advanced course of java programming and assumes that students already have strong programming skills and are well versed with the syntax & semantics of Java programming language. This intensive, hands-on course explores advance language features such as collections framework, multithreading, and designing modular and scalable applications using Spring framework. By the end of this course the students will have sound knowledge of the concepts that will enable them to simplify development and reduce code complexity while designing and developing interactive modular web applications. | | | | | | | | |
| Total lect | ure, T | utorial | and Practical | Hours fo | or this course (Take 15 t | eachi | ing weeks pe | r semester): 90 |
| | | | | | P | ractio | ce | |
| Lectures: 30 | hours | 3 | | Tutoria | ls: 0 hours | Lab | Work : 60 ho | urs |
| Possible u it is compl | ısefulr | • | · | er its com | pletion i.e., how this cours | se will | be practically | / useful to him once |
| CO 1 | | erstand Collectio | | of Collec | tions Framework and ide | ntify | type safety fe | atures introduced in |
| CO 2 | | erstand aphores | | basic co | ncurrency constructs and | synd | chronize threa | ads using locks and |
| CO 3 | Create applications which can communicate to a relational database and analyze various database | | | | | | ze various database | |
| CO 4 | CO 4 Identifying contrast between traditional and modern ways of application development, thereby recognizing their applications and develop the understanding of core architecture of Spring Framework. | | | | | | | |
| CO 5 Understand the Server Side concepts for the development of Java based interactive modular web application using Spring Framework. | | | | | | | | |
| 23. UNIT WIS | 23. UNIT WISE DETAILS No. of Units: 5 | | | | | | | |
| Unit Number | r: 1 | Title: C | collections Fr | amework | τ | | | No. of hours: 8 |



Content Summary:

Collections Framework: An overview, Benefits of using different collections classes, ArrayList: Introduction, Syntax, Usage examples, Sorting & Comparison, LinkedList: Introducing LinkedList class, Inserting and Deleting a new node, Iterator Interface, Sets: Introduction to Set Interface, HashSet, LinkedHashSet and TreeSet, Examples and Usages, Maps: Introduction, HashMap, LinkedHashMap and TreeMap, Examples and Usages, Stack: Introduction, Example and Usages, Queues: Introduction, Example and Usages, Priority Queue, Comparable & Comparator Interface, Applications, Pros and Cons.

| Unit Number: 2 | 2 Title: Java Multithreading | No. of hours: 4 |
|----------------|------------------------------|-----------------|
| | | |

Content Summary:

Multi-Threading Fundamentals: Introduction and Example Usages, Thread States and Transitions, Creating Threads - Using Thread class, Using Runnable Interfaces, Starting a Thread, Joining Threads: using Join Method, Thread Priorities: Example Demonstration, Synchronization: Concept and Example, Inter-Thread Communication: wait(), notify() and notifyAll().

| Unit Number: 3 | Title: Introduction to JDBC | No. of hours: 4 |
|----------------|-----------------------------|-----------------|
|----------------|-----------------------------|-----------------|

Content Summary:

Introduction to JDBC: Components, Architecture, JDBC API, establishing a connection, JDBC Demo (Connection with a relational database), Drivers, Statements, Prepared Statement, Exploring Result Set, BLOBs, CLOBs, Metadata, Transaction Management, Exceptions in JDBC

Content Summary:

What is Spring, Brief History of Spring, Why Spring, Before Spring (Loosely Typed Application Example), Basic Spring Example, what is IOC and DI, Spring vs JEE, Understanding Various Factories in Spring. Spring Setup with JARS only, Spring Setup with Maven, What is Maven, Why we need it, About POM, About Dependency, About Goals, About Plugins, Spring Java based approach & annotation based approach, Spring Dependency Injection, Constructor Injection, Setter Injection, Field Injection, Collection Injection, Bean Inheritance, Bean Life Cycle, Scopes: Singleton and Prototype, Using Property File, Stereotypes, Auto Wire & Qualifiers, Default Bean Name, Qualifiers with Constructors.

| Unit Number: 5 | Title: Spring MVC | No. of hours: 6 |
|-------------------|--------------------|-----------------|
| Cilit Halliboli C | Titlo: Opinig in C | 110.0.100.0.0 |

Content Summary:

MVC Design Pattern, Spring MVC basics, Front controller, MVC architecture, setting up the environment, MVC configuration, Input form handling, Data binding using @ModelAttributes, Input form validations using Bean Validation API, Applying predefined validation checks on a input form field, Creating custom annotations & Custom form validations, Session Management: @CookieValue, @SessionAttributes, Spring MVC integration with JDBC

24. Brief Description of Self-learning components by students (through books/resource material etc.):

HTTP Request-Response Model, SQL Queries, Transaction Management, Automation Tools, Program management tools

Supplementary MOOC Courses

https://www.coursera.org/learn/web-development-with-java-spring-framework https://www.udemy.com/course/collections-and-concurrent-collection-video-lectures-and-tutorials/ https://www.udemy.com/course/jsp-tutorial/

Certification courses/Programs for Skill Development

https://education.oracle.com/oracle-certified-associate-java-se-8-programmer/trackp_333 https://onlinecourses.nptel.ac.in/noc20 cs85/preview



Development IDEs/Frameworks

https://www.eclipse.org/

https://code.visualstudio.com/

https://www.jetbrains.com/idea/

Build Automation Tools

https://maven.apache.org/

https://gradle.org/

Backend Automation Testing Tools

https://junit.org/junit5/

https://site.mockito.org/

https://testng.org/doc/

Logging Frameworks

https://logging.apache.org/log4j/2.x/

http://www.slf4j.org/

25. Advanced Learning Components

Advanced Java Frameworks for creation of rich internet applications https://spring.io/

ORM mapping tools for Java Programming language https://hibernate.org/orm/

Books Recommended

Textbooks:

Iuliana Cosmina, Rob Harrop, Chris Schaefer, Clarence Ho, "Pro Spring 5", Apress Publisher, 5th Edition, 2017.

- Dreamtech Press, "Core & Advanced Java Black Book", Wiley India, 1st Edition, 2016
- Brian R Jackson, "Maven the Definitive Guide", O'Reilly Media, 2nd Edition, 2015
- Sujoy Acharya, "Mastering Unit Testing using Mockito and Junit", Pact Publications, 1st Edition, 2014

Reference Books:

Herbert Schildt, "Java: The Complete Reference", Oracle Press, 11th Edition, 2018
 Craig Walls, "Spring in Action", Manning, 5th Edition, 2018

Reference Websites: (nptel, swayam, coursera, edx, Udemy, Ims, official documentation weblink)

- https://spring.io/
- https://docs.oracle.com/javase/8/docs/api/index.html
- https://docs.oracle.com/javase/7/docs/api/
- https://maven.apache.org/guides/getting-started/

E books:

- https://www.pdfdrive.com/big-java-early-objects-d185377725.html
- https://www.pdfdrive.com/head-first-java-e175339683.html
- https://www.pdfdrive.com/java-threads-understanding-and-mastering-concurrent-programming-e183554512.html
- https://www.pdfdrive.com/head-first-servlets-and-jsp-2nd-edition-e58932829.html
- https://www.oracle.com/technetwork/java/javaee/documentation/index.html



Interview/Placements related Commonly asked Questions:

- https://www.techbeamers.com/java-collections-quiz-for-experienced/
- https://www.javamadesoeasy.com/2015/10/collection-java-mcq-150-multiple-choice.html
- https://www.techbeamers.com/java-multithreading-quiz-with-20-interview-questions/
- https://www.javamadesoeasy.com/2015/10/threadmulti-threading-quiz-in-java-mcq.html
- https://www.javatpoint.com/java-multithreading-interview-questions
- https://www.javatpoint.com/servletinterview
- https://www.tutorialspoint.com/jsp/jsp_interview_questions.htm
- https://www.edureka.co/blog/interview-questions/servlet-interview-questions/

Experiential Learning Component

| S No. | Topic | Type of Submission/Assessment Mode | Cos Covered |
|-------|---|---|-------------|
| 1 | Real time case studies on Collections & Multithreading/Concurrency | Evaluation in Tutorial Class through a one or two page write up | CO1, CO2 |
| 2 | Testing the Backend database connectivity through automation tools like Junit & Mockito | Evaluation in Tutorial class with practical assessment through group presentation | CO3, CO6 |
| 3 | Guest lecture by Industrial Expert "Advanced Java: From the eye of an IT Professional" | Online Quiz | CO1-CO5 |
| 4 | Mini Project: Complete Full stack application using Java Enterprise Frameworks | End term practical assessment through group presentations and viva | CO1-CO6 |
| 5 | Self-Learning (Certificates earned by pursuing supplementary MOOC courses from Coursera/Udemy or any Certification Program) | Completion certificate submitted by student | CO1-CO6 |

Practice Tutorial Content

| S No. | Topic | Unit Covered |
|-------|-----------------------------------|--------------|
| 1. | Collections Framework | 1 |
| 2. | Multithreading | 2 |
| 3. | Concurrency & Synchronization | 2 |
| 4. | Java Database Connectivity (JDBC) | 3 |
| 5. | Build Automation Tools | 4 |
| 6. | Session Management | 5 |
| 7. | Automated Testing & Logging | 6 |

List of Case Studies (Annexure attached)

Practical Content

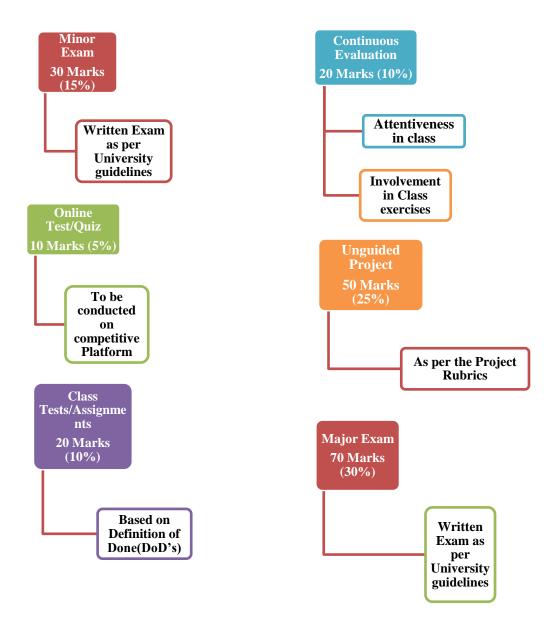


| Sr. No. | Title of the Experiment | Software/Hard | Unit | Time |
|---------|--|---------------|---------|----------|
| | | ware based | covered | Required |
| 13. | Collections Framework | Software | 01 | 02 |
| | (i) Lists (ii) Maps | | | |
| | (ii) Maps (iii) Trees | | | |
| 14. | Collections Framework | Software | 01 | 02 |
| | (i) Stacks | | | |
| | (ii) Priority Queues | | | |
| 4.5 | (iii) Comparable Vs Comparator | 0.4 | 0.4 | |
| 15. | Generics | Software | 01 | 02 |
| 16. | Multithreading: Thread Creation & Parallel Execution | Software | 02 | 02 |
| 17. | Multithreading: Thread States | Software | 02 | 02 |
| 18. | Multithreading: Thread Synchronization | Software | 02 | 02 |
| 19. | Multithreading: Producer Consumer Problem | Software | 02 | 04 |
| 20. | JDBC: Connection Steps | Software | 03 | 01 |
| 21. | JDBC: CRUD operations | Software | 03 | 04 |
| 22. | JDBC: Prepared Statement & Result Set | Software | 03 | 02 |
| 23. | JDBC: Transaction Management | Software | 03 | 02 |
| 24. | Java Servlets: Session Tracking/Management | Software | 04 | 02 |
| 25. | Java Servlets: Library App CRUD operations | Software | 04 | 04 |
| 26. | JSP: Basic & Expression Tags | Software | 05 | 02 |
| 27. | JSP: Implicit Objects | Software | 05 | 02 |
| 28. | JSP: JSTL | Software | 05 | 02 |
| 29. | Unit Testing: Junit Test Cases | Software | 06 | 02 |
| | Value Added Experime | ents | | |
| 4. | Cycle Detection in a List using Floyd's Algorithm | Software | 01 | 04 |
| 5. | Creating a To Do list using Priority Queues | Software | 01 | 02 |
| 6. | Producer Consumer Problem | Software | 02 | 02 |
| 7. | Synchronization in Banking Transactions | Software | 02 | 02 |
| 8. | CRUD Operations using JDBC | Software | 03 | 04 |
| 9. | Basic Library App using Servlets | Software | 04 | 02 |
| 10. | Cookies Handling using Servlets | Software | 04 | 02 |
| 11. | Using JSP Standard Tag Library | Software | 05 | 02 |
| 12. | Writing Junit test cases in MVC software design | Software | 06 | 01 |



Project (To be done as individual/in group): Yes (List of projects with their Definition of Done (DoDs) will be provided by faculty and will be evaluated by external faculty teaching the same course in the department)

Evaluation Scheme





Continuous Evaluation

Attentiveness in class 10 Marks

Involvement in Class exercises 10 Marks

| Peer Mentoring | 5 |
|------------------------------------|----|
| Discipline | 5 |
| Participation in class discussions | 5 |
| | |
| Total | 15 |

| Shown 90 - 100 % of the exercises | 14-15 |
|-----------------------------------|-------|
| Shown 80 - 90 % | 12-13 |
| Shown 70% - 80 % | 9-11 |
| Shown 60 - 75 % | 6-8 |
| Shown <60% | 5 |

| Component | Max Marks (20) | | | | | Total Marks |
|----------------------------|-----------------------|------------------------|-------|-------|-------|----------------|
| | DoD 1 | DoD 2 | DoD 3 | DoD 4 | DoD 5 | |
| Assignment | 3 | 3 | 5 | 5 | 4 | 20 |
| Online course | Online Te | Online Test Completion | | | | 20 |
| Competitive Programming | Badges / Stars Earned | | | | 20 | |



| S. No. | TYPE OF COURSE | PARTICULAR | ALLOTTED RANGE OF MARKS | PASS CRITERIA |
|--------|---|------------------------|-------------------------------|--|
| | | Minor Test | 15% | |
| | | Major Test | 35% | Must Secure 30% Marks Out |
| 1 | Project Based Course (L-T-P/L-T- 0/L-0-P/L-0-0) | Unguided Project | 25% | of Combined Marks of End Term Project Plus Major Test |
| | | Continuous Evaluation | 10% | & Minor Test with Overall 40% Marks in Total. |
| | | Class Test/ Assignment | 10% | ivano in rotal. |
| | | Online Test/Quiz | 5% | |

Mapping of PO's and CO's

| | РО | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
|-----|----|----|----|----|----|----|----|----|----|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | | | | | |
| CO1 | 2 | 1 | 2 | 2 | 3 | 2 | 1 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 2 |
| CO2 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 2 | 1 | 2 |
| CO3 | 2 | 1 | 3 | 1 | 2 | 2 | - | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 2 |
| CO4 | 3 | 1 | 3 | 1 | 2 | 2 | 1 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 3 |
| CO5 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 2 |
| CO6 | 1 | - | 1 | 1 | 3 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | - | 1 |



Project 1

Topic - Blood Bank Management System

Objective: The Main Objective of this System is to design a Web based Application to maintain considerable information of the Patients, Donors, & Report details for any blood-related organization. The application also keeps a record of the donor's health record for future reference. Blood seekers can request for blood to the administrator.

Modules:

- 1. Admin Module
 - a. Admin Login with Username and Password
 - b. Add/Update Hospital details
 - c. Add/View/Delete blood requests
 - d. Add/View/Delete Blood Banks
 - e. Add/View/Delete Donor Details
- 2. Donor Module
 - a. Donor Registration and Login
 - b. Update profile active/passive status
 - c. View blood requests
 - d. Accept/Ignore blood requests
 - e. View Blood banks
- 3. Blood Bank Module
 - a. View Active Donors
 - b. View Hospitals

Definition of Done:

- 1. The project should follow MVC Software Design Paradigm using Maven Integration
- 2. Client and Server-Side validations should be applied properly
- 3. User authentication & Session Management should be applied
- 4. Minimum one unit-test case should be performed per module

Project 2

Topic – Online Healthcare & Logistics Management

Objective: A logistics and healthcare specialists tracking website that allows a customer to search for all the details like schedule meeting with a specialist, date, time and location, Specialists assigned for a booking etc. It also allows customers to check the logistics used for scheduled bookings and unique data required for the logistics.

Modules:



- 1. Admin/Manager Module
 - i. Admin Login with Username & Password
 - ii. Add/View Equipment's
 - iii. Add/View Tests
 - iv. Add/View Specialists
 - v. Add/View Customers
 - vi. Add/View Patients
 - vii. Schedule Bookings
 - viii. Add Bills
- 2. Specialist Module
 - i. Registration
 - ii. View Patients
 - iii. View/Delete Scheduled Bookings
 - iv. View Tests
 - v. View Equipment's
- 3. Patient Module
 - i. Registration & Login
 - ii. View Specialists
 - iii. View Scheduled Bookings
 - iv. View Tests
- 4. Customer Module
 - i. Registration and Login
 - ii. View/Book Equipment's
 - iii. View Bills

Definition of Done:

- 1. The project should follow MVC Software Design Paradigm using Maven Integration
- 2. Client and Server-Side input validations should be applied properly
- 3. User authentication & Session Management should be applied

Project 3

Topic – Online House Rental Management

Objective: To develop a House rental portal where house owners, clients, customers can exchange information effectively and inexpensively.

Modules:

- 1. Owner Module
 - a. Owner Login and Registration
 - b. Add/Update/Delete House details
 - c. Add/Update Location & Price details
- 2. Admin Module
 - a. Admin Login with username & password
 - b. View/Authenticate Owner Details
 - c. Add/Update Customer Details
- 3. Customer Module
 - a. Customer Login and Registration
 - b. Update profile



- c. View House
- d. View House location & Price
- e. Search & get results based on Price details

Definition of Done:

- 1. The project should follow MVC Software Design Paradigm using Maven Integration
- 2. Client and Server-Side input validations should be applied properly
- 3. User authentication & Session Management should be applied
- 4. Minimum one unit-test case should be performed per module

Project 4

Topic - Online University Yearbook System

Objective: For the CSE department, in our university we want to develop a website which helps in showcasing the tasks, achievements accomplished by Students and Faculties. With each academic year passing by, new information can be added, updated & deleted. The project focuses on providing the information regarding the achievements of the CSE Department every year.

Modules:

- 1. Admin Module
 - i. Admin Login with Username & Password
 - ii. Add/View/Update Faculty Details
 - iii. Add/View/Update Student Details
 - iv. Delete Faculty/Student Details
- 2. Faculty Module
 - i. Faculty Registration
 - ii. Login with Username & Password
 - iii. Update Profile
 - iv. Add/Update/Delete Achievements
 - v. View Achievements
- 3. Student Module
 - i. Student Registration
 - ii. Login with Username & Password
 - iii. Add/Update/Delete Achievements
 - iv. View Achievements

Definition of Done:

- 1. The project should follow MVC Software Design Paradigm using Maven Integration
- 2. Client and Server-Side validations should be applied properly
- 3. User authentication & Session Management should be applied
- 4. Minimum one unit-test case should be performed per module



Project 5

Topic - Online Car Pooling

Objective: The online carpooling system is a web-based application which provides us with a simple riding platform between the car owner and car user. This project enables users to access mobility assets own by others exactly when they need. It shows a medium for available cars to pick up them on the interest of car owner with time and capacity.

Modules:

- 1. Car-Owner Module
 - a. Car-Owner Registration and Login
 - b. Update Profile
 - c. View Car Users
 - d. Confirm Car rides
- Admin Module
 - a. Admin login with username & password
 - b. View/Update Car Owner details
 - c. View/Update Car User details
- 3. Car-User Module
 - a. Car-User Registration and Login
 - b. Update Profile
 - c. View/Search Car-Owners based on location
 - d. Request Car rides

Definition of Done:

- 1. The project should follow MVC Software Design Paradigm using Maven Integration
- 2. Client and Server-Side validations should be applied properly
- 3. User authentication & Session Management should be applied
- 4. Minimum one unit-test case should be performed per module

Project 6

Topic – Online Recruitment System (Job Suggestions Website)

Objective: To serve as a common meeting ground for jobseekers and employer's, both locally and globally, where the candidates can find their dream jobs and recruiters can find the right candidate to fulfill their requirements.

Modules:

- 1. Admin Module
 - a. Admin login with username & password



- b. View/Delete Registered Candidates
- c. View/Delete Registered Companies
- d. View/Delete Jobs Posted
- e. View Tests
- 2. Candidate Module
 - a. Candidate Registration and Login
 - b. Update Profile
 - c. View Companies
 - d. View/Search Jobs Posted
 - e. Search Jobs
 - f. Take Test
- 3. Company (Recruiter) Module
 - a. Company Registration and Login
 - b. Add/Post Job Details
 - c. Add/Post Vacancies
 - d. Create/Update/Delete Tests
 - e. View Registered Candidates

Definition of Done:

- 1. The project should follow MVC Software Design Paradigm using Maven Integration
- 2. Client and Server-Side validations should be applied properly
- 3. User authentication & Session Management should be applied
- 4. Minimum one unit-test case should be performed per module

Project 7

Topic - University Event Management (UEM) Portal

Objective: To develop a smart web application which allows Faculty, Staff, Students and Outside Organizers to meet at a place which is very flexible.

Modules:

- 1. Faculty/Staff Module
 - a. Registration and Login
 - b. Create/Update/Search Events
 - c. View Upcoming Events
 - d. View Organizers
- 2. Students Module
 - a. Registration and Login
 - b. Create/Update/Search Events
 - c. View Upcoming Events
 - d. View Organizers
- 3. Outside Organizers Module



- a. Registration and Login
- b. Update Profile
- c. View Location Details
- d. Create/Update Events
- 4. Admin Module
 - a. Login with username & password
 - b. Create/Update Event Location
 - c. View/Delete Events
 - d. View/Delete Organizer details
 - e. View/Delete outside organizers

Definition of Done:

- The project should follow MVC Software Design Paradigm using Maven Integration
- ii. Client and Server-Side validations should be applied properly
- iii. User authentication & Session Management should be applied

List of Case Studies

Collections Framework

Our hacker, Little Stuart lately has been fascinated by ancient puzzles. One day going through some old books he finds something scribbled on the corner of a page. Now Little Stuart believes that the scribbled text is more mysterious than it originally looks, so he decides to find every occurrence of all the permutations of the scribbled text in the entire book. Since this is a huge task, Little Stuart needs your help, he needs you to only figure out if any permutation of the scribbled text exists in the given text string, so he can save time and analyze only those text strings where a valid permutation is present.

Definition of Done:

- a. First line contains number of test cases T. Each test case contains two lines, first line contains pattern and next line contains a text string. All characters in both the strings are in lowercase only [a-z]
- b. For each test case print "YES" or "NO" (quotes for clarity) depending on whether any permutation of the pattern exists in the text string
- 2. Implement a to-do list. Tasks have a priority between 1 and 9, and a description. When the user enters the command add *priority description*, the program adds a new task. When the user enters next, the program removes and prints the most urgent task. The quit command quits the program. Use a priority queue in your solution.

Definition of Done



- i. Assign priorities b/w 1 to 9 to all the tasks
- ii. Tasks should be added and removed according to the user input
- iii. Finally display the resultant queue

The Task Class

This class represents a task and should be saved in the file Task.java .

- task : String - priority : int - order : boolean «constructor» Task() «constructor» Task(t: String, p: int) + getTask() : String + getPriority(): int + setTask(t : String) : void + setPriority(p: int) : void + getOrder() : boolean + setOrder(o : boolean) : void + toString() : String + equals(o : Object) : boolean



The TaskList Class

This class represents a list of tasks and should be saved in the file TaskList.java .

TaskList + MAX : int (20) - list : Task[] - count : int «constructor» TaskList() «constructor» TaskList(list: Task[]) + getCount() : int + addTask (t : Task) : void + deleteTask(p : pos) : void + sort() : Task[] + next() : Task + toString() : String + equals(o : Object) : boolean

The Driver Program: TaskDriver.java

You also need to write a program with a main() method. This will be the driver for the entire collection of files/classes. This file should be saved as TaskDriver.java.

This file will implement a menu-based program. All input should be validated and re-prompted until valid input is entered (i.e., a data validation loop should be used for all input). It should allow for the following options:

- 1. Print the task list
- 2. Print the number of tasks
- 3. Add a task
- 4. Remove a task (based on position)
- 5. Print the next task to be done
- 6. Sort the tasks by priority
- 7. Change the priority scale
- 8. Quit

When tasks are first added, they are added to the end of the list. They are only sorted by priority if a sort is done.

When sorting, it must be by Task.order: if true, then sort where 1 is the highest priority. If Task.order is false then sort where 5 is the highest priority.



Comparators

- 3. There are several cricket players in an academy who waits to be listed in an international T20 team. A unique id is assigned to each player who waits to get listed. The Selection committee select the players based on the following criteria:
 - a. The player having the highest Strike Rate (batting/bowling) is selected first
 - b. Players having the same Strike Rate will be selected by Runs scored in descending order (Player with maximum runs will be chosen first)
 - c. Players having the same Strike Rate and Runs will be selected in ascending order of their id (Jersey Number)

Definition of Done:

- a. The first line of input contains integer *n* (describing the total number of players)
- b. Each of the *n* subsequent lines will be in the following form:

ID Name Strike Rate Runs

- After entering the player records, the Program should ask for the number of players to be selected
- d. The ID & Name contain only integer numbers (without leading zeroes). The Strike Rate will contain, at most, two digits after the decimal points. ID should be unique
- e. The final output should contain the Player Name in the order based on the selection criteria

Multithreading

3. Consider a system with three smoker processes and one agent process. Each smoker continuously rolls a cigarette and then smokes it. But to roll and smoke a cigarette, the smoker needs three ingredients: tobacco, paper, and matches. One of the smoker processes has paper, another has tobacco, and the third has matches. The agent has an infinite supply of all three materials. The agent places two of the ingredients on the table. The smoker who has the remaining ingredient then makes and smokes a cigarette, signaling the agent on completion. The agent then puts out another two of the three ingredients, and the cycle repeats. Write a program to *synchronize* the agent and the smokers.

Definition of Done:

- i. The Program should take file name as command line argument
- ii. Inside *run* () perform the desired operation
- iii. Print the desired output

Java Database Connectivity

4. Develop a Java Servlet application "E-Library" that performs all the basic CRUD (Create, Read, Update & Delete) operations.

Sequence of Events



- a. A client can start the web app by issuing URL http://hostname:port/ElibraryProject/Login.html
- b. The Login page will present two options:
 - i. Register the user or Sign In [which maps to a servlet class that will query the database accordingly]
 - ii. You can take any number of parameters for user registration
- c. After successful authentication, the user can perform any of the following operations into the library database
 - i. Insert a book record
 - ii. Search a book record
 - iii. Update an existing book record
 - iv. Delete a book record

Definition of Done

- i. Create a table in MySQL (Any Relational) database
- ii. Design the web page and create a class that connects to the MySQL database
- iii. Perform all CRUD operations
- iv. Display the results on the desired web page

Sample Database



CSL343 Designing Human Computer Interfaces

COURSE TEMPLATE

| 1. | Department: | Department of Computer Science and Engineering | | | | | |
|---|--|---|----------------------------|---------------------------|----------------|--|--|
| 2. | Course Name: Design | ing Human-Computer | 3. Course Code | 4. L-T-P | 5. Credits | | |
| | Interfaces | | CSL343 | 2-0-4 | 4 | | |
| | T (0 | T | | <u>_</u> | | | |
| 6. | Type of Course (Check one): | Programme Core | Programme Elective | ✓ Open Electi | ive | | |
| 7. | 7. Pre-requisite(s), if any: C# programing for Unity | | | | | | |
| 8. | 8. Frequency of offering (check one): Odd Even Either semester Every semester | | | | | | |
| 9. | 9. Focus: Employability Entrepreneurship Skill Development Basic Knowledge | | | | | | |
| 10. | Brief Syllabus: | | | | | | |
| tea fac In t | Human-Computer Interaction (HCI) is a multidisciplinary area concerned with design, and evaluation. This course teaches students to design user interfaces based on the capabilities of computer technology and the needs of human factors. Students design a user interface for a system and implement a prototype from a list of informal requirements. In this course students design projects that are developed on current human-computer interaction principles and understand the User Centre Design (UDC), Graphic User Interface (GUI)Design &Aesthetics by Creating a prototype of HCI by end of the course. | | | | | | |
| | Total lecture, Lutorial, | , and Practical Hours f | or this course (Take 15 t | eaching weeks per ser | nester): 90 | | |
| | | | P | ractice | | | |
| | ctures: 30 hours | | utorials: 10 hours | Lab Work: 50 | hours | | |
| 11. Course Outcomes (COs) Possible usefulness of this course after its completion i.e. how this course will be practically useful to him once it is completed after the completion of this course students will be able to | | | | | | | |
| | | Learn what is HCl and its evolution and history of HCl. Contrast the important aspects of interaction design. | | | | | |
| | - | Identify the interactions from a user's perspective and the cognitive aspects of interactions. Summarize the psychological aspects of user experience. | | | | | |
| | CO 3 Describe vand the go | • | luate the performance of a | a design, given the conte | ext, the task, | | |



| CO 4 | Relate and apply the basics of design and experiment to evaluate a design and its Usability Engineering |
|------|--|
| CO 5 | Identify the techniques that are cost-efficient and efficient to test their designs and apply them to create a Prototyping on Adobe XD. |
| | |

12. UNIT WISE DETAILS

No. of Units: 5

Unit Number: 1

Title: Historical Evolution of Computer Interaction

No. of hours: 5

Content Summary:

From the initial computers performing batch processing to the user-centric design, there were several milestones like – Early computer, the Visual Display Unit, the Development of the Sketchpad, Douglas Engelbart's introduction to programming toolkits, the Introduction of the Word Processor, and Introduction of the personal computer.

| Unit Number: 2 | Title Introduction: Human-Computer Interface | No. of hours: 5 |
|----------------|--|-----------------|
| | | |

Content Summary:

What is Human-Computer Interface, Difference between HCI and UX design, and what do you need to know to create an intuitive user experience, Human psychology, Emotional design, and Specialized design processes?

| Unit Number: 3 Title: Introduction to Human-Computer Interaction No. of hours |
|---|
|---|

Content Summary:

What is HCI? What are the main components of HCI? How has it developed over time? Basic concepts and principles
• The official version III. HCI research • Usability • Accessibility • Visualization.

| Unit Number: 4 | Title: Concept of Usability Engineering | No. of hours: 5 |
|----------------|---|-----------------|
|----------------|---|-----------------|

Content Summary:

What is Usability Engineering and its concept, method, progress, software, and systems? Concepts: User-Centered Design, Usability Testing.

| Unit Number: 5 | Title: Final Project – Prototyping | No. of hours: 10 |
|----------------|------------------------------------|------------------|
|----------------|------------------------------------|------------------|

Content Summary:

What is the different type of software prototyping models and functionalities? User Centre Design (UDC), Graphic User Interface (GUI) Design &Aesthetics. Create a prototype of HCI.

13. Brief Description of Self-learning components by students (through books/resource material etc.):

- User Centre Design (UDC)
- Graphic User Interface (GUI)
- Design &Aesthetics



14. Books Recommended:

Textbooks:

1. Alan Dix, Janet E. Finlay, Gregory D. Abowd, and Russell Beale. Human-computer interaction, 3rd ed. Prentice Hall, 2004

Reference Books:

- 1. Preece, J., Rogers, Y., & Sharp, H., Interaction design: Beyond human-computer interaction,4th ed John Wiley & Sons Ltd., 2015
- 2. Thomas George, Designing and Analyzing HCI. Experiments, 1st ed, Penn State University, 2008.
- 3. H. Nguyen, Human-Computer Interaction in Game Design, 2nd ed, Word ware Publishing, Inc.,2012.

Reference Websites: (nptel, swayam, coursera, edx, udemy, lms, official documentation weblink)

• https://www.udemy.com/courses/search/?q=human%20computer%20interaction&src=sac&kw=human%20computer%20inter

Practice (Tutorial/Case Studies/ Industry Visit/Field Work) Content

| Sr. No. | Торіс | Unit Covered |
|---------|----------------------------|--------------|
| 1 | Human-Computer Interface | 1,2 |
| 2 | Human-Computer Interaction | 2,3,4,5 |

Practical Content

| Sr. No. | Title of the Experiment | Software/ Hardware Based | Unit Covered | Time Required |
|---------|---|---------------------------------|-----------------|------------------|
| 1 | Examine any 10 games, recently released Commercially successful Good reviews and awards Steps – Played (Kept diaries) Catalog interaction techniques, the main element Observe another player Collect online game reviews and discussion List of design elements and novel approaches | Word doc | 1,2 | 6 hours |
| 2 | List and research the effortless community getting critical mass and Effortless community connection to the community | Word doc | 3,4 | 4 hours |
| 3 | Create a game template User interface for the following platform – • iOS Device • Android Device | Word doc/ Adobe Photoshop | 4,5 | 20 hours |
| | Value Added Experime | ents | | |
| 1 | Write a report on based of a case study of games in the following contributions | Word doc | 1,2,3,4,5 | 20 hours |



CSL343 Designing Human Computer Interfaces

| Effortless Community | | |
|--|--|--|
| Learning by Watching | | |
| Deep Customizability | | |
| Fluid System-Human Interaction | | |

Project (To be done as individual/in group): Yes

Evaluation Scheme

| TYPE OF COURSE | PARTICULAR | ALLOTTED RANGE OF MARKS | PASS CRITERIA | | |
|---|--------------------------------|----------------------------|---|--|--|
| Project Based Course (L-T-P/L- T- 0/L-0- P/L-0-0) | End Term Project Major Test | 40% 35% | Must Secure 30% Marks Out of Combined Marks of End Term | | |
| | Class Test/ Assignment | 15% | Project Plus Major Test with | | |
| | Class Participation Evaluation | 10% | Overall 40% Marks in Total. | | |

Mapping of PO's and CO's

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| CO1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | - | 1 | 2 |
| CO2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 1 | 3 | - | 2 | 2 |
| CO3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 2 |
| CO4 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | - | 2 | 3 |
| CO5 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 3 |



COURSE TEMPLATE

| 1. | Department: | Department of Computer Science and Engineering | | | | | | | | | |
|--|---|---|--|-------------------------|--------------|------------------|-------------|--|--|--|--|
| 2. | Course Name: Virtual | Reality Development | | 3. Course Code | | 4. L-T-P | 5. Credits | | | | |
| | | | | CSL345 | | 2-0-4 | 4 | | | | |
| 6. | Type of Course (Check one): | Programme Core Programme Elective Open Elective | | | | | | | | | |
| 7. | 7. Pre-requisite(s), if any: Advance Programming for Games, Cross Platform Game Development | | | | | | | | | | |
| 8. | 8. Frequency of offering (check one): Odd Even Either semester Every semester | | | | | | | | | | |
| 9. | Focus: Employability | ✓ Entrep | Entrepreneurship Skill Development Basic Knowledge | | | | | | | | |
| 10. | 10. Brief Syllabus: | | | | | | | | | | |
| This course covers the concepts of VR and equips graduates with the practical skills to develop games/applications using this emerging technology. With this new knowledge, graduates will be able to analyze, design, plan, and create games/applications that advantage VR technologies VR students will also cultivate the skills to design, program, and develop Virtual Reality simulations. Virtual Reality is being used to develop apps and experiences for a broad range of industries beyond games. You can do Architectural Visualization by walking around a building before it is built. This course makes understanding Unreal VR super easy. Not only do we show you how to use the engine's VR features, but also, we teach you the fundamental concepts of VR development. By teaching you the fundamentals, in the rapidly developing VR space . | | | | | | | | | | | |
| | Total lecture, Tutoria | I, and Practica | Il Hours f | or this course (Take 15 | teachir | ng weeks per ser | nester): 90 | | | | |
| | | | Practice | | | | | | | | |
| | Lectures: 30 hours | | | utorials: 0 hours | Lab Work: 60 | ork: 60 hours | | | | | |
| 11. Course Outcomes (COs) Possible usefulness of this course after its completion i.e. how this course will be practically useful to him once it is completed. | | | | | | | | | | | |
| | | Explain and identify how modern VR headsets "trick the brain" into believing it is somewhere else and develop a 3D VR environment targeting a device as simple as iOS/Android cardboard. | | | | | | | | | |
| | | Apply the advanced features in Unreal Engine, including Blueprints and Game framework, and design interactive VR game plays. | | | | | | | | | |
| | CO 3 | Compare, how to add support for Game Controllers and Cardboard "Screen Touch" button. Learn | | | | | | | | | |
| 1 | and Appl | and Apply to Create interactive VR game plays with advanced Unreal Engine features, including | | | | | | | | | |



| | Line Tracing (Ray Casting) and Navigation (Path Finding). | | | | | | | |
|---|---|---|---|--|--|--|--|--|
| CO 4 | | Learn to analyze how to take advantage of Unity's Events to trigger actions on interactive objects, including loading scenes. | | | | | | |
| CO 5 | how | lyze and learn how to use VR-supported hardware like Oculus to add support for Game/VR Controllers. Design and develop e mode how it works with Unreal engine 4. Learn to build beau | an environment and set up | | | | | |
| CO 6 | | rn to build a Game in Unreal engine – a virtual reality space shoreate interactive heads-up 3D user interfaces. | nooter game and puzzle game | | | | | |
| 12. UNIT WISE | E DETA | AILS | No. of Units: 6 | | | | | |
| Unit Number: | : 1 | Title: Introduction to Virtual Reality and languages C&C++ | No. of hours: 4 | | | | | |
| | - | Introduction to VR, Introduction to Unreal Engine Project Setup and build & Player Settings VR Lobby. How to program with Can | - | | | | | |
| Unit Number: | | Title: Unreal Fundamentals | No. of hours: 4 | | | | | |
| object's (Trans Tasks, Vectors | sform) s, and | component, Using Prefabs, creating a development e component, Using Code Snippets (Templates) to add more Visual Debug features easily and quickly. More math, with invany other value. Using Animation Curves to ease in and out the | properties, Using MonoDevelop verse linear interpolations, Using | | | | | |
| Unit Number: | 3 | Title: Blueprint and Game Framework | No. of hours: 6 | | | | | |
| Actors, Bluep Input Mappir movement. I | orint cla ng, VR mporti | r: Introduction to Blueprints, Variables, Arrays, Functions, Fasses, Timelines, Level Scripting. Player Start, Game Modes, I Pawn, VR Controllers. Setup the character's movement, ng environment and Setting up Game Mode with collision behing and Using Materials, Fades, Timers, and Teleporting. How | Pawns, Characters, Controllers, and drawbacks of controller navior. Line Tracing A Teleport | | | | | |
| Unit Number: | 4 | Title: ArchViz Project | No. of hours: 6 | | | | | |
| Content Summary: In this unit, we will learn how to set up a Scene by using Blueprint, importing external Assets, Adding Navmesh, Input management, Controls, Variant Management, and Animating objects with code. Teleportation, Line Tracing. | | | | | | | | |
| Unit Number: | 5 | Title: Introduction to Unreal Motion Graphics (UMG) | No. of hours: 4 | | | | | |
| Designer, Tex | Grapl t Widg | nics overview, how to add Root Widget, Canvas Panel, Coret, Button Widget, Border Widget & Image Widget, Progress Pertical Box, Grid Panel & Uniform Grid Panel, Scale Box & Size | Bar Widget, Checkbox Widget, | | | | | |



the HUD Handling UI inputs, binding values, Loading a Scene. Also, Audio, Lighting, Hepatic feedback, Environment as UI, Object Interaction, drop points, Holders, Different ways to navigate a 3D world, Navigation Vs Volume for teleport.

Unit Number: 6 Title: VR Gaming Vs Metaverse Technology No. of hours: 6

Content Summary:

How to create a team/clan-based virtual reality puzzle and VR Shooter Game. Learn about how to Import Skeletal mesh, play the animation, Creating Hand Controls, Grab Animation, Point Animation, Scene Setup, Puzzle design, Hint System, and post-processing. Adding Creating Character and AI, shooting mechanics, Score System, Game Loop, Win Lose conditions.

Experience: Well, the Metaverse will provide us with a wealth of 3D (three-dimensional) visuals and even 2D (two-dimensional) experiences that we cannot now enjoy.

Discovery: The Metaverse ecosystem still has inbound and outbound discovery methods. When individuals actively seek information, this is referred to as inbound discovery. Outbound marketing, on the other hand, refers to delivering communications to individuals regardless of whether they requested it or not.

Creator Economy: Earlier versions of the internet required some programming ability to create and build tools. However, web application frameworks have made it easy to create web apps without coding. As a result, the number of web designers is quickly increasing.

Spatial Computing: It is a technology that blends virtual reality with augmented reality. Microsoft's HoloLens is a great illustration of what this technology is capable of. Even if you haven't gotten your hands on a Hololens yet, you must consider Instagram's face filters as an instance of spatial computing.

Decentralization: Developers may take advantage of online capabilities by leveraging a scalable ecosystem powered by microservices and distributed computing. Furthermore, blockchain and smart contracts provide producers access to their own data and goods.

Human Interface: By merely looking around at the actual world, users may obtain information about their surroundings, access maps, and even create shared AR experiences utilizing a combination of human interface and spatial computing.

Infrastructure: The presence of other layers is dependent on technological infrastructure. It involves 5G and 6G computing in order to boost network capacity and minimize network congestion.

- 13. Brief Description of Self-learning components by students (through books/resource material etc.):
 - Students must master VR headsets "trick the brain" into believing it is somewhere else. In addition, create a 3D VR project targeting a device as simple as iOS/Android cardboard. Watch suggested videos to understand the d current state of bleeding-edge VR
 - Read suggest articles/papers for keeping up to date in the field of VR Research
 - Unreal Developer documentation



14. Books Recommended:

Textbooks:

1. Jason Jerarld, The VR Book, Human-Centered Design for Virtual Reality,2nd ed, Association for Computing Machinery and Morgan & Claypool Publishers, 2015.

Reference Books:

- 1. Sam Keene, Google Daydream VR Cookbook: Building Games and Apps with Google Daydream and Unity, 1st ed, Addison-Wesley Professional, 2018.
- 2. Marcos Romero & Brenden Sewell, Blueprints Visual Scripting for Unreal Engine: The faster way to build games using UE4 Blueprints, 2nd ed, Packt publication, 2019.
- 3. Mitch McCaffrey, Unreal Engine VR Cookbook: Developing Virtual Reality with UE4 (Game Design), 1st ed, Addison-Wesley Professional,2017.

Reference Websites: (nptel, swayam, coursera, edx, udemy, lms, official documentation weblink)

- https://unity.com/solutions/ar-and-vr-games
- https://www.unrealengine.com/en-US/vr

Practice (Tutorial/Case Studies/ Industry Visit/Field Work) Content

| Sr. No. | Topic | Unit Covered |
|---------|---|--------------|
| 1 | Case study: virtual reality in real estate https://www.juegostudio.com/virtual-reality-real-estate-case-study | 2,3,4 |
| 2 | Case study: virtual reality game | 4,5,6 |
| 0 | https://www.juegostudio.com/real-time-multiplayer-vr-game-case-study | 4,5,6 |
| 3 | WorldViz Virtual Reality Case Studies https://www.worldviz.com/virtual-reality-case-studies | 4,5,6 |

Practical Content

| Sr. No. | Title of the Experiment | Software/Hardware based | Unit covered | COs | Time Required |
|---------|------------------------------------|-------------------------|-----------------|---------------|------------------|
| 1. | Hello world | Unreal Engine | 1 | CO 1 | 05 hours |
| 2. | Level Setup & building application | Unreal Engine | 1,2 | CO 1, CO 2 | 05hour s |
| 3. | Blueprints and events | Unreal Engine | 3 | CO 3 | 10 hours |



CSL345 Virtual Reality Development

| 4 | Interaction System | Unreal Engine | 4 | CO 4 | 10 hours |
|----|--|--------------------------------------|---|------|-------------|
| 5 | UX | Adobe Photoshop /Unreal Engine | 5 | CO 5 | 10 hours |
| 6 | Shooter Game | Adobe Photoshop /Unreal Engine | 6 | CO 6 | 10 hours |
| | Value A | Added Experiments | | | |
| 1. | a) Create a VR simulation that | 3D Studio | | | |
| | includes the following features – b) Aesthetics c) Technical Features • Teleportation • UI & UX • Performance • Haptic Feedback • Immersiveness | Max/Unreal 4 | 6 | | 10 hours |
| | d) Create a VR Game that includes the following features – Concept Aesthetics Features Set Game Play Macanics | | | | |

Project (To be done as individual/in group): Yes

Evaluation Scheme

| TYPE OF COURSE | PARTICULAR | ALLOTTED RANGE OF MARKS | PASS CRITERIA |
|---------------------|--------------------------------|----------------------------|------------------------------|
| Project | End Term Project | 40% | Must Secure 30% Marks Out of |
| Based Course (L- | Major Test | 35% | Combined Marks of End Term |
| T-P/L-T- | Class Test/ Assignment | 15% | Project Plus Major Test with |
| 0/L-0-P/L- 0-0) | Class Participation Evaluation | 10% | Overall 40% Marks in Total. |



Mapping of PO's and CO's

| | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 | PO 9 | PO 10 | PO 11 | PO 12 | PSO 1 | PSO 2 | PSO 3 |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|
| CO 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | - | 2 | 2 |
| CO 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 1 | 3 | 1 | 2 | 2 |
| CO 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 2 |
| CO 4 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 1 | 3 | 3 |
| CO 5 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 3 |
| CO 6 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 3 | 3 | 3 | 3 |



COURSE TEMPLATE

| 1. | Department: | Department of Computer Science and Engineering | | | | | | |
|--|--|---|-----------------------------|----------------------|-------------|--|--|--|
| 2. | Course Name: XR St | udio | 3. Course Code | 4. L-T-P | 5. Credits | | | |
| | | | CSL342 | 2-0-4 | 4 | | | |
| 6. | Type of Course (Check one): | Programme Core | Programme Elective | ✓ Open Elect | ive | | | |
| 7. | Pre-requisite(s), if ar | ıy: Advance Programmin | ng for Games, AR Developm | ent, VR Development | | | | |
| 8. | Frequency of offerin | g (check one): Odd | Even Either semo | ester Every s | semester | | | |
| 9. | Focus: Employability | Entrepreneursh | nip Skill Developm | nent 🗸 Basic Kno | owledge | | | |
| 10. | Brief Syllabus: | | | | | | | |
| lea Stu sim the Wit Thi | This course is designed to develop Interactive experiences using Mixed Reality software and hardware. Students will learn the fundamental concepts and applications of Mixed reality using a modern game engine and hardware platform. Students will also learn to appreciate the unique design opportunities inherent to the platform. To supplement and simulate the physical world, students will learn methods and practices to meaningfully integrate virtual content into the physical world. In addition, focuses on performing successfully while managing all the variables of a final project. With continued faculty support, students gain new insights into the components of the WebXR production pipeline. This module is the start where students are briefed, and work on XR Projects. Each XR Project simulates real-world entertainment media, such as Games or Simulations. Advanced digital workflows and techniques are covered. | | | | | | | |
| | Total lecture, Tutoria | Il and Practical Hours fo | or this course (Take 15 tea | aching weeks per ser | nester): 90 | | | |
| | | | Pra | actice | | | | |
| | ctures: 30 hours | | utorials: 0 hours | Lab Work: 60 | hours | | | |
| 11. | Course Outcomes (C | Os) | | | | | | |
| Possible usefulness of this course after its completion i.e. how this course will be practically useful to him once it is completed after the completion of this course students will be able to | | | | | | | | |
| | CO 1 technolog | Understand and learn Web technologies like - HTML, CSS, and Java Scripts. Discover technologies like the internet, Server, and cloud systems and apply them to create a WebXR experience. | | | | | | |
| | (3()) | Explain how Three.js frameworks work, their structure, and their applications. Design web-based applications in three.js. | | | | | | |



| CO 3 | Describe how the WebXR works, categorize its internal architecture and how all its internal components behave and communicate in application flow and with each other. |
|------|---|
| CO 4 | Design a VR application scene, adding control input and controller haptic feedback. Relate how UX works in VR. |
| CO 5 | Create an AR application scene, add touch input, and add anchors. Illustrate how UX works in AR, and how surface detection and hit test work. |
| CO 6 | Learn how to use a Microsoft HoloLens. Also discover the Microsoft HoloLens towards Developing their first applications using Gaze, Gestures, Spatial Mapping and Spatial Sound. |

12. UNIT WISE DETAILS

No. of Units: 6

Unit Number: 1

Title: An introduction to Web Technologies & WebXR

No. of hours: 4

Content Summary:

Introduction to WebXR, history, present, and future. Understanding the WebXR Landscape and Different Industries Leveraging WebXR. Understanding web development and web technologies. Introduction to HoloLens device and its hardware, its features. Understanding the HoloLens menu and its use.

Unit Number: 2

Title: Introduction to Three.js

No. of hours: 4

Content Summary:

Getting Started with Three.js and Understanding the application structure, Creating a Browser-Based experience. Adding mesh, lights, sound, and textures to our application. Learn how animation, particles, and physics works.

Unit Number: 3

Title: Understanding WebXR

No. of hours: 4

Content Summary:

Introduction to WebXR, Application Flow, XR devices, XR session, Frame Loop, XR spaces, XR input. How UX works in VR and by the end Movement system and interaction will be added.

Unit Number: 4

Title: Creating VR Experiences with WebXR

No. of hours: 4

Content Summary:

Getting Started with PlayCanvas and Understanding the Entity Component Design Pattern, creating a Browser-Based AR Project. Getting Started with Setting up the VR scene, adding controllers, Input support, Haptic feedback, Teleportation, and User interaction. How UX works in VR and by the end Movement system and interaction will be added.

Unit Number: 5

Title: Creating VR Experiences with Web XR & Metaverse

No. of hours: 4

Content Summary:

Installing and Setting Up Unity and Understanding the Unity Editor, Creating a Solar System and Visualize in Google Cardboard and Importing 3D Models in Unity and Using Gaze to Move in 3D World.

How to collaborate Metaverse and web XR.



| Unit Number: 6 | Title: XR application for Hololens | No. of hours: 10 |
|----------------|------------------------------------|------------------|
| 1 | | · |

Content Summary:

Introduction to HoloLens device and its hardware, its features. Understanding the HoloLens menu and its use. Set up MRTK and work on Gaze, Gestures: Hand detected feedback, Gestures: Click on a model, Voice command, Spatial Mapping, and Spatial Sound.

13. Brief Description of Self-learning components by students (through books/resource material etc.):

- Create a 3D VR project targeting a device as simple as iOS/Android cardboard and HoloLens.
- Students must master and create a 3D VR project targeting a device as simple as iOS/Android cardboard and HoloLens.

14. Books Recommended:

Textbooks:

1. Jesse Glover & Jonathan Linowes, Complete Virtual Reality and Augmented Reality Development with Unity: Leverage the power of Unity and become a pro at creating mixed reality applications,2nd ed, Packt Publishing, 2018.

Reference Books:

- 1. McCaffrey M., Unreal Engine VR Cookbook: Developing Virtual Reality with UE4 (Game Design), 1st ed, Addison-Wesley Professional, 2017.
- 2. Keene S., Google Daydream VR Cookbook: Building Games and Apps with Google Daydream and Unity, 1st ed, Addison-Wesley Professional, 2018.
- 3. Baruah R., AR and VR Using the WebXR API: Learn to Create Immersive Content with WebGL, Three.js, and A-Frame, 1st ed, Apress, 2020.

Reference Websites: (nptel, swayam, coursera, edx, udemy, lms, official documentation weblink)

- https://www.udemy.com/course/extended-reality-xr-building-ar-vr-mr-projects/
- https://www.coursera.org/learn/xr-introduction
- https://kguttag.com/2020/02/11/great-new-book-on-ar-mr-xr-displays/
- https://immersive-web.github.io/webxr/
- https://docs.microsoft.com/en-us/windows/mixed-reality/

Practice (Tutorial/Case Studies/ Industry Visit/Field Work) Content

| Sr. No. | Торіс | Unit Covered |
|---------|--|--------------|
| 1 | XR Training case study - Throwing light on business improvement training https://www.excellencegateway.org.uk/content/import-pdf2599-0 | 3,4,5 |
| 2 | Comparing innovative XR systems in cultural heritage. A case study | 3,4,5,6 |



Practical Content

| Sr. No. | Title of the Experiment | Software/ Hardware Based | Unit Covered | Time Required | | |
|-------------------------|--|---|-----------------|------------------|--|--|
| 1. | Creating a dynamic web page. | VS Code, web browser | 1,2,3 | 5 hours | | |
| 2. | Create three.js scene, add camera, lights and mesh to it. | VS Code, web browser | 1,2, | 5 hours | | |
| 3. | Create three.js application with custom materials, add textured mesh and animations. | VS Code, web browser | 2,3 | 10 hours | | |
| 4 | | VS Code, web browser, VR headset | | | | |
| | Create an Architecture Visualization VR application | | 4 | 10 hours | | |
| 5 | Create an AR measurement application. | VS Code, web browser, Smartphone | 5 | 10 hours | | |
| Value Added Experiments | | | | | | |
| 1 | Create a Hololens application | Unity, Unreal Engine 4 / Oculus Rift , HTC | 5 | 10 hours | | |

Project (To be done as individual/in group): Yes

Evaluation Scheme

| TYPE OF COURSE | PARTICULAR | ALLOTTED RANGE OF MARKS | PASS CRITERIA |
|--------------------------------|--------------------------------|----------------------------|--|
| Project Based Course (L- | End Term Project Major Test | 40% 35% | Must Secure 30% Marks Out of Combined Marks of End Term |
| T-P/L-T- | Class Test/ Assignment | 15% | Project Plus Major Test with |
| 0/L-0-P/L- 0-0) | Class Participation Evaluation | 10% | Overall 40% Marks in Total. |

Mapping of PO's and CO's

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| CO1 | 1 | 2 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 | 1 | 3 | 1 | 2 | 2 |



CSL342 XR Studio

| CO2 | 2 | 2 | 3 | 3 | 3 | 2 | 1 | 2 | 1 | 2 | 1 | 3 | 1 | 2 | 2 |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CO3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 3 |
| CO4 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 1 | 3 | 2 |
| CO5 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 3 |
| CO6 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 |



CSL243 Game Design and Asset Creation

COURSE TEMPLATE

| ι. υ | epartment: | Department of Computer Science and Engineering | | | | | | | | | | |
|---|---|--|-------------------------|------------------|---------------|---------------|--|--|--|--|--|--|
| | ourse Name: Game | Design and Asset | 3. Course Code | 4. | L-T-P | 5. Credits | | | | | | |
| С | reation | | CSL243 | | 2-0-4 | 4 | | | | | | |
| | ype of Course Check one): | Programme Core | Programme Elective | | Open Electi | ve | | | | | | |
| 7. P | 7. Pre-requisite(s), if any: None | | | | | | | | | | | |
| 8. F | 8. Frequency of offering (check one): Odd 🗸 Even Either semester Every semester | | | | | | | | | | | |
| 9. F | ocus: Fmploy | ability Entrepr | eneurship Skill | Developme | nt Ba | sic Knowledge | | | | | | |
| 10. B | rief Syllabus: | | | | | | | | | | | |
| of the method to devivil had to read with ticonce and ucover user i | In this course, students will learn to create 2D and 3D assets essentials for game development with the introduction of the skills required to create 3D Models in Industry Standard 3D Software efficiently. Students will learn different methods of modeling and texturing, and how to achieve good topology in a 3D model. Students will have the ability to develop, discuss, and implement from preproduction to production, Assets for the video game Industry. Students will have the skills to model, articulate, and render game requirements. Students will learn professional terms relating to real-time game asset creation. Produce professional game models and breakdowns for use in a portfolio. Be familiar with time management as per professional asset development pipelines. This module will also give a theoretical and conceptual understanding of the field of game design, along with practical exposure to the process of creating a game and understanding what defines a "game" and the mechanics and rules behind different types of games. Topics covered include iteration, rapid prototyping, mechanics, dynamics, flow theory, the nature of fun, game balance, and user interface design. | | | | | | | | | | | |
| Т | otal lecture, Tutorial | and Practical Hours f | or this course (Take 15 | teaching w | eeks per sen | nester): 90 | | | | | | |
| | | | <u> </u> | Practice | | | | | | | | |
| | ires: 30 hours | | utorials: 0 hours | L | _ab Work: 60 | hours | | | | | | |
| Р | 11. Course Outcomes (COs) Possible usefulness of this course after its completion i.e. how this course will be practically useful to him once it is completed. | | | | | | | | | | | |
| С | ()1 | | g of drawing, and color | and apply | the principle | of Design to | | | | | | |
| | create UI for game applications. | | | | | | | | | | | |



| Lear | ning and creating 2D Assets -Adobe Photoshop - Basic | Tools. Students will be able | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|
| CO 2 to ur | derstand the Game Art Creation Pipeline and applying | into 2d and 3D Space. | | | | | | | | |
| | erstand what the essential documentation for a game detify design, develop and create a "Physical Board Game | • | | | | | | | | |
| | erstand the basics of 3D space and tools and techniques to Max. | for polygon Modeling in 3D | | | | | | | | |
| | erstand and Learn the Advance tools - Material systems apply them to create game assets. | , Texturing techniques in 3D | | | | | | | | |
| CO 6 | Applying all the concepts, tools, and techniques of 3D Modeling and texturing students are independently able to create a full 3D Game. | | | | | | | | | |
| 12. UNIT WISE DETAILS No. of Units: 6 | | | | | | | | | | |
| Unit Number: 1 | Unit Number: 1 Title: Introduction to Digital Design & UI UX No. of hours: 2 | | | | | | | | | |
| Content Summary: Introduction & overvi | ew: Basic Drawing Skills, Color Theory, Elements and Principle | es of Design. | | | | | | | | |
| Unit Number: 2 | Title: Introduction to Digital Design and 2D Game Art Creation | No. of hours: 2 | | | | | | | | |
| - Color, Layers, Prop | Basic Tools, Adobe Photoshop - different File format/menu bar/ erties, Adobe Photoshop - Create buttons / design / Text/ Effects n Pipeline /Introduction to 2D Space. | | | | | | | | | |
| Unit Number: 3 | Title: Introduction to Game Design & Documentation & Tools | No. of hours: 6 | | | | | | | | |
| the process of creating Topics covered includes | cal and conceptual understanding of the field of game design, ag a game. What defines a "game" and the mechanics and rules ude iteration, rapid prototyping, mechanics, dynamics, flow therface design. The primary focus is on non-digital games "Boa | behind different types of games? theory, the nature of fun, game | | | | | | | | |
| Unit Number: 4 | Title: Introduction to 3D Asset Creation: 3D Studio Max - Part 1 | No. of hours: 8 | | | | | | | | |



Content Summary:

Introduction to Game Art Creation Pipeline /Introduction to 3D Space. Introduction to Game Art in 3D – Creating a Good 3D Model Topology etc. Introduction to 3ds max -Primitives and Shapes, 3D Studio Max - Tools and Techniques. Tools and Techniques: Polygon Modeling, learn how to create a small group of props in a scene / environment - Modeling /UV/Texturing.

| Unit Number: 5 | Title: Advance 3D Game Level Creation: 3D Studio Max - Part 2 | No. of hours: 6 |
|----------------|---|-----------------|
| | Title : Advance 3D Model with Blender | |

Content Summary:

Learn the Advance tools - Material System, Texturing techniques, LOD's, Basic lighting for Game Development, New texturing tools - Substance Painter. Production Workflow - 3Ds Max Blender to Unity. Learning Basics of Unity game engine - Importing and Exporting and Interface.

| Unit Number: 6 | Title: Creating Your 3D Game Level | No. of hours: 6 |
|----------------|------------------------------------|-----------------|
|----------------|------------------------------------|-----------------|

Content Summary:

With the help of 3D Studio Max - Create a full 3D game level with the key aspect of level design and optimization.

13. Brief Description of Self-learning components by students (through books/resource material etc.):

 Game Design Document - Students are provided with PDF and Learning Video tutorials for Self- learning which are added in LMS.

14. Books Recommended:

Textbooks:

1. Luke Ahearn, 3D Game Textures: Create Professional Game Art Using Photoshop, 4th ed, A K Peters/CRC Press, June 15, 2016.

Reference Books:

- 1. Brenda *Brathwaite* & Ian *Schreiber*, Challenges for Game Designers,1st ed, Cengage Learning,2009.
- 2. Raph Koster, Theory of Fun for Game Design Links, 2nd ed, O'Reilly Media, Inc., 2013

Reference Websites: (nptel, swayam, coursera, edx, udemy, lms, official documentation weblink)

- https://area.autodesk.com/all/tutorials/3ds-max/
- https://www.lynda.com/3ds-Max-training-tutorials/138-0.html
- http://docs.autodesk.com/3DSMAX/16/ENU/3ds-Max-Tutorials/
- https://www.udemy.com/course/3ds-max-modeling/?src=sac&kw=3d
- https://www.udemy.com/course/learn-professional-2d-game-asset-graphic-design-in-photoshop/

Practice (Tutorial/Case Studies/ Industry Visit/Field Work) Content



CSL243 Game Design and Asset Creation

| Sr. No. | Topic | Unit Covered |
|---------|---|--------------|
| 1 | Introduction to Adobe Photoshop | 1,2 |
| 2 | Introduction to 3ds Max | 3,4,5 |
| 3 | Basic of Unity | 6 |
| 4 | Create a prototype of Physical Board Game | 7,8 |

Practical Content

| Sr. No. | Title of the Experiment | Software/Hardwa re based | Unit covered | Time Required |
|---------|--|--------------------------|--------------|------------------|
| 1. | UI UX Design – | Adobe | 1 | 4 |
| | Drawing Exercise - Work sheets, Painting primary secondary and tertiary, Color Wheel. | Photoshop | - | hours |
| | Pick up any logo and change the colour scheme on drawing paper with colour | | | |
| | Pick up your favorite game UI and recreate the UI /Create your own UI for any existing Game. | | | |
| 2. | Adobe Photoshop- | Adobe | 2 | 6 |
| | Create a poster of any topic given – | Photoshop | | hours |
| | Create a color Wheel in Adobe Photoshop with Tint, tone, and shades. | - | | |
| | Develop a mock-up for a 2d Character for your game in Adobe Photoshop. | | | |
| | Mini Project 1: Create 2d Character for your game with reference to mock-up (P-3) in Adobe Photoshop. | | | |
| 3. | Create a Concept by Re-mix different games | Adobe | 3 | 10 |
| | Create a Concept for your own physical board game. (Elements like - BG Story, Idea, Concept, Character). | Photoshop / 3Ds Max | | Hour s |
| | Mini Project 3: Create a Concept document for | | | |
| | your own physical board game. | | | |
| | Physical board game team building and Role- playing exercise. | | | |
| | Create UI for Physical board game & Packaging | | | |
| | Create a UI for your physical board Game Design (This is a team project) | | | |
| 4. | | Adobe Photoshop / | 4 | 10 Hour |
| | Creating an Open Cardboard Box model and Texture. | 3Ds Max | | S |
| | | | | |

CSL243 Game Design and Asset Creation

| 5. | Create a high Resolution and low-Resolution game | Adobe | 5 | 10 |
|----|--|----------------|---|-----------|
| | model. | Photoshop / | | Hour |
| | Backing Normal Map in 3D Studio Max and Adobe Photoshop. | 3Ds Max | | S |
| | Creating an Assets pack model and texture from the given reference. | | | |
| | Creating an Assets pack model and texture (Alpha / Normal Map) from the given reference. | | | |
| | Create a Green Environment (add 5 elements – | | | |
| | trees, grass, Ground, flower, stone of different | | | |
| | size) | | | |
| | Value Added | | | |
| | Experiments | | | |
| 1. | Adobe Photoshop (2D Digital Assets creation) | Software Based | 2 | 4 hrs |
| 2. | 3D Studio Max (Level Creation) | Software Based | 6 | 10 hrs |
| 4. | Physical Board Game | Software Based | 3 | 6 hrs |

Project (To be done as individual/in the group): Yes/No Create a game Level –

- Create a low poly game level in 3Ds Max
- UV and Texture in Adobe Photoshop
- And import the game Level in Unity Game Engine
- Software based (3Ds Max / Adobe Photoshop / Ndo / Unity 3D)

Evaluation Scheme

| TYPE OF COURSE | PARTICULAR | ALLOTTED RANGE OF MARKS | PASS CRITERIA |
|---|-----------------------------------|-------------------------------|--|
| Project Based | End Term Project Major Test | 40% 35% | Must Secure 30% Marks Out of |
| Course (L-T-P/ L- T-0/ L-0-P/ L-0-0) | Class Test/ Assignment | 15% | Combined Marks of End Term |
| 1-0/ L-0-P/ L-0-0) | Class Participation Evaluation | 10% | Project Plus Major Test with Overall 40% Marks in Total. |



Mapping of PO's and CO's

| | PO1 | PO2 | PO3 | PO4 | PO5 | P06 | P07 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| CO1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 1 | - | 3 | - | 1 | 2 |
| CO2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 1 | 1 | 3 | 1 | 2 | 2 |
| CO3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 |
| CO4 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | - | 3 | 2 |
| CO5 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 3 | 2 |
| CO6 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 1 | 3 | 3 |

CSL244 Advance Programming for Games

COURSE TEMPLATE

| 1. | Department: | | Department of | partment of Computer Science and Engineering | | | | | | | | |
|--|---|--------------------------|----------------|--|--------------------------|-----------|-----------------|-----------------|-------|-----------------|--|--|
| 2. | Course Name: Ac | dvance Prog | gramming for | 3. Co | urse Code | | 4. L-T - | ·P | 5. | Credits | | |
| | Games | | | | CSL244 | | 2-0-4 | | | 4 | | |
| 6. | Type of Course (one): | Check | Programme Cor | е | ve | | | | | | | |
| 7. | 7. Pre-requisite(s), if any: Programming for Games | | | | | | | | | | | |
| 8. | 8. Frequency of offering (check one): Odd Even Either semester Every semester | | | | | | | | | | | |
| 9. | Focus: Employat | oility 🗸 | Entrepreneursh | nip | Skill Developn | ment 🗸 | Ba | sic Know | ledge | e | | |
| 10. | Brief Syllabus: | | | | | | | | | | | |
| efficient and in unchood continued c | This course introduces students to more advanced concepts in game development and programming games more efficiently. Understanding how more advanced data structures can be used to make games run faster and make code cleaner and maintainable. Students will also learn how 3D asset pipelines work in Unity, the basics of a 3D mesh, and how it gets rendered in a game the way we see it. Students will learn and utilize making custom tools and assets in unity to help make game development faster and manage data in games easily. Students will independently identify, choose, and implement appropriate algorithmic, programming, and mathematical techniques to develop software components for various aspects of computer games such as character control, scene management, artificial intelligence, graphics, and animation. Create prototype games or game fragments by integrating original software components with existing professional tools, such as game engines, middleware, and common application programming interfaces. Also test, debug, and optimize a game or game component to meet production requirements. | | | | | | | | | | | |
| | Total lecture, Tut | orial and P | ractical Hours | for this | course (Take 15 | teachin | g week | s per se | meste | er) : 90 | | |
| 1 44 | oturos. 20 hours | | | | | Practic | е | | | | | |
| | ctures: 30 hours Course Outcome | es (COs) | 7 | Tutorial: | s: 10 hours | | Lab | Work: 50 | hour | îs . | | |
| | Possible usefulness of this course after its completion i.e., how this course will be practically useful to him once it is completed after the completion of this course students will be able to | | | | | | | | | | | |
| | | Summarize advanced 3[| | r games | and will recogn i | ize Data | structur | res, Desiç | ın pa | tterns, and | | |
| | COZ | dentify the orototype. | custom inspect | tor, Edit | or windows, and | l data co | ontainer | s in Unit | y and | d create a | | |

| CO 3 | Explain the 3D asset pipeline in Unity, importing 3D assets and animating them, the Basic | | | | | |
|------|--|--|--|--|--|--|
| COS | structure of a mesh, and how to modify it for rendering a scene. | | | | | |
| CO 4 | Relate essential Concepts of role-playing games (RPG) and deployment for the same. Learn | | | | | |
| CO 4 | and contrast between different types of lighting in unity. | | | | | |
| CO 5 | Conclude how game graphics, core mechanics, game physics, sound, and artificial intelligence | | | | | |
| | are applied to develop a game. | | | | | |

12. UNIT WISE DETAILS

No. of Units: 5

Unit Number: 1

Title: Data Structures and Design Patterns

No. of hours: 4

Content Summary:

Introduction to basic data structures like Stack, Queue, and Dictionary and learn about design patterns in C#. Use design patterns to create prototypes in Unity

Unit Number: 2 Title: Custom Scripting in Unity No. of hours: 6

Content Summary:

Understanding various 3D components of unity like physics, mesh renderer, colliders, and character controller. Learn how to extend inspector windows and create user-friendly inspectors. Create custom Editor windows to add custom functionality to the game and learn about data containers in Unity. Scriptable introduction and usage to create prototypes in Unity.

| Unit Number: 3 | Title: 3D Assets pipeline | No. of hours: 4 |
|----------------|---------------------------|-----------------|
|----------------|---------------------------|-----------------|

Content Summary:

Importing 3D assets in the game. Learn about 3D animations and different techniques to animate your assets ingame. Learn the basics of mesh and its construction in Unity. How a mesh gets rendered in Unity.

| Unit Number: 4 | Title: Role Playing Game and Lighting and Baking | No. of hours: 6 |
|----------------|--|-----------------|
|----------------|--|-----------------|

Content Summary:

Introduction to the RPG genre, its history, and developing an RPG game from scratch. Understanding how lighting works in unity and discussing various types of lights like directional light, spotlight, point light, etc. Learn different types of lighting techniques and their usage in Unity.

| Unit Number: 5 | Title: RPG First-Person Shooter | No. of hours: 10 |
|-------------------|-------------------------------------|-------------------|
| Offic Harrison. 3 | Title: Multiplayer game development | No. of flours. To |

Content Summary:

Plan a First-person shooter game with dummy bots. Implement NPCs, an Ammo system, and different player characters. Customize game missions and levels through editor scripting.



How to Set Up Multiplayer on Unity. Use of LAN and building a network. Learning different scenarios; coding languages like C++, and C#, Implementing NPCs, an Ammo system, and different player characters. Customize game missions and levels through editor scripting.

13. Brief Description of Self-learning components by students (through books/resource material etc.):

- Watch suggested videos to understand the current state of bleeding-edge AR
- Read suggested articles/papers for keeping up to date in the field of AR Research
- Unity and MSDN documentation for programming in Unity
- ARCore Developer documentation for ARCore workflow

14. Books Recommended:

Textbooks:

1. McShaffry M. and Graham D., Game Coding Complete, Course Technology PTR, 4th ed, Cengage Learning PTR, 2013.

Reference Books:

- 1. Rabin S. (ed) "Introduction to Game Development", 2e, 2009, Cengage Learning
- 2. b. Goldstone W. "Unity Game Development Essentials", 3e, 2011, Packt Publishing
- 3. c. Rugeli J., Zapusek M. "Learning Programming with Serious Games", ICST Transactions

Reference Websites: (nptel, swayam, coursera, edx, udemy, lms, official documentation weblink)

- https://academics.sheridancollege.ca/programs/game-development-advanced-programming
- https://www.codingame.com/start
- https://www.udemy.com/courses/search/?q=advanced%20game%20programming&src=sac&kw=advanced%20game%20programming%20for%20games
- Code in Game (https://www.codingame.com/start)
- Gamasutra Resources (https://www.gamasutra.com/resourcecenter)
- Game Programming with Unity (https://www.udemy.com/course/game-programming-with-unity/)

Practice (Tutorial/Case Studies/ Industry Visit/Field Work) Content

| Sr. No. | Topic | Unit Covered | | | |
|---------|--|--------------|--|--|--|
| 1 | Basic game with data structures | 1 | | | |
| 2 | Custom level editor | 2 | | | |
| 3 | 3D role-playing game in Third person | 3,4 | | | |
| 4 | Create a client server program using tcp/udp sockets in c# | 5 | | | |

Practical Content



CSL244 Advance Programming for Games

| Sr. No. | Title of the Experiment Software/ Hardware CO s Based | | CO s | Unit Covered | Time Required |
|------------|---|------------------------|-----------|-----------------|------------------|
| 1 | Inventory using a Stack data structure | Unity/Visual Studio | CO 1 | 1 | 2 hours |
| 2 | Save and load level using Queue and Json | Unity/Visual Studio | CO 1 | 2 | 2 hours |
| 3 | Avatar creation | Unity/Visual Studio | CO 2 | 2 | 2 hours |
| 4 | 3D level from code | Unity/Visual Studio | CO 3 | 2 | 2 hours |
| 5 | Basic players move around | Unity/Visual Studio | CO 3 | 4 | 2 hours |
| 6 | Lighting and Baking | Unity/Visual Studio | CO 4 | 4 | 2 hours |
| 7 | Player Skills and Damage System | Unity/Visual Studio | CO 4 | 4 | 2 hours |
| 8 | Enemy Artificial Intelligence | Unity/Visual Studio | CO 4 | 4 | 2 hours |
| 9 | Inventory and Weapon Selection | Unity/Visual Studio | CO 4 | 5 | 2 hours |
| 10 | Role-playing game | Unity/Visual Studio | CO 5 | 5 | 2 hours |
| | | Value Added Ex | periments | | |
| 1 | Player weapons | Unity/Visual Studio | | 5 | 20 hours |
| 2 | Selecting Different Weapons | Unity/Visual Studio | | 5 | 20 hours |

Project (To be done as individual/in group): Yes

Evaluation Scheme

| TYPE OF COURSE | PARTICULAR | ALLOTTED RANGE OF MARKS | PASS CRITERIA |
|-------------------------------|------------------------|----------------------------|------------------------------|
| Duning t Dans d | End Term Project | 40% | Must Secure 30% Marks Out of |
| Project Based Course (L-T- | Major Test | 35% | Combined Marks of End Term |
| | Class Test/ Assignment | 15% | Project Plus Major Test with |
| P/L-T- 0/L-0- P/L-0-0) | Class Participation | 10% | Overall 40% Marks in Total |

Mapping of PO's and CO's



CSL244 Advance Programming for Games

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO 1 | PSO 2 | PSO 3 |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------|----------|----------|
| CO 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | - | 2 | 2 |
| CO 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | - | 2 | 3 |
| CO 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 |
| CO 4 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 1 | 3 | 2 |
| CO 5 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 3 |

Value-added courses for the next semester:

- Innovation through Design (Duration: 31 hours)
- Demystifying mindfulness (Duration: 44 hours)
- Creative thinking tools for success (Duration: 30 hours)

MOOC courses to be offered as open electives

| S.No. | Code | MOOC Course |
|-------|--------|--|
| 1 | CSM201 | Joy of Computing using Python |
| 2 | CSM202 | Social Networks |
| 3 | CSM203 | Foundations of Cryptography |
| 4 | CSM204 | Privacy and Security in Online Social Media |
| 5 | CSM205 | Data Analytics with Python |
| 6 | CSM206 | Ethical Hacking |
| 7 | CSM207 | Problem Solving Through Programming In C |
| 8 | CSM208 | An Introduction to Programming Through C++ |
| 9 | CSM209 | Getting Started with Competitive Programming |
| 10 | CSM210 | Cryptography and Network Security |
| 11 | CSM212 | Engineering Statistics |
| 12 | CSM213 | Foundation of Cloud IoT Edge ML |

NCU/FRM/1.1/ACAD/001



Minutes of Ist Meeting - BoS

Multidisciplinary Engineering Department School of Engineering & Technology (SOET) Date: 12/05/23

Sheet 1 of 6

From: BoS Convener

To: BoS Members CC: Dean Academics, MDE Faculty

Minutes of the Meeting

Meeting Venue and Time: CAD Lab (RN223) on 7th May 2023 at 11:00 AM onwards

| | BoS Pa | inel Members | Signature |
|--------|---|---|-------------------|
| S. No. | Name | Role | Signature |
| 1. | Prof. Sharda Vashisth | HoD & Chairperson BoS, MDE | Open |
| 2. | Prof. Manoj Kumar Gopaliya | Dean Academics, NCU | m |
| 3. | Dr. Rohit Singh Lather | Associate Head, Program Coordinator ME, MDE & Convener BoS, MDE | Robit Sing Sather |
| 4. | Dr. Vaishali Sahu, Associate Head MDE, , MDE | 11 1 Decareom | Nehm |
| 5. | Dr. Pooja Sabharwal | Program Coordinator ECE, NCU, Member BoS | Nex |
| 6. | Prof. Anjali Garg | Professor, MDE, Member BoS | Ayah |
| 7. | Dr. Satnam Singh | Associate Professor, MDE, Member BoS | South |
| 8. | Prof. Monika Aggarwal | Professor, CARE, HT Delhi, External Expert BoS | Nouse |
| 9. | Mr. Pankaj Sharma | Manager, Incubation Centre, STPI, Industry Expert BoS | Roxley Sha |

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Minutes of the meeting:

- 1. The BoS started with a welcome address by Sharda Vashisth, Head MDF, and
- 2. Dr. Rohit Singh Lather, Associate Head, briefed all the members and faculty on the proposed minor certificate courses. Subsequently, the board discussed the proposed minor certificate programs and provided their recommendations as follows:
 - Dr. Vandana Khanna, coordinator VLSI Design minor, presented the VLSI Design minor for 12 credits with the following course structure:
 - a. ECL263: CMOS VLSI Design & Layouts
 - b. ECL264: RTL Design & Synthesis
 - e. ECL366: VLSI Physical Design

During the discussions, the board observed that the course covered important topics like Digital Integrated Circuit Design, Analog Integrated Circuit Design, and VLSI Testing. As a result, the BOS agreed to approve the minor certificate program in VLSI Design.

- Dr. Pooja Sabharwal, coordinator, Internet of Things (IoT) minor, presented the Internet of Things (IoT) minor for 12 credits with the following course structure: ii.
 - a. ECL479: Introduction to IoT
 - b. ECL481: Fundamentals of cloud computing
 - c. ECL352: Design for IoT

During the discussions, the board observed that the course covered essential topics like IoT Applications, IoT Security, and IoT Architecture. As a result, the BOS agreed to approve the minor certificate program in the Internet of Things (IoT).

- Dr. Vaishal Sahu, the coordinator of the Sustainability minor, presented the Sustainability minor for 12 credits with the following course structure: iii.
 - a. CEL801: Introduction to Sustainability
 - b. CEL803: Society and Sustainability
 - c. CEL802: Professional skills in sustainability practices

During the discussions, the board observed that the course covered essential topics like Sustainability Fundamentals, Sustainable Fnergy Systems, and Sustainable Design. As a result, the BOS agreed to approve the minor certificate program in Sustainability.

- iv. Dr. Rohit Singh Lather, coordinator Project Management minor, presented the project management certificate for 12 credits with the following course structure:
 - a. MEL613-IP: Project Management
 - b. MEL615: Project Leadership, Strategy, and Scope
 - e. MEL617: Business Agile Project Management

During the discussions, the board observed that the course covered essential topics like Project Planning and Control, Project Risk Management, and Project Leadership. As a result, the BOS agreed to approve the minor certificate program in Project Management.

- v. Dr. Rohit Singh Lather, the coordinator of Supply Chain Management, presented the project management certificate for 12 credits with the following course structure:
 - a. MEL630-IP: Fundamentals of Supply Chain Management
 - b. MEL631: Advanced Supply Chain Management
 - c. MEL632: Integrated Logistics Strategy and Supply Chain Performance

During the discussions, the board observed that the course covered essential topics like Supply Chain Planning and Control, Logistics Management, and Supplier Relationship Management. As a result, the BOS agreed to approve the minor certificate program in Supply Chain Management.

The details of the approved minor specialisation is given in Annexure - 1.

- The BOS discussed the current semester's proposed introduction of Value Added courses as follows:
 - a. Summer internship in Tinkering Lab
 - b. Summer internship in Drone Technology

Discussion Points:

- The BOS members and faculty engaged in a detailed discussion about the proposed courses and their potential student benefits. Value-added courses enhance the academic curriculum and provide students with additional skill development and specialization opportunities.
- BOS members agreed that introducing these courses would provide students with practical knowledge and hands-on experience in emerging fields.
- iii. Dr. Vandana Khanna briefed the BOS on the Summer internship in the Tinkering Lab and
- iv. Dr. Rohit Singh Lather briefed the BOS Summer training in Drone Technology

- v. BOS members reported that both the VA courses will provide students with excellent opportunities to gain real-world experience and foster innovation.
- vi. The BOS members discussed the logistics of implementing these courses, including faculty and experts' availability, infrastructure requirements, and assessment methods.
- It was suggested to allocate specific timelines for each course, ensuring a balanced distribution and avoiding scheduling conflicts.

The details of the approved value added courses given in Annexure - 2.

- 4. The following two value added courses offered in the current semester were reported to BOS:
 - a. Robotics & Intelligent Systems
 - b. Six Sigma Yellow Belt Mr. Anmol Bhatia

Discussion Points:

- Dr. Anu Tonk briefed the BOS on The Robotics & Intelligent Systems course. She reported that 30 hours Robotics & Intelligent Systems course was offered to NCU students from Jan 2023 till 25th May 2023. The course will help students learn programming, control systems, and automation skills. A total of 60 students have enrolled in the course.
- ii. Mr. Anmol Bhatia briefed BOS on The Six Sigma Yellow Belt course. He reported that Six Sigma Yellow belt certification course was offered in association with 6sigma institute to NCU students. A total of 21 students successfully completed VA Course. The course helped students develop problem-solving and quality management skills.

The details of the reported value added courses given in Annexure - 3.

- The BOS members emphasized the need for proper coordination and collaboration between academic departments to implement and manage minor certifications and value-added courses effectively.
- It was agreed to form a committee comprising faculty members and administrative staff
 to oversee the proposed courses' planning, implementation, and evaluation.
- 7. The vision and mission of the MDE department was reported to the Board of Studies (BOS). The aim of vision the new vision and mission of MDE was to align the department's goals and objectives with the overall strategic direction of The NorthCap University. The BOS members discussed the vision and mission statements to be presented to the Academic Council meeting.

Discussion Points:

- The BOS members reviewed the vision and mission statements of the MDE department.
- ii. It was noted that the vision statement reflects the department's long-term aspirations and desired outcomes. In contrast, the mission statement articulates the department's purpose, scope, and key activities.
- iii. The vision statement of MDE emphasizes the department's commitment to fostering innovation, interdisciplinary collaboration, and excellence in design engineering education.
- iv. The mission statement highlighted the department's goal of producing well-rounded engineers with technical skills, creativity, and problem-solving abilities.
- The BOS members noted that MDE's vision and mission statements are aligned with the institution's strategic goals and objectives.

The details of the approved vision and mission of the MDE department are given in Annexure - 4.

Prepared by:

Dr. Rohit Sing Lather, Associate Head MDE BoS Convenor

Endorsed By:

Prof. Sharda Washisth

HoD & Chairperson BoS, MDE

Dr. Rohit Singh Lather Associate Head, Program Coordinator ME & Convener BoS. MDE

oja Sabharwal Program Coordinator - ECE, NCU, Member BoS

Prof. Manoj K Gopaliya Dean Academics, NCU

Dr. Vaishali Sahu, Associate Head. Program Coordinator CE, & Member BoS, MDE

Dr. Satnam Singh Associate Professor, MDE, Member BoS

Prof. Monika Aggarwal Professor, CARE, IIT Delhi, External Expert BoS

Professor, MDE, Member BoS

Mr. Pankaj Sharma Manager, Incubation Centre. STPI, Industry Expert BoS

Parkaj Shar

Approved By:

The Chairperson, BoS (Signature with Date)



The North Cap University

CENTRE FOR LANGUAGE LEARNING (CLL) Meeting of The Board of Studies, CLL

Minutes of BoS meeting held on Wednesday, May 10th, 2023 at 4:30 PM

BoS Members

| S NO. | NAME | DESIGNATION | DEPARTMENT (REPRESENTING) |
|-------|----------------------|------------------|---|
| 1. | Dr. DivyabhaVashisth | Chairperson | Head, Centre for Language Learning (CLL) |
| 2. | Prof. Mukesh Ranjan | Member | Professor, Dept. of English, Director, International Relations, Jamia Millia Islamia, Delhi |
| 3. | Dr. Shrutimita Mehta | Member | Faculty, Internal Expert, English |
| 4. | Dr. Payal Khurana | Member | Faculty, Internal Expert, English |
| 5. | Dr. Chetna Karnani | Member | Faculty, Internal Expert, English |
| 6. | Dr. Gouri Kapoor | Member Secretary | Faculty, Internal Expert, English |

Minutes of the BoS meeting

 The scheme was deliberated upon by the internal BoS members and was then shared with the External Expert, Prof. Mukesh Ranjan, for approval of the proposed changes in the BA (Hons.) English scheme.

The following points were discussed during the meeting:

- Poetry I CLL 106 was earlier taught in II semester, but we realized that History of English Literature, being a tough and elaborate course of literature, needs a supplementary course like Poetry I to make students understand the history better. Poetry I was therefore shifted from II semester to I semester.
- To balance the entire scheme, one compulsory course is shifted from IV semester to II semester - Compulsory Foreign Language Elective.
- Effective Communication I CLL 101 and II CLL 102 have been shifted from the First and Second semester to Second and Third Semester. The codes of Effective

Page 1

Communication I CLL 101 and II CLL 102 are respectively changed as CLL 130 and

- Indian Writing in English has been shifted to Programme electives to balance the scheme.
- 4-4 Credits of Summer Internships CTC 201 and CTC 301 have been introduced as part of the new UGC guidelines after the II and IV semesters.
 - Revision took place in Effective Communication I and II as per the requirement of SCALE regarding content and delivery.

Since there were no other points to be discussed, the meeting was concluded.

Dr. Gouri Kapoor (Member Secretary, BoS-CLL)

Enclosures:

Annexure 1 – BA (Hons.) English Programme Scheme

Prof. Mukesh Ranjan (External Expert)

Dr. Shrutimita Mehta (Internal Expert- Member)

Dr. Chetna Karnani (Internal Expert- Member) Dr. Divyabha Vashisth (Head, CLL- Member)

Dr. Payal Khurana (Internal Expert- Member)

Dr. Gouri Kapoor (Member Secretary, BoS CLL)

B.A. (English) - 2023-26

| COLUMBER | | | | | | | | Office Section | GP | | m. | er_ | Contact Bours | Credi |
|----------|--|----------------------------------|-------------------------|---|-----------------------------|--------------------|--|----------------------|-----------|-----|----|-----|--|-------|
| Semester | | | Semester Course (| Code, Course Name (L-T-I | Credits | | | Community Service GP | | 1 | T | P | Per Sem | 1 |
| | :CLL105 | CLL106 | CH1.100 | PCL103 | BSL102 | | CSV100 | CLS101 | CLRIOI | | | | | |
| 1 | History of English Literature | Poetry-I (14th-18th Centrury) | Environmental Studies | Introduction to Psychology | Principles of Management | | Basic Computer Skills for Professionals | CS-I | GP-1 | 13 | 2 | 8 | 23 X 15+330 | 20 |
| | (3-1-0) 4 | (3-1-0) 4 | (3-0-0) 3 | (2-0-2) 3 | (2-0-2) 3 | | (0-0-4) 2 | | 1 Credit | | | | | - |
| | CEL.107 | | BSL101 | CLL120 | CLP120 | | CLL130 | CLS102 | CLR102 | | | | | |
| | British Drama-1 (16th-18th Century) | Foreign Language Elective | Entrepreneurship | Human Values and Professional Ethics | Creative Writing | Seminar | Effective Comm-I | CS-2 (140 hrs)** | GP-2 | 9 | 3 | 10 | 22X15=330 | 20 |
| | (3-1-0)4 | (1-2-0)-3 | (2-0-2) 3 | (2-0-0)2 | (0-0-2) 1 | (0.0.4) 2 | (1-0-2) 2 | 2 Credit | 1 Credit | | | | | _ |
| Summers | | | | | CLT201 Summer In | ternship (0-0-8) 4 | | | | | | | | 4 |
| | CL1.208 | CL1.205 | CLL207 | 200 | | | CLL140 | CLS201 | CLR201 | | | | | |
| 1 | British Novel-1 | Poetry-2 | Popular Literature | PE-I | Open Elective-I | | Effective Comm-II | CS-3 | GP-3 | 16 | 4 | 2 | 22X15=330 | .22 |
| | (3-1-0)4 | (3-1-0) 4 | (3-1-0) 4 | (3-1-0)4 | (3-0-0) 3 | | (1-0-2)2 | (0) (0) (0) | // Credit | + | | | | |
| | CLL202 | CL1.206 | CLL203 | PE-2 | | | | CLS202 | CLR202 | 100 | m | 0 | 19X15=285 | 22 |
| 4 | Modern British Drama | British Novel-2 | World Literature | | Open Elective-2 | | | CS-4 (140 hrs)** | GP-4 | | | 1 | 17/01/27/09/2 | - |
| | (3-1-0)4 | (3-1-0) 4 | (3-1-0)4 | (3-1-0) 4 | (3-0-0) 3: | | | 2 Credit | 1 Credit | | | - | | - |
| Summers | | | | | CLT301 Summer In | ternship (0-0-8) 4 | | | | | | | | 10.4 |
| | CLL 301 | CLL303 | CLL305 | 96.3 | | | | CLS301 | CLR301 | | | | TANKS OF THE PARTY | 40 |
| 5 | Amencal Literature | Literary Criticism | Short Stories & Novella | 8.655 | Open Elective-3 | | | CS-5 | GP-5 | 15 | | 0 | 19X15-285 | 20 |
| | (3-1-0)4 | (3-1-0)4 | (3-1-0) 4 | (3-1-0) 4 | (3-0-0) 3 | | | | 1 Credit | | | | | _ |
| | CL1.302 | CLL304 | DE A | | | Major Project | | CLS302 | CLR302 | | | | | |
| 6 | Post Colonial Literature | Women's Writing | PE-4 | Open Elective-4 | | CLD302 | | CS-6 (140 hrs)** | GP-6 | 12 | 3 | 12 | 27X15=345 | 24 |
| | (3-1-0) 4 | (3-1-0) 4 | (3-1-0) 4 | (3-0-0)3 | | (0-0-12) 6 | | 2 Credit | 1 Credit | | | | | |
| | | | | | OTAL | | | | | 80 | 20 | 32 | 132X15=1980 | 136 |

[&]quot;Note: Students can utilize the summer/writer break period to complete the remaining 140 Community Service hours every year.

Mak. In

Comin Hoom

The University shall conduct introductory sessions in the 1st semester on soft skills, which are a set of transferable skills and key personal traits essential for personality development.

⁺ A value-added course over and above the programme scheme shall be offered during the 4th Semester to train students for the upcoming placement process.

Advanced sessions on soft skills shall be conducted in the 5th Semester to hope up the preparedness of students for placements and make them industry ready for national and international jobs.

NCU-FRM-BOS



Title: Minutes of Meeting -BOS

Date: 12/05/2023

School: School of Management & Liberal **Studies**

Sheet 1 of 1

From: School of Management & Liberal Studies

To: Hon'ble VC

CC: Hon'ble GB

Minutes of the Meeting

Meeting Venue and Time: Room No. N205, The NorthCap University at 10:00 am. Following members were present for the meeting

| | BoS Pane | el Members | | |
|-----------|---|--|-------------|--------|
| S. No. | Name | Role | Signature | |
| 1 | Prof. Prem Vrat | Pro Chancellor & Chief Mentor, NCU | John Wat | |
| 2 | Prof. Manoj Gopaliya | Dean Academics, NCU | M | |
| 3 | Dr. Divya Verma, Associate Professor, G.G.S. Indraprastha University, New Delhi | External Expert | Dinh | |
| 4 | Mr. Ravi Parmeshwar, Consultant - People Aspects | External Expert | Paristonh | _ |
| 5 | Prof. Nimit Gupta | HOD-SOM&LS, NCU | NP9 | |
| 6 | Dr. Sona Vikas | HOD-SOM&LS, NCU | Sparelly | 2.123 |
| 7 | Dr Preeti Chawla | Programme Coordinator- MBA | | 15/2/2 |
| 8 | Dr Deergha Sharra | Programme Coordinator- B.Com(H) FM | Mary Mary | |
| 9 | Dr Akasha Sandhu | Programme Coordinator- B.Com(H) | Marthy | |
| 10 | Dr Shaveta Sachdeva | Programme Coordinator- B.A (H) Economics | Drawing | |
| 11 | Mr. Ashish Budhwar | Programme Coordinator- B.A (H) Pyschology | 13 K 23 | |
| 12 | Dr Akshat Aditya Rao | Programme Coordinator- BBA-EFB | MUZ | |
| 13 | Dr Kanchan Yadav | Programme Coordinator- BBA-DM | Yanelay 123 | |
| 14 | Dr Shilpa Sindhu | Programme Coordinator- BBA, BOS Coordinator | While | |
| 15 | Ms. Saniya Bhutani | Faculty, SOMELS | Tung | |



Title: Minutes of Meeting -BOS

Date: 12/05/2023

Sheet 1 of 1

School: School of Management & Liberal Studies

From: School of Management & Liberal Studies

To: Hon'ble VC

CC: Hon'ble GB

Minutes of the meeting:

- 1. Dr Shilpa Sindhu welcomed all the estemmed members of the committee and with the permission of Chair the discussion on all the agenda points was initiated.
- 2. Dr Shilpa Sindhu presented the proposed Scheme of BBA (2023-24) in alignment to NEP 2020.
 - It was suggested by Prof. Prem Vrat to replace two Open Electives (OEs) with Programme Electives (PEs).

ii. It was also suggested to offer specialisations as streamed electives/tracks instead of different specialisations.

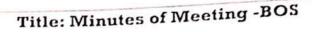
iii. It was suggested by Dr. Divya one comprehensive project can be introduced in third year. It was explained that we are offering Major Project.

iv. The scheme was overall appreciated for inclusion of all the requirements as suggested in NEP 2020.

3. Dr Preeti Chawla presented the proposed scheme of study of MBA (2023-24)

- Prof. Prem Vrat emphasised that Operations Management should not be removed from the core scheme of study as it required subject for an MBA graduate.
- ii. Inclusion of Supply Chain Management can also be thought of introduction in the scheme.
- iii. Dr Divya suggested that courses on Fintech, Behavioral Finance, Sustainable Finance and Climate finance can be offered. Course on valuation of securities can be offered.
- iv. Management of financial services can be deleted. We can keep financial institutions and markets intact. Financial analytics can be introduced as one of the elective.
- v. In place of Microfinance a course on Prsonal Finance and Wealth Management can be offered.
- vi. Money and Banking and Bank Management can be merged to one subject.
- vii. It was suggested by Mr. Ravi that a course on Taxation should be introduced.
- viii. Industrial Relations and Labour Laws can be separated into two subjects.
- ix. Negotiation skills should be taught to every student as it is one of the course.

Shilper



Date: 12/05/2023

Sheet 1 of 1



School: School of Management & Liberal Studies

From: School of Management & Liberal Studies

To: Hon ble VC

- Dr Akasha Sandhu presented the Scheme of Study of B.Com(H) 2023-24.
 The scheme was appreciated and no change was suggested.
- 5. Dr Deergha Sharma presented the Scheme of Study of B.Com(H) 2023-24 in Financial Markets.
 - The scheme was appreciated and no change was suggested. It was suggested to go for more elective courses to increase the rigour of the program once NCU enters in an MOU is done with industry partner (NISM).
 - ii. It was also suggested to offer specialisations as streamed electives/tracks instead of different specialisations.
- 6. Mr. Ashish Budhwar presented the scheme of study of BA (H) Psychology 2023-24.
 - Prof. Vrat commented on the LTP of courses. 2-0-2 scheme can be retained for most of the courses. It was explained for the courses which are mainly theoretical are changed to 4-0-0 or 3-1-0.
 - ii. Foreign language-I can be replaced with Foreign Language.
 - iii. Behavioural economics can be added as a program elective.
 - iv. Interchange Basics of Computer Skills from first semester to second for optimistion of resources.
- 7. Dr. Shaveta Sachdeva presented the scheme of study of BA (H) Economics 2023-24. It was appreciated that it is a well structured scheme and no change was suggested.
- Dr Shilpa Sindhu presented the agenda item no 3 for new MOOC courses courses offered to PhD students in their course work for approval.
- Dr. Shaveta Sachdeva presented the course templates for revision of courses – Principles of Economics (ENL102) and Introductory Microeconomics (ENL106)
- 10.Dr. Shilpa presented the minor specialization on People Management.
- 11.Dr. Deergha presented the revised PO's of B.Com(H) and B.Com(H) Financial Markets. Prof Vrat suggested that POs should be brief and crisp and according to Blooms Taxonomy.

The meeting concluded with a vote of thanks to the experts for their valuable suggestions.

of the

NCU-FRM-BOS



Title: Minutes of Meeting -BOS

Date: 12/05/2023

Sheet 1 of 1

School: School of Management & Liberal

Studies

From: School of Management & Liberal Studies

To Hon'ble VC

CC. Hon'ble GB

SHILM SINDHU, Associate Professor ation & Signature BOS Coordinator

Name, Designation & Signature

BoS Convenor (Signature with Date)

Endorsed By:

Name, Designation & Signature of all the members (Signature with Date)

| S. N | o. Name | Role | Signature | |
|------|---|--|-----------|-------------------|
| 1 | Prof. Prem Vrat | Pro Chancellor & Chief Mentor, NCU | freustral | |
| 2 | Prof. Manoj Gopaliya | Dean Academics, NCU | m | |
| 3 | Dr. Divya Verma, Associate Professor, G.G.S. Indraprastha University, New Delhi | External Expert | Dinte os | . 23 |
| 4 | Mr. Ravi Parmeshwar, Consultant - People Aspects | External Expert | Pangha | 12/5/23 1/2/32 |
| 5 | Prof. Nimit Gupta | HOD-SOM&LS, NCU | 042 | |
| 6 | Dr. Sona Vikas | HOD-SOM&LS, NCU | 8 gue Vo | - n/s/23 |
| 7 | Dr Preeti Chawla | Programme Coordinator- MBA | | 0/13/23 |
| 8 | Dr Deergha Showna | Programme Coordinator- B.Com(H) FM | DES. 36 | , , |
| 9 | Dr Akasha Sandhu | Programme Coordinator- B.Com(H) | Dew du | 3 |
| 10 | Dr Shaveta Sachdeva | Programme Coordinator- B.A (II) Economics | 1- Marida | |
| 11 | Mr. Ashish Budhwar | Programme Coordinator- B.A (H) Pyschology | 11713 | |
| 12 | Dr Akshat Aditya Rao | Programme Coordinator- BBA-EFB | Mynlos | 113 |
| 13 | Dr Kanchan Yadav | Programme Coordinator- BBA-DM | (auchar | is |
| 14 | Dr Shilpa Sindhu | Programme Coordinator- BBA, BOS Coordinator | Bliffing | 5/23 |

NCU-FRM-ROS

NORTHCAP

THE

Title: : Agenda of Board of Studies (BOS) Meeting

School: School of Management & Liberal Studies

Date: 09/05/2023

Sheet 1 of 1

UNIVERSITY From School of Management & Liberal Studies

To: Hon'ble VC

CC: Hon'ble GB

Agenda Items

Meeting Venue and Time: Room No. N205, New Building, The NorthCap University at 10:00 am.

Agenda Items:

- 1. Agenda Item No 1. Introduction of NEP 2020 in Scheme of Study of Bachelors of Business Administration (BRA) 2023-24 Appearant Administration (BBA) 2023-24 - Annexure 1 Purpose:
 - i. Flexibility to move from one discipline of study to another;
 - ii. Opportunity for learners to choose the courses of their interest in all disciplines;
 - iii. Facilitating multiple entry and exit options with UG certificate/ UG diploma/ or degree depending upon the number of smaller accounts. the number of credits secured.
 - iv. Flexibility for learners to move from one institution to another to enable them to have multi and/or interdisciplinary learning;
 - v. Flexibility to switch to alternative modes of learning (offline, ODL, and Online learning, and hybrid modes of learning).
- 2. Agenda Item No 2. Revision of scheme of studies of all the programmes proposed for the Academic Year 2023-24: -

At SOM- NCU it is envisaged to keep on updating and enhancing of curricula to keep the programmes aligned with the dynamic Industry shifts and market conditions and Higher Education. Keeping this in view, we have tried to enhance the curricula of the programmes at SOM&LS as given below:

- 1) Masters of Business Administration (MBA) Annexure 2
- 2) Bachelors of Commerce (B.Com-Hons.) Annexure 3
- 3) Bachelors of Commerce (B.Com-Hons.) in Financial Markets Annexure 4
- 4) Bachelors of Economics B.A. (H) Economics Annexure 5
- 5) Bachelors of Psychology B.A. (H) Psychology Annexure 6
- 6) Bachelors of Business Administration (BBA) with Specialization in Digital Marketing Annexure 7
- 7) Bachelors of Business Administration (BBA) with Specialization in Business Analytics Annexure 8
- 8) Bachelors of Business Administration (BBA) with Specialization in Entrepreneurship and Family Business - Annexure 9

Purpose:

- i. To enhance the programmes offered at the department in order to meet the requirements of the industry as well as that of higher education.
- ii. For Credit Optimization of all the schemes of Programmes.
- iii. Incorporation of SCALE framework in all the programmes.
- 3. Agenda Item No 3. Approval of MOOC Courses Annexure 10

- 4. Agenda Item No 4. Revision of Course Templates. Annexure 11
- 5 Agenda Item No 5. Introduction of Minor Specialization Annexure 12
- 6. Agenda Item No 6. Revision of POs and PSOs of B.Com(H):- Annexure 13
- 7. Agenda Item No 7. Any other with the permission of the Chair.

The details of the course descriptions are attached.

| | BoS Panel Members | |
|--------|---|--|
| s. No. | Name | Role |
| 1 | Prof. Prem Vrat | Pro Chancellor & Chief Mentor, NCU |
| 2 | Prof. Manoj Gopaliya | Dean Academics, NCU |
| 3 | Dr. Divya Verma, Associate Professor, G.G.S. Indraprastha University, New Delhi | External Expert |
| 4 | Mr. Ravi Parmeshwar, Consultant - People Aspects | External Expert |
| 5 | Prof. Nimit Gupta | HOD-SOM&LS, NCU |
| 6 | Dr. Sona Vikas | HOD-SOM&LS, NCU |
| 7 | Programme coordinators of all programmes | |
| 8 | Dr. Shilpa Sindhu | Associate Professor & BOS Coordinator, SOM&LS |

Issued by:

DR SHILPA SINDHU

Associate Professor, SOM & LS

BOS Convenor

Agenda Item No 1. Introduction of NEP 2020 in Scheme of Study of Bachelors of Business Administration (BBA) 2023-24

Highlights (Objectives of Change) of the Scheme

- i. Flexibility to move from one discipline of study to another;
- ii. Opportunity for learners to choose the courses of their interest in all disciplines;
- iii. Facilitating multiple entry and exit options with UG certificate/ UG diploma/ or degree depending upon the number of credits secured.
- iv. Flexibility for learners to move from one institution to another to enable them to have multi and/or interdisciplinary learning;
- v. Flexibility to switch to alternative modes of learning (offline, ODL, and Online learning, and hybrid modes of learning).
- vi. UG Certificate: Students who opt to exit after completion of the first year and have secured 40 credits will be awarded a UG certificate if, in addition, they complete one vocational course of 4 credits during the summer vacation of the first year. These students are allowed to re-enter the degree programme within three years and complete the degree programme within the stipulated maximum period of seven years.
- vii. UG Diploma: Students who opt to exit after completion of the second year and have secured 80 credits will be awarded the UG diploma if, in addition, they complete one vocational course of 4 credits during the summer vacation of the second year. students are allowed to re-enter within a period of three years and complete the degree programme within the maximum period of seven years.
- viii. 3-year UG Degree: Students who wish to undergo a 3-year UG programme will be awarded UG Degree in the Major discipline after successful completion of three years, securing 120 credits and satisfying the minimum credit requirement
- ix. 4-year UG Degree (Honours): A four-year UG Honours degree in the major discipline will be awarded to those who complete a four-year degree programme with 160 credits and have satisfied the credit requirements.
- x. 4-year UG Degree (Honours with Research): Students who secure 75% marks and above in the first six semesters and wish to undertake research at the undergraduate level can choose a research stream in the fourth year. They should do a research project or dissertation under the guidance of a faculty member of the University/College. The research project/dissertation will be in the major discipline. The students who secure 160 credits, including 12 credits from a research project/dissertation, are awarded UG Degree (Honours with Research).

Major Changes:

Addition of New Courses

| Subject Code | Name of Course | L-T-P | Credits | Semester |
|--------------|-------------------------------------|-------|---------|----------|
| BSL501 | Management Principles & Practices | 2-0-2 | 3 | 7 |
| BSL503 | Organizational Behaviour | 2-0-2 | 3 | 7 |
| BSL505 | Marketing Management | 2-0-2 | 3 | 7 |
| BSL512 | Business Research Methods | 2-0-2 | 3 | 8 |
| BSL518 | Legal & Ethical Aspects of Business | 2-0-2 | 3 | 8 |
| BSL506 | Decision Sciences | 2-0-2 | 3 | 8 |

| BSD401 | Dissertation I | 0-0-16 | 8 | 7 |
|--------|-------------------------|--------|---|---|
| BSD402 | Dissertation II | 0-0-16 | 8 | 8 |
| | Programme Elective – V | 2-0-2 | 3 | 6 |
| | Programme Elective – VI | 2-0-2 | 3 | 6 |
| | Open Elective - III | 2-0-2 | 3 | 8 |

Nomenclature changed

| | NEW | | OLD |
|---------------------|---|---------------------|---|
| Subject Code | Name of Course | Subject Code | Name of Course |
| BSL103 | Fundamentals of Marketing Management | BSL207 | Introduction to Marketing Management |
| BSL105 | Fundamentals of Organizational Behavior | BSL208 | Introduction to Organizational Behavior |
| CSV100 | Basic Computer Skills for Professionals | CSV119 | Digital Literacy |
| CLL130 | Effective Communication I | CLL101 | Effective Communication I |
| CLL140 | Effective Communication II | CLL102 | Effective Communication II |
| ENL210 | Fundamentals of Spreadsheet Modelling | ENL340 | Fundamentals of Spreadsheet Modelling |
| BSL206 | Basics of Leadership | BSL302 | Leadership |

Shifting of Courses from one Semester to another

| Course Code | Course Name | Old | New |
|-------------|---|-----|-----|
| BSL103 | Fundamentals of Marketing Management | 3 | 1 |
| BSL105 | Fundamentals of Organizational Behavior | 4 | 1 |
| CLL130 | Effective Communication I | 1 | 2 |
| CLL140 | Effective Communication II | 2 | 3 |
| BSL101 | Entrepreneurship | 2 | 3 |
| BSL104 | Introduction to Human Resource Management | 3 | 2 |
| CML110 | Communication and Documentation in Business | 1 | 3 |
| CML107 | Introduction to Banking | 2 | 3 |

| OVERALL CREDIT STRUCTURE- BBA | | | | | |
|-----------------------------------|---------|---------|--|--|--|
| Catagory | Credits | Credits | | | |
| Category | NCU | NEP | | | |
| Programme Core | 78 | 80 | | | |
| Ability Enhancement | 15 | 8 | | | |
| Summer Internship + Minor Project | 8 | 2-4 | | | |
| Project/ Dissertation | 22 | 12 | | | |
| Skill Enhancement | 8 | 9 | | | |
| General Proficiency | 6 | - | | | |
| Program Electives | 18 | 32 | | | |
| Open Electives/Multidisciplinary | 9 | 9 | | | |
| Community Service | 6 | - | | | |
| Total Credits | 170 | 160 | | | |

BBA SCHEME OF STUDY 2023-2024

| | BBA SCHENE OF STODY 2025-2024 Community CD Hrs. | | | | | | C | | | | | | | |
|----------|--|--|---|--|---|---|---|---|------------------------------|----|--------------|----|--------------------------|---------|
| Semester | | | Semester Cours | se Code, Course Name | (L-T-P) Credits | | | Community Service | GP | P | Hrs Per w | | Contact Hours per Sem | Credits |
| 1 | BSL102 Principles of Management (2-0-2)3 | BSL103 Fundamentals of Marketing Management (2-0-2)3 | CML101 Professional Accounting (2-0-2)3 | CML109 Business Laws (2-0-2)3 | BSL105 Fundamentals of Organizational Behavior (2-0-2)3 | CSV100 Basic Computer Skills for Professionals (0-0-4)2 | CLL120 Human Values & Professional Ethics (2-0-0)2 | BSS101 CS-I | BSR101 GP-I 1 Credit | 12 | 0 | 14 | 26*15=390 | 20 |
| 2 | CLL130 Effective Comm-I (1-0-2)2 | CHL100 Environmental Studies (3-0-0)3 | ENL102 Principles of Economics (2-0-2)3 | ENL101 Statistics & Research Methodology- I (2-0-2)3 | BSL104 Introduction to Human Resource Management (2-0-2)3 | CML108 Financial Management- I (2-0-2)3 | | BSS102 CS-II (140 Hrs)* 2 Credit | BSR102 GP-II 1 Credit | 13 | 0 | 9 | 22*15=330 | 20 |
| Summers | BST201 Internship | I/ Vocational Cours | e# OR BS | D201 Minor Project | (0-0-8) | | | | | | | | 8 | 4 |
| | | _ | | EXIT WITH | I CERTIFICATE IN BU | USINESS ADMINI | ISTRATION | 1 | | | | | | |
| 3 | BSL201 Fundamentals of Operations Management (2-0-2)3 | BSL204 Fundamentals of Consumer Behavior (2-0-2)3 | CML110 Communication & Documentation in Business (2-0-2)3 | CML208 Financial Management- II (2-0-2)3 | ENL204 Statistics and Research Methodology-II (2-0-2)3 | CLL140 Effective Comm-II (1-0-2)2 | BSL101 Entrepreneurship (2-0-2)3 | BSS201 CS-III | BSR201 GP-III 1 credit | 14 | | 13 | 27*15=405 | 21 |
| 4 | CML107 Introduction to Banking (2-0-2)3 | BSL209 Ecommerce (2-0-2)3 | BSL206 Basics of Leadership (2-0-2)3 | Open Elective- I (2-0-2)3 | Programme Elective –I (2-0-2)3 | Foreign Language Elective (1-2-0)3 | | BSS202 CS-IV (140 Hrs)* 2 Credit | BSR202 GP-IV 1 credit | 11 | 2 | 10 | 23*15=345 | 21 |
| Summers | | BST301 Sun | nmer Internship | | (0-0-8) |)4 | | | | | | | 8 | 4 |
| | | | | EXIT WITI | H UG DILPOMA IN BU | SINESS ADMINI | STRATION | | | | | | | |
| 5 | ENL210 Fundamentals of Spreadsheet Modelling (2-0-2)3 | BSL303 International Business (2-0-2)3 | BSV301 Creative thinking and Negotiation Skills (2-0-2)3 | BSL301 Business Policy & Strategy (2-0-2)3 | Programme Elective-II (2-0-2)3 | Programme Elective-III (2-0-2)3 | | BSS301 CS-V | BSR301 GP-V 1 credit | 12 | 0 | 12 | 24*15=360 | 19 |
| 6 | BSL304 Investment Management (2-0-2)3 | Programme Elective –IV (2-0-2)3 | Programme Elective –V (2-0-2)3 | Programme Elective-VI (2-0-2)3 | BSD302 Major Project (0-0-12)6 | | | BSS302 CS-VI (140 Hrs) 2 Credit | BSR302 GP-VI 1 credit | 8 | 0 | 8 | 16*15=240 | 21 |
| | | | | EXIT WIT | H UG DEGREE IN BU | SINESS ADMINIS | STRATION | | | | | | | |
| 7 | BSL501 Management Principles & Practices (2-0-2)3 | BSL503 Organizational Behaviour (2-0-2)3 | BSL505 Marketing Management (2-0-2)3 | Open Elective-II (2-0-2)3 | BSD401 Dissertation I (0-0-16)8 | | | | | 8 | 0 | 8 | 16*15=240 | 20 |
| 8 | BSL512 Business Research Methods (2-0-2)3 | BSL518 Legal & Ethical Aspects of Business (2-0-2)3 | BSL506 Decision Sciences (2-0-2)3 | Open Elective-III (2-0-2)3 | BSD402 Dissertation II (0-0-16)8 | | | | | 8 | 0 | 8 | 16*15=240 | 20 |
| | | | | TOTAL | | | | | | | | | | 170 |
| | EXIT WITH UG DEGREE (HONOURS) WITH RESEARCH IN BUSINESS ADMINISTRATION** | | | | | | | | | | | | | |

Approved in BOS Dated 12.05.2023

- NOTE: i. The University shall conduct introductory sessions in the 1st semester on soft skills, which are a set of transferable skills and key personal traits essential for personality development.
 - ii. The University shall conduct special sessions in the 4th semester to reinforce the learnings of introductory training sessions conducted in the first year.
 - iii. Two value-added courses over and above the programme scheme shall be offered during the 5th & 6th semesters to impart special skills to students for enhancing their employability.
 - iv. Advanced sessions on soft skills shall be conducted in the 7th semester to hope up the preparedness of students for placements and make them industry ready for national and international jobs.
 - *Students shall complete the required 140 community service hours across the year.
 - ** If the student is not undertaking any research based project then Student has to do MOOC Courses of equivalent credits.
 - # Student taking exit after one year has to do Internship I/ Vocational Course

Following is the complete scheme of the BBA programme:

| OVERALL CREDIT STRUCTURE | |
|---------------------------------|--------|
| Category | Credit |
| | S |
| Programme Core | 78 |
| Ability Enhancement | 15 |
| Project Presentation & Training | 30 |
| Skill Enhancement | 8 |
| General Proficiency | 6 |
| Program Electives | 18 |
| Open Electives | 9 |
| Community Service | 6 |
| Total Credits | 170 |

| Ability Er | nhancement | L-T-P | C |
|------------|--|-------|---|
| CHL100 | Environmental Studies | 3-0-0 | 3 |
| CLL120 | Human Values & Professional Ethics | 2-0-0 | 2 |
| CLL130 | Effective Communication I | 1-0-2 | 2 |
| CLL140 | Effective Communication II | 1-0-2 | 2 |
| ENL210 | Fundamentals of Spreadsheet Modelling | 2-0-2 | 3 |
| Foreign La | anguage Elective | 1-2-0 | 3 |
| Program | ne Core | L-T-P | C |
| BSL101 | Entrepreneurship | 2-0-2 | 3 |
| BSL102 | Principles of Management | 2-0-2 | 3 |
| BSL103 | Fundamentals of Marketing Management | 2-0-2 | 3 |
| BSL104 | Introduction to Human Resource Management | 2-0-2 | 3 |
| BSL105 | Fundamentals of Organizational Behavior | 2-0-2 | 3 |
| BSL201 | Fundamentals of Operations Management | 2-0-2 | 3 |
| BSL204 | Fundamentals of Consumer Behavior | 2-0-2 | 3 |
| BSL206 | Basics of Leadership | 2-0-2 | 3 |
| BSL209 | E-Commerce | 2-0-2 | 3 |
| BSL301 | Business Policy & Strategy | 2-0-2 | 3 |
| BSL303 | International Business | 2-0-2 | 3 |
| BSL304 | Investment Management | 2-0-2 | 3 |
| CML10 | Professional Accounting | 2-0-2 | 3 |
| CML10 7 | Introduction to Banking | 3-0-0 | 3 |
| CML10 8 | Financial Management I | 2-0-2 | 3 |
| CML10 9 | Business Laws | 3-0-0 | 3 |
| CML20 8 | Financial Management II | 2-0-2 | 3 |
| ENL101 | Statistics & Research Methodology-I | 2-0-2 | 3 |
| ENL102 | Principles of Economics | 2-0-2 | 3 |

| ENL204 | Statistics and Research | 2-0-2 | 3 |
|----------|--|-------|----------|
| | Methodology II | | |
| BSL501 | Management Principles & Practices | 2-0-2 | 3 |
| BSL503 | Organizational Behaviour | 2-0-2 | 1 |
| BSL505 | Marketing Management | 2-0-2 | |
| BSL512 | Business Research Methods | 2-0-2 | |
| BSL518 | Legal & Ethical Aspects of Business | 2-0-2 | |
| BSL506 | Decision Sciences | 2-0-2 | |
| PROGRA | AMME ELECTIVES | | |
| Marketin | g | L-T-P | (|
| BSL331 | Customer Relationship Management | 2-0-2 | 3 |
| BSL332 | Management of Sales and Distribution | 2-0-2 | - |
| BSL333 | Marketing & Consumer Analytics | 2-0-2 | |
| BSL334 | Fundamentals of Retail Management | 2-0-2 | |
| BSL335 | Marketing of Services | 2-0-2 | 3 |
| BSL336 | Advertising and Promotion | 2-0-2 | 3 |
| BSL337 | Fundamentals of Strategic Marketing | 2-0-2 | 1 |
| BSL338 | Marketing in Digital Era | 2-0-2 | |
| BSL381 | Product and Brand Management | 2-0-2 | 1 |
| BSL382 | Marketing Communication | 2-0-2 | 3 |
| HRM | | | |
| BSL339 | Recruitment and Selection | 2-0-2 | 3 |
| BSL340 | Performance and Competency Management | 2-0-2 | - |
| BSL341 | Employee Training and Development | 2-0-2 | - |
| BSL342 | Industrial Relations and Indian Labour Laws | 2-0-2 | 3 |
| BSL343 | Compensation and Reward Management | 2-0-2 | : |
| BSL344 | Organization Change and Development | 2-0-2 | 1 |
| BSL345 | Cross Culture HRM | 2-0-2 | 3 |
| BSL346 | Fundamentals of Strategic HRM | 2-0-2 | 3 |
| BSL390 | HR Audit | 2-0-2 | 3 |
| BSL391 | Systems Thinking | 2-0-2 | 3 |
| BSL392 | Workplace Diversity and Inclusion | 2-0-2 | 3 |
| Finance | | I | <u> </u> |
| BSL347 | Financial Reporting and Analysis | 2-0-2 | 3 |
| | Introduction to Financial | 2-0-2 | 3 |
| BSL348 | Introduction to Finalicial | 202 | - |

Institutions and Market

Fundamentals of Money and

Insurance and Risk

Management

Banking

BSL349

BSL350

2-0-2

2-0-2

| BSL351 | Introduction to Portfolio | 2-0-2 | 3 |
|-----------|----------------------------|---------|-----|
| | Management | | |
| BSL352 | Microfinance in India | 2-0-2 | 3 |
| BSL353 | Cost and Management | 2-0-2 | 3 |
| | Accounting | | |
| General l | Proficiency | C | |
| BSR101 | GP-I | 01 Cred | lit |
| BSR102 | GP-II | 01 Cred | lit |
| BSR201 | GP-III | 01 Cred | lit |
| BSR202 | GP-IV | 01 Cred | lit |
| BSR301 | GP-V | 01 Cred | lit |
| BSR302 | GP-VI | 01 Cred | lit |
| Commun | ity Service | | |
| BSS101 | Community Service (CS-I) | 02 | |
| BSS102 | Community Service (CS-II) | Credit | |
| BSS201 | Community Service (CS-III) | 02 | |
| BSS202 | Community Service (CS-IV) | Credit | |
| BSS301 | Community Service (CS-V) | 02 | |
| BSS302 | Community Service (CS-VI) | Credit | |
| Skill Enh | Skill Enhancement Courses | | C |
| BSV301 | Creative thinking and | | |
| | Negotiation Skills | 2-0-2 | 3 |

| CSV100 | Basic Computer Skills for | | |
|-----------|------------------------------------|--------|---|
| | Professionals | 0-0-4 | 2 |
| CML11 | Communication and | | |
| 0 | Documentation in Business | 2-0-2 | 3 |
| Other Co | urses | L-T-P | C |
| Open Elec | etive – I | 2-0-2 | 3 |
| Open Elec | etive – II | 2-0-2 | 3 |
| Open Elec | | 2-0-2 | 3 |
| Programm | e Elective – I | 2-0-2 | 3 |
| Programm | e Elective – II | 2-0-2 | 3 |
| Programm | e Elective – III | 2-0-2 | 3 |
| Programm | e Elective – IV | 2-0-2 | 3 |
| Programm | e Elective – V | 2-0-2 | 3 |
| Programm | e Elective – VI | 2-0-2 | 3 |
| Project P | resentation & Training | L-T-P | C |
| BSD201 | Minor Project (for BBA) | 0-0-8 | 4 |
| BSD302 | Major Project (for BBA) | 0-0-12 | 6 |
| BSD401 | Dissertation I | 0-0-16 | 8 |
| BSD402 | Dissertation II | 0-0-16 | 8 |
| BST201 | Internship I/ Vocational Course | 0-0-8 | 4 |
| BST301 | Summer Internship (for BBA) | 0-0-8 | 4 |

Agenda Item No 2. Revision of scheme of studies proposed for the Academic Year 2023-24: -

> Revision of Scheme of Study for Masters of Business Administration (MBA)

Highlights (Objectives of Change) of the Scheme

- 1) 1st semester marketing management is shifted in 2nd semester.
- 2) In 2nd semester consumer behaviour is removed from core and shifted to marketing elective.
- 3) As per the suggestion in BOS, the subject i.e. Selling Negotiations and Business Development is removed from marketing electives & a new subject Negotiation & Influence is added as core in 2nd semester for all the students
- 4) In 2nd semester legal aspects of business and business ethics is being removed and merged as one subject i.e., legal and ethical aspects of business.
- 5) In 2nd semester advanced excel is being introduced.
- 6) In 2nd semester management lab is being removed & shifted in 3rd semester.
- 7) R Programming for Analytics is removed from core and shifted to business analytics elective.
- 8) One credit in Summer Internship is removed, earlier 5 credits are now 4 credits. One credit in Major Project is added, earlier 5 credits are now 6 credits.
- 9) The subjects such as Management of Financial Services, Principles of Risk & Insurance, Bank Management, Micro finance Management, Spreadsheet Modelling & Foreign Exchange Management are removed form finance electives whereas Security Analysis & Investment Management & Portfolio Management is merged as one subject, i.e.: Security Analysis & Portfolio Management. One new subject i.e., Behavioral & Personal Finance is introduced in finance electives.
- 10) In third & fourth semester, dual specialisation is removed. Six program electives are considered as major papers of specialisation and four program electives are considered as minor paper/open of other specialisations or other school of university.

Total number of credits for the program is decreased to 95 from 98 which were offered earlier

Major Changes

Deletion of Old Courses

| S.N. | Subjects | Remarks |
|------|---|---|
| 1 | Legal Aspects of Business Business Ethics R Programming for Analytics | ✓ Legal aspects of business and business ethics is being removed and merged as one subject i.e., Legal and ethical aspects of business. ✓ Two value-added courses over and above the programme scheme shall be offered during the 1st & 2nd semesters to prepare the students for the placements and to groom the overall personality. ✓ Advanced sessions on soft skills shall be conducted in the 3rd semester to hope up the preparedness of students for placements and make them industry ready for national and international jobs. ✓ R Programming for Analytics is removed from core and shifted to business analytics elective. |

> Addition of New Subjects

- a. BSL517 Negotiation & Influence
- b. BSL518 Legal & Ethical Aspects of Business
- c. BSP504 Advanced Excel

> Addition of New Electives (Business Analytics Electives)

- a. R Programming for Analytics
- b. Security Analysis & Portfolio Management
- c. Behavioral & Personal Finance

3. COMPARISON

| Particulars | FIIB | NIFTEM | FMS | IP University | IIT, Delhi | SOM, NCU |
|---------------------------------|------|--------|-----|---------------|------------|----------|
| Number of Credits | 95 | 122 | 144 | 102/108 | 72 | 92 |
| Credit for Core Courses | 72 | 92 | 99 | 84 | 45 | 62 |
| Credit for Program Electives | 24 | 30 | 45 | 24 | 27 | 30 |

MBA SCHEME OF STUDY (2023-24)

| | | | | | | | | | Comount | C | | ntac Week | • | Contac t hours | |
|-----|---|---|--|---|---|--|---|---|------------------------------|---|----|---------------------|---------|----------------|----|
| SEM | Course 1 Cou | Course 2 Course 3 Co | Course 4 Course 5 | Course 5 | Course 6 Course 7 | Course 8 | General Proficiency | Cours es | L | Т | P | per semes ter | Credits | | |
| ı | BSL501 Management Principles and Practices (2-0-2)3 | BSL503 Organizatio nal Behaviour (2-0-2)3 | BSL507 Accounting for Managers (2-0-2)3 | BSL509 Managerial Economics (2-0-2)3 | BSL511 Business Statistics (2-0-2)3 | BSL513 Operations Managemen t (2-0-2)3 | BSL515 Communicatio n for Managers (2-0-2)3 | | BSR501 GP I 1 Credit | 7 | 14 | 0 | 14 | 28*15 =420 | 22 |
| 11 | BSL502 Management of Human Resources (2-0-2)3 | BSL504 Financial Manageme nt (2-0-2)3 | BSL505 Marketing Management (2-0-2)3 | BSL506 Decision Sciences (2-0-2)3 | BSL512 Business Research Methods (2-0-2)3 | BSL517 Negotiation & Influence (2-0-2)3 | BSL518 Legal & Ethical Aspects of Business (2-0-2)3 | BSP504 Advanced Excel Lab (0-0-4)2 | BSR502 GP II 1 Credit | 7 | 14 | 0 | 18 | 32*15 =480 | 24 |
| | | BS | T601 Sum | mer Internship + | one week of co | ommunity service | e (0-0-8)4 | | | 1 | 0 | 0 | 8 | 0 | 4 |
| Ш | BSL603 Strategic Management (2-0-2)3 | Elective 1 (Major) (2-0-2)3 | Elective 2 (Major) (2-0-2)3 | Elective 3 (Major) (2-0-2)3 | Elective 4 (Major) (2-0-2)3 | Elective 1 Minor/Open (2-0-2)3 | Elective 2 Minor/Open (2-0-2)3 | BSP502 Manageme nt Lab (0-0-2)1 | BSR503 GP III 1 Credit | 8 | 14 | 0 | 16 | 30*15 =450 | 23 |
| IV | BSL516 Entrepreneurship and Innovation (2-0-2)3 | Elective 5 (Major) (2-0-2)3 | Elective 6 (Major) (2-0-2)3 | Elective 3 Minor/Open (2-0-2)3 | Elective 4 Minor/Open (2-0-2)3 | BSD602 Major Project + CS (0-0-12)6 | | | BSR504 GP IV 1 Credit | 6 | 10 | 0 | 10 | 20*15 =300 | 22 |
| | | | | | | | | | 29 | | | | | 95 | |
| | Total Credits MBA Program | | | | | | | | | | | 95 | | | |

^{*}Note: A student must study either 4 Minor Papers (2-0-2)3 or 3 Open Electives (4-0-0)4

^{*}Two value-added courses over and above the programme scheme shall be offered during the 1st & 2nd semesters to prepare the students for the placements and to groom the overall personality.

^{*}Advanced sessions on soft skills shall be conducted in the 3rd semester to hone up the preparedness of students for placements and make them industry ready for national and international jobs.

MASTER OF BUSINESS ADMINISTRATION

OVERALL CREDIT STRUCTURE

| Category | Credits |
|---------------------------------|---------|
| Programme Core | 42 |
| Ability Enhancement | 6 |
| Project Presentation & Training | 10 |
| Skill Enhancement | 3 |
| General Proficiency | 4 |
| Program Electives | 30 |
| Total Credits | 95 |

| Progran | Program Core | | | |
|---------|-------------------------------------|-------|---|--|
| BSL501 | Management Principles and Practices | 2-0-2 | 3 | |
| BSL502 | Management of Human Resources | 2-0-2 | 3 | |
| BSL503 | Organizational Behavior | 2-0-2 | 3 | |
| BSL504 | Financial Management | 2-0-2 | 3 | |
| BSL505 | Marketing Management | 2-0-2 | 3 | |
| BSL506 | Decision Sciences | 2-0-2 | 3 | |
| BSL507 | Accounting for Managers | 2-0-2 | 3 | |
| BSL509 | Managerial Economics | 2-0-2 | 3 | |
| BSL511 | Business Statistics | 2-0-2 | 3 | |
| BSL512 | Business Research Methods | 2-0-2 | 3 | |
| BSL513 | Operations Management | 2-0-2 | 3 | |
| BSL517 | Negotiation & Influence | 2-0-2 | 3 | |
| BSL518 | Legal & Ethical Aspects of Business | 2-0-2 | 3 | |
| BSL603 | Strategic Management | 2-0-2 | 3 | |

| General Pro | oficiency |
|--------------------|-----------|
|--------------------|-----------|

| General | С | |
|---------|--------|-----------|
| BSR501 | GP I | 01 Credit |
| BSR502 | GP II | 01 Credit |
| BSR601 | GP III | 01 Credit |
| BSR602 | GP IV | 01 Credit |

| Skill Enl | Skill Enhancement Courses | | | | |
|------------------|---------------------------|-------|---|--|--|
| BSP504 | Advanced Excel | 0-0-4 | 2 | | |
| BSP502 | Management Lab | 0-0-2 | 1 | | |
| | Value Added-I | 0-0-2 | 0 | | |
| | Value Added-II | 0-0-2 | 0 | | |

| Ability E | Ability Enhancement | | | | | |
|-----------|---------------------------------|-------|---|--|--|--|
| BSL515 | Communication for Managers | 2-0-2 | 3 | | | |
| BSL516 | Entrepreneurship and Innovation | 2-0-2 | 3 | | | |

| Programme Electives | | | L-T-P |
|----------------------------|--|--|-------|
| | | | |

| магкесіпд | | | | | | | |
|-----------|--------------------|-------|---|--|--|--|--|
| BSL632 | Services Marketing | 2-0-2 | 3 | | | | |
| BSL633 | B-2-B Marketing | 2-0-2 | 3 | | | | |

C

| Finance | | | | | | | | |
|---------|--|-------|---|--|--|--|--|--|
| BSL508 | Consumer Behaviour | 2-0-2 | 3 | | | | | |
| BSL694 | Marketing of Luxury Products | 2-0-2 | 3 | | | | | |
| BSL674 | Selling Negotiations and Business Development | 2-0-2 | 3 | | | | | |
| BSL640 | Strategic Marketing Management | 2-0-2 | 3 | | | | | |
| BSL638 | Digital Marketing & Social Media | 2-0-2 | 3 | | | | | |
| BSL637 | Retail Management | 2-0-2 | 3 | | | | | |
| BSL636 | Integrated Marketing Communication | 2-0-2 | 3 | | | | | |
| BSL635 | International Marketing | 2-0-2 | 3 | | | | | |
| BSL634 | Rural Marketing | 2-0-2 | 3 | | | | | |
| | | | | | | | | |

| BSL642 | International Financial Management | 2-0-2 | 3 |
|--------|--|-------|---|
| BSL643 | Financial Derivatives | 2-0-2 | 3 |
| BSL645 | Management Accounting and Control | 2-0-2 | 3 |
| BSL646 | Business Analysis using Financial Statements | 2-0-2 | 3 |
| BSL648 | Mergers and Acquisitions: The Market for Corporate Control | 2-0-2 | 3 |
| BSL652 | Financial Institutions and markets | 2-0-2 | 3 |
| BSL653 | Bank Management | 2-0-2 | 3 |
| BSL695 | Securities Analysis and Portfolio Management | 2-0-2 | 3 |
| BSL696 | Behavioral & Personal Finance | 2-0-2 | 3 |

HRM

| BSL655 | Leadership – Past, Present and Future | 2-0-2 | 3 |
|--------|--|-------|---|
| BSL656 | Industrial Relations & Labour Laws | 2-0-2 | 3 |
| BSL657 | Workforce Planning, Recruitment &Selection | 2-0-2 | 3 |
| BSL658 | Competency Mapping | 2-0-2 | 3 |
| BSL659 | Contemporary Issues in HRM | 2-0-2 | 3 |
| BSL660 | Performance and Compensation Management | 2-0-2 | 3 |
| BSL661 | Training and Development | 2-0-2 | 3 |
| BSL662 | Organizational Development | 2-0-2 | 3 |
| BSL664 | Strategic HRM | 2-0-2 | 3 |
| BSL665 | Cross Cultural HRM and Inclusive Workplace Management | 2-0-2 | 3 |
| BSL666 | Talent Management | 2-0-2 | 3 |

| Business | Analytics | | | | | | | | |
|----------|-----------------------------------|---------------------------------|---|--|--|--|--|--|--|
| BSP601 | R Programming for Analytics | Programming for Analytics 2-0-2 | | | | | | | |
| BSL675 | Applied Econometrics | 2-0-2 | 3 | | | | | | |
| BSL676 | Big Data Analytics | 2-0-2 | 3 | | | | | | |
| BSL677 | Applications in CRM | 2-0-2 | 3 | | | | | | |
| BSL678 | Data Mining | 2-0-2 | 3 | | | | | | |
| BSL679 | Data Privacy and Data Security | 2-0-2 | 3 | | | | | | |
| BSL680 | Data Visualization and Expression | 2-0-2 | 3 | | | | | | |
| BSL681 | Econometrics | 2-0-2 | 3 | | | | | | |
| BSL682 | Finance Analytics | 2-0-2 | 3 | | | | | | |
| BSL683 | Marketing Analytics | 2-0-2 | 3 | | | | | | |
| BSL684 | People Analytics | 2-0-2 | 3 | | | | | | |

| BSL685 | Predictive Modeling | 2-0-2 | 3 |
|--------|---|-------|---|
| BSL686 | Python for Data Science | 2-0-2 | 3 |
| BSL687 | SAS Programming | 2-0-2 | 3 |
| BSL688 | Social Network Analysis | 2-0-2 | 3 |
| BSL689 | SQL for Data Analytics and Business Intelligence | 2-0-2 | 3 |
| BSL671 | Supply Chain and Logistics Analytics | 2-0-2 | 3 |
| BSL692 | Time Series Analysis | 2-0-2 | 3 |
| BSL693 | Web and Social Media Analytics | 2-0-2 | 3 |

| Project | L-T-P | C | |
|---------|-------------------|--------|---|
| BST601 | Summer Internship | 0-0-8 | 4 |
| BSD602 | Major Project | 0-0-12 | 6 |

Revision of Scheme of Study for Bachelors of Commerce B.Com(H)

➤ Highlights (Objectives of Change) of the Scheme

- i. The Credit structure has been optimized
- ii. Adjustment of courses to give more exposure to the students
- iii. Incorporation of SCALE framework

Major Changes

Addition of New Courses

| Subject Code | Name of Course | L-T-P | Credits | Semester |
|--------------|---|-------|---------|----------|
| ENL212 | Corporate governance and sustainability | 3-0-0 | 3 | 4 |

Deletion of Courses

| Subject Code | Name of Course | L-T-P | Credits | Semester |
|--------------|--------------------|-------|---------|----------|
| | Program Elective V | 2-0-2 | 3 | 6 |

Code/ Nomenclature changed

| | NEW | | OLD |
|--------------|---|---|----------------------------|
| Subject Code | Subject Code Name of Course | | Name of Course |
| CSV100 | Basic Computer Skills for Professionals | tter Skills for Professionals CSV119 Digital Literacy | |
| CLL130 | Effective Comm - I | CLL101 | Effective Comm – I |
| CLL140 | Effective Communication II | CLL102 | Effective Communication II |
| ENL104 | Business Mathematics | ENL203 | Business Mathematics |

Shifting of Courses from one Semester to another

| Course Code | Course Name | Old | New |
|-------------|---|-----|-----|
| CLL130 | Effective Communication I | 1 | 2 |
| CLL140 | Effective Communication II | 2 | 3 |
| CML110 | Communication and Documentation in Business | 2 | 1 |
| CSV100 | Basic Computer Skills for Professionals | 1 | 2 |
| | Program Elective I | 4 | 5 |
| | Program Elective III | 5 | 6 |
| BSL301 | Business Policy and Strategy | 4 | 5 |
| | Foreign Language Elective | 3 | 4 |
| CML206 | Security & Investment Management | 4 | PE |

| OVERALL CREDIT STRUCTURE- BCom Hons | | | | | | | |
|-------------------------------------|-------------|----------------|--|--|--|--|--|
| Category | Credits New | Credits Old | | | | | |
| Programme Core | 69 | 75 | | | | | |
| Ability Enhancement | 12 | 13 | | | | | |

| Project Presentation & Training | 14 | 12 |
|---------------------------------|-----|-----|
| Skill Enhancement | 8 | 8 |
| General Proficiency | 6 | 6 |
| Program Electives | 12 | 15 |
| Open Electives | 9 | 9 |
| Community Service | 6 | 6 |
| Total Credits | 136 | 138 |

B.COM(H)- SCHEME OF STUDY 2023-2024

| Semester | | Semester Course Code, Course Name(L-T-P) Credits | | | | | COMMUNITY SERVICE | GP | Per | Hrs. we | ek | Contact Hours per Semester | Credits | |
|----------|---|---|--|--|--|---|---|--|------------------------------|------------|----|----------------------------------|-----------|----------|
| | | | | | | | | | | L | Т | Р | | |
| 1 | CHL100 Environmental Studies (3-0-0)3 | Principles of Management (2-0-2)3 | ENL101 Statistics & Research Methodology-I (2-0-2)3 | CML107 Introduction to Banking (2-0-2)3 | CML101 Professional Accounting (2-0-2)3 | CML110 Communication & Documentation in Business (2-0-2)3 | | CMS101 CS-I | CMR101 GP-I 1 Credit | 11 | 0 | 12 | 23*15=345 | 18+1=19 |
| 2 | CLL130 Effective Comm - I (1-0-2)2 | BSL101 Entrepreneurship (2-0-2)3 | ENL102 Principles of Economics (2-0-2)3 | CLL120 Human Values & Professional Ethics (2-0-0)2 | CSV100 Basic Computer Skills for Professionals (0-0-4)2 | CML109 Business Laws (2-0-2)3 | CML108 Financial Management-I (2-0-2)3 | CMS102 CS-II (140 HRS) 2 Credit | CMR102 GP-II 1 Credit | 13 | 0 | 12 | 25*15=375 | 18+3=21 |
| Summer | | | CMD2 | 01 | Minor Proje | ect (0-0-8) 4 | | | | | | | | 4 |
| 3 | CML208 Financial Management -II (2-0-2)3 | ENL204 Statistics & Research Methodology -II (2-0-2)3 | ENL104 Business Mathematics (2-0-2)3 | BSL203 HRM (2-0-2)3 | BSL209 E-Commerce (2-0-2)3 | CLL140 Effective Comm-II (1-0-2)2 | CML203 Fundamentals of Auditing (2-0-2)3 | CMS201 CS-III | CMR201 GP-III 1 Credit | 13 | 0 | 14 | 27*15=405 | 20+1=21 |
| 4 | CML202 Income Tax & Practice (2-0-2)3 | CML204 Corporate Accounting (2-0-2)3 | ENL 212 Corporate Governance & Sustainability (3-0-0)3 | BSL207 Introduction to Marketing Management (2-0-2)3 | Foreign Language Elective (1-2-0)3 | Open Elective I (2-0-2)3 | | CMS202 CS-IV (140 HRS) 2 Credit | CMR202 GP-IV 1 Credit | 11 | 2 | 10 | 21*15=305 | 18+3+=21 |
| Summers | | | | CMT301 | Summer In | ternship (0-0-8) 4 | | | | | | | | 4 |
| 5 | CML301 Cost Accounting (2-0-2)3 | CML303 Indirect Taxation (GST) (2-0-2)3 | BSV301 Creative Thinking &Negotiation Skills (2-0-2)3 | Program Elective I (2-0-2)3 | Program Elective II (2-0-2)3 | Open Elective II (2-0-2)3 | BSL301 Business Policy & Strategy (2-0-2)3 | CMS301 CS-V | CMR301 GP-V 1 Credit | 12 | 0 | 14 | 26*15=390 | 21+1=22 |
| 6 | CML302 Management Accounting (2-0-2)3 | CML304 Micro Finance (2-0-2)3 | Program Elective III (2-0-2)3 | Program Elective IV (2-0-2)3 | Open Elective III (2-0-2)3 | CMD302 Major Project (0-0-12)6 | | CMS302 CS-VI (140 HRS) 2 Credit | CMR302 GP-VI 1 Credit | 12 | 0 | 12 | 24*15=360 | 21+3=24 |
| | | | | | тот | AL | | | | | | | | 136 |

^{*} The University shall conduct introductory sessions in the 1st semester on soft skills, which are a set of transferable skills and key personal traits essential for personality development.

^{*} A value-added course over and above the programme scheme shall be offered during the 4th Semester to impart special skills to students for enhancing their employability.

^{*} Advanced sessions on soft skills shall be conducted in the 5th Semester to hope up the preparedness of students for placements and make them industry ready for national and international jobs.

^{*} Students shall complete the required 140 community service hours across the year

BACHELOR OF COMMERCE(H) OVERALL CREDIT STRUCTURE

| Category | Credits |
|---------------------------------|---------|
| Programme Core | 69 |
| Ability Enhancement | 12 |
| Project Presentation & Training | 14 |
| Skill Enhancement | 8 |
| General Proficiency | 6 |
| Program Electives | 12 |
| Open Electives | 9 |
| Community Service | 6 |
| Total Credits | 136 |

| Progra | mme Core | L-T-P | C |
|--------|---|-------|---|
| BSL101 | Entrepreneurship | 2-0-2 | 3 |
| BSL102 | Principles of Management | 2-0-2 | 3 |
| ENL101 | Statistics & Research Methodology-I | 2-0-2 | 3 |
| ENL102 | Principles of Economics | 2-0-2 | 3 |
| CML107 | Introduction to Banking | 2-0-2 | 3 |
| CML109 | Business Laws | 2-0-2 | 3 |
| CML101 | Professional Accounting | 2-0-2 | 3 |
| CML108 | Financial Management I | 2-0-2 | 3 |
| CML208 | Financial Management II | 2-0-2 | 3 |
| BSL203 | Human Resource Management | 2-0-2 | 3 |
| BSL207 | Introduction to Marketing Management | 2-0-2 | 3 |
| BSL209 | E-Commerce | 2-0-2 | 3 |
| BSL301 | Business Policy & Strategy | 2-0-2 | 3 |
| CML202 | Income Tax & Practice | 2-0-2 | 3 |
| CML203 | Fundamentals of Auditing | 2-0-2 | 3 |
| CML204 | Corporate Accounting | 2-0-2 | 3 |
| CML301 | Cost Accounting | 2-0-2 | 3 |
| CML302 | Management Accounting | 2-0-2 | 3 |
| CML303 | Indirect Taxation (GST) | 2-0-2 | 3 |
| CML304 | Micro Finance | 2-0-2 | 3 |
| ENL104 | Business Mathematics | 2-0-2 | 3 |
| ENL204 | Statistics & Research Methodology-II | 2-0-2 | 3 |
| ENL212 | Corporate Governance and Sustainability | 3-0-0 | 3 |

noral Droficionev

| Genera | il Proficiency | C |
|--------|----------------|--------|
| CMR101 | CD I | 01 |
| CMR101 | GP-I | Credit |
| CMR102 | CD II | 01 |
| CMR102 | GP-II | Credit |
| CMR201 | CD III | 01 |
| CMRZUI | GP-III | Credit |
| CMR202 | CD IV | 01 |
| CMRZUZ | GP-IV | Credit |
| CMR301 | CB V | 01 |
| CMR301 | GP-V | Credit |

| CMR302 | GP-VI | 01 Credit |
|--------|-------|--------------|
| | | |
| | | _ |

Community Service

| CMS101 Community Service (CS-I) | |
|-----------------------------------|-----------|
| CMS102 Community Service (CS-II) | 02 Credit |
| CMS201 Community Service (CS-III) | 02 Crodit |
| CMS202 Community Service (CS-IV) | 02 Credit |
| CMS301 Community Service (CS-V) | 02 Crodit |
| CMS302 Community Service (CS-VI) | 02 Credit |

Skill Enhancement Courses L-T-PC 0-0-4 2 CSV100 Basic Computer Skills for Professionals BSV301 Creativity and Negotiation Skills 2-0-2 3

CML110 Communication & Documentation in Business

| Ability Enhancement | | L-T-P | C |
|---------------------|------------------------------------|-------|---|
| CHL100 | Environmental Studies | 3-0-0 | 3 |
| CLL130 | Effective Communication I | 1-0-2 | 2 |
| CLL140 | Effective Communication II | 1-0-2 | 2 |
| CLL120 | Human Values & Professional Ethics | 2-0-0 | 2 |
| | Foreign Language Elective | 1-2-0 | 3 |

PROGRAMME ELECTIVES

L-T-PC

2-0-2 3

Marketing

| BSL331 | Customer Relationship Management | 2-0-2 | 3 |
|--------|--------------------------------------|-------|---|
| BSL332 | Management of Sales and Distribution | 2-0-2 | 3 |
| BSL333 | Marketing & Consumer Analytics | 2-0-2 | 3 |
| BSL334 | Fundamentals of Retail Management | 2-0-2 | 3 |
| BSL335 | Marketing of Services | 2-0-2 | 3 |
| BSL336 | Advertising and Promotion | 2-0-2 | 3 |
| BSL337 | Fundamentals of Strategic Marketing | 2-0-2 | 3 |
| BSL338 | Marketing in Digital Era | 2-0-2 | 3 |

| Product and Brand Management | 2-0-2 | 3 |
|---|--|--|
| Marketing Communication | 2-0-2 | 3 |
| International Business | 2-0-2 | 3 |
| | | |
| Recruitment and Selection | 2-0-2 | 3 |
| Performance and Competency Management | 2-0-2 | 3 |
| Employee Training and Development | 2-0-2 | 3 |
| Industrial Relations and Indian Labour Laws | 2-0-2 | 3 |
| Compensation and Reward Management | 2-0-2 | 3 |
| Organization Change and Development | 2-0-2 | 3 |
| Cross Culture HRM | 2-0-2 | 3 |
| Fundamentals of Strategic HRM | 2-0-2 | 3 |
| HR Audit | 2-0-2 | 3 |
| Systems Thinking | 2-0-2 | 3 |
| Workplace Diversity and Inclusion | 2-0-2 | 3 |
| | Marketing Communication International Business Recruitment and Selection Performance and Competency Management Employee Training and Development Industrial Relations and Indian Labour Laws Compensation and Reward Management Organization Change and Development Cross Culture HRM Fundamentals of Strategic HRM HR Audit Systems Thinking | Marketing Communication 2-0-2 International Business 2-0-2 Recruitment and Selection 2-0-2 Performance and Competency Management 2-0-2 Employee Training and Development 2-0-2 Industrial Relations and Indian Labour Laws 2-0-2 Compensation and Reward Management 2-0-2 Organization Change and Development 2-0-2 Cross Culture HRM 2-0-2 Fundamentals of Strategic HRM 2-0-2 HR Audit 2-0-2 Systems Thinking 2-0-2 |

Finance

| BSL347 | Financial Reporting and Analysis | 2-0-2 | 3 |
|--------|--|-------|---|
| BSL348 | Introduction to Financial Institutions and Market | 2-0-2 | 3 |

| BSL349 | Insurance and Risk Management | 2-0-2 | 3 |
|---------|---|-------|---|
| BSL350 | Fundamentals of Money and Banking | 2-0-2 | 3 |
| BSL351 | Introduction to Portfolio Management | 2-0-2 | 3 |
| CML352 | Financial Econometrics | 2-0-2 | 3 |
| ENL210 | Fundamentals of Spreadsheet Modelling | 2-0-2 | 3 |
| CML353 | Corporate Restructuring, Mergers & Acquisitions | 2-0-2 | 3 |
| CML354 | International Finance | 2-0-2 | 3 |
| CML355 | Project Appraisal & Finance | 2-0-2 | 3 |
| CML 206 | Security & Investment Management | 2-0-2 | 3 |

| Other Courses | L-T-P C |
|---------------------|---------|
| Open Elective – I | 2-0-2 3 |
| Open Elective – II | 2-0-2 3 |
| Open Elective – III | 2-0-2 3 |

| Project Presentation & Training | | L-T-P | C |
|---------------------------------|----------------------------------|--------|---|
| CMD201 | Minor Project (for BCom (H)) | 0-0-8 | 4 |
| CMT301 | Summer Internship (for BCom (H)) | 8-0-0 | 4 |
| CMD302 | Major Project (for BCom (H)) | 0-0-12 | 6 |

Revision of Scheme of Study for Bachelors of Commerce B.Com(H) in Financial Markets

➤ Highlights (Objectives of Change) of the Scheme

- i. The Credit structure has been optimized
- ii. Adjustment of courses to give more exposure to the students.
- iii. Addition of Programme electives specifically focusing on Financial Markets
- iv. Incorporation of SCALE framework

Major Changes

Addition of New Courses

| Subject Code | Name of Course | L-T-P | Credits | Semester |
|--------------|---|-------|---------|----------|
| ENL212 | Corporate governance and sustainability | 3-0-0 | 3 | 4 |
| CML309 | Behavioral Finance | 2-0-2 | 3 | PE |

Deletion of Courses

| Subject Code | Name of Course | L-T-P | Credits | Semester |
|--------------|---|-------|---------|----------|
| | Program Elective V | 2-0-2 | 3 | 6 |
| BSL331 | Customer Relationship Management | 2-0-2 | 3 | PE |
| BSL332 | Management of Sales and Distribution | 2-0-2 | 3 | PE |
| BSL333 | Marketing & Consumer Analytics | 2-0-2 | 3 | PE |
| BSL334 | Fundamentals of Retail Management | 2-0-2 | 3 | PE |
| BSL335 | Marketing of Services | 2-0-2 | 3 | PE |
| BSL336 | Advertising and Promotion | 2-0-2 | 3 | PE |
| BSL337 | Fundamentals of Strategic Marketing | 2-0-2 | 3 | PE |
| BSL338 | Marketing in Digital Era | 2-0-2 | 3 | PE |
| BSL381 | Product and Brand Management | 2-0-2 | 3 | PE |
| BSL382 | Marketing Communication | 2-0-2 | 3 | PE |
| BSL339 | Recruitment and Selection | 2-0-2 | 3 | PE |
| BSL340 | Performance and Competency Management | 2-0-2 | 3 | PE |
| BSL341 | Employee Training and Development | 2-0-2 | 3 | PE |
| BSL342 | Industrial Relations and Indian Labour Laws | 2-0-2 | 3 | PE |
| BSL343 | Compensation and Reward Management | 2-0-2 | 3 | PE |
| BSL344 | Organization Change and Development | 2-0-2 | 3 | PE |
| BSL345 | Cross Culture HRM | 2-0-2 | 3 | PE |
| BSL346 | Fundamentals of Strategic HRM | 2-0-2 | 3 | PE |
| BSL352 | HR Audit | 2-0-2 | 3 | PE |
| BSL353 | Systems Thinking | 2-0-2 | 3 | PE |
| BSL354 | Workplace Diversity and Inclusion | 2-0-2 | 3 | PE |

| BSL347 | Financial Reporting and Analysis | 2-0-2 | 3 | PE |
|---------|---|-------|---|----|
| BSL349 | Insurance and Risk Management | 2-0-2 | 3 | PE |
| BSL350 | Fundamentals of Money and Banking | 2-0-2 | 3 | PE |
| CML352 | Financial Econometrics | 2-0-2 | 3 | PE |
| BSL303 | International Business | 2-0-2 | 3 | PE |
| ENL 340 | Fundamentals of Spreadsheet Modelling | 2-0-2 | 3 | PE |
| CML353 | Corporate Restructuring, Mergers & Acquisitions | 2-0-2 | 3 | PE |
| CML355 | Project Appraisal & Finance | 2-0-2 | 3 | PE |
| BSL348 | Introduction to Financial Institutions and Market | 2-0-2 | 3 | PE |
| CML354 | International Finance | 2-0-2 | 3 | PE |

Nomenclature changed

| | NEW | | OLD | |
|--------------|---|-----------------------------|------------------|--|
| Subject Code | Name of Course | Subject Code Name of Course | | |
| CSV100 | Basic Computer Skills for Professionals | CSV119 | Digital Literacy | |

Shifting of Courses from one Semester to another

| Course Code | Course Name | Old | New |
|-------------|---|-----|-----|
| CLL101 | Effective Communication I | 1 | 2 |
| CLL102 | Effective Communication II | 2 | 3 |
| CML110 | Communication and Documentation in Business | 2 | 1 |
| CSV100 | Basic Computer Skills for Professionals | 1 | 2 |
| | Program Elective I | 4 | 5 |
| | Program Elective III | 5 | 6 |
| BSL301 | Business Policy and Strategy | 4 | 5 |
| | Foreign Language Elective | 3 | 4 |
| CML206 | Security & Investment Management | 4 | PE |

| ity Enhancement ect Presentation & Training Enhancement eral Proficiency gram Electives n Electives | Credits | Credits |
|---|---------|---------|
| Category | New | Old |
| Programme Core | 69 | 75 |
| Ability Enhancement | 12 | 13 |
| Project Presentation & Training | 14 | 12 |
| Skill Enhancement | 8 | 8 |
| General Proficiency | 6 | 6 |
| Program Electives | 12 | 15 |
| Open Electives | 9 | 9 |
| Community Service | 6 | 6 |
| Total Credits | 136 | 138 |

B.COM(H)- FINANCIAL MARKETS SCHEME OF STUDY 2023-2024

| Semester | | Semester Course Code, Course Name(L-T-P) Credits | | | | | COMMUN ITY SERVICE | GP | P | Hrs. | | Contact Hours per Semester | Credi ts | |
|----------|--|--|--|--|---|---|--|--|------------------------------|------|---|----------------------------------|-------------|---------|
| | | | | | | | | | | L | T | P | | |
| 1 | CHL100 Environment al Studies (3-0-0)3 | BSL 102 Principles of Management (2-0-2)3 | ENL101 Statistics & Research Methodology-I (2-0-2)3 | CML107 Introduction to Banking (2-0-2)3 | CML101 Professional Accounting (2-0-2)3 | CML110 Communic ation & Documenta tion in Business (2-0-2)3 | | CMS101 CS-I | CMR101 GP-I 1 Credit | 11 | 0 | 12 | 23*15=345 | 18+1=19 |
| 2 | CLL130 Effective Comm - I (1-0-2)2 | BSL101 Entrepreneurs hip (2-0-2)3 | ENL102 Principles of Economics (2-0-2)3 | CLL120 Human Values & Professional Ethics (2-0-0)2 | CSV100 Basic Computer Skills for Professionals (0-0-4)2 | CML109 Business Laws (2-0-2)3 | CML108 Financial Management-I (2-0-2)3 | CMS102 CS-II (140 HRS) 2 Credit | CMR102 GP-II 1 Credit | 13 | 0 | 12 | 25*15=375 | 18+3=21 |
| Summers | CMI | D201 | Minor | Project (0-0-8) | 4 | | | | | | | | | 4 |
| 3 | CML208 Financial Management -II (2-0-2)3 | ENL204 Statistics & Research Methodology -II (2-0-2)3 | ENL104 Business Mathematics (2-0-2)3 | BSL203 HRM (2-0-2)3 | BSL209 E-Commerce (2-0-2)3 | CLL140 Effective Comm-II (1-0-2)2 | CML203 Fundamentals of Auditing (2-0-2)3 | CMS201 CS-III | CMR201 GP-III 1 Credit | 13 | 0 | 14 | 27*15=405 | 20+1=21 |
| 4 | CML202 Income Tax & Practice (2-0-2)3 | CML204 Corporate Accounting (2-0-2)3 | Corporate Governance & Sustainability (3-0-0)3 | Introduction to Marketing Management (2-0-2)3 | Foreign Language Elective (1-2-0)3 | Open Elective I (2-0-2)3 | | CMS202 CS-IV (140 HRS) 2 Credit | CMR202 GP-IV 1 Credit | 11 | 2 | 10 | 21*15=305 | 18+3+=2 |
| Summers | Ci | MT301 | | nternship (0-0-8 | 3) 4 | | | | | | | | | 4 |
| 5 | CML301 Cost Accounting (2-0-2)3 | CML303 Indirect Taxation (GST) (2-0-2)3 | RSV301 Creative Thinking &Negotiation Skills (2-0-2)3 | Program Elective I (2-0-2)3 | Program Elective II (2-0-2)3 | Open Elective II (2-0-2)3 | BSL301 Business Policy & Strategy (2-0-2)3 | CMS301 CS-V | CMR301 GP-V 1 Credit | 12 | 0 | 14 | 26*15=390 | 21+1=22 |
| 6 | CML302 Management Accounting (2-0-2)3 | CML304 Micro Finance (2-0-2)3 | Program Elective III (2-0-2)3 | Program Elective IV (2-0-2)3 | Open Elective III (2-0-2)3 | CMD302 Major Project (0-0-12)6 | | CMS302 CS-VI (140 HRS) 2 Credit | CMR302 GP-VI 1 Credit | 12 | 0 | 12 | 24*15=360 | 21+3=24 |
| | | | | | | TOTAL | | | | | | | | 136 |

^{*} The University shall conduct introductory sessions in the 1st semester on soft skills, which are a set of transferable skills and key personal traits essential for personality development.

^{*} A value-added course over and above the programme scheme shall be offered during the 4th Semester to impart special skills to students for enhancing their employability.

^{*} Advanced sessions on soft skills shall be conducted in the 5th Semester to hope up the preparedness of students for placements and make them industry ready for national and international jobs.

^{*} Students shall complete the required 140 community service hours across the year.

BACHELOR OF COMMERCE(H)-Financial Markets

OVERALL CREDIT STRUCTURE

| Category | Credits |
|---------------------------------|---------|
| Programme Core | 69 |
| Ability Enhancement | 12 |
| Project Presentation & Training | 14 |
| Skill Enhancement | 8 |
| General Proficiency | 6 |
| Program Electives | 12 |
| Open Electives | 9 |
| Community Service | 6 |
| Total Credits | 136 |

| Prograi | mme Core | L-T-P | С |
|---------|---|-------|---|
| BSL101 | Entrepreneurship | 2-0-2 | 3 |
| BSL102 | Principles of Management | 2-0-2 | 3 |
| ENL101 | Statistics & Research Methodology-I | 2-0-2 | 3 |
| ENL102 | Principles of Economics | 2-0-2 | 3 |
| CML107 | Introduction to Banking | 2-0-2 | 3 |
| CML109 | Business Laws | 2-0-2 | 3 |
| CML101 | Professional Accounting | 2-0-2 | 3 |
| CML108 | Financial Management I | 2-0-2 | 3 |
| CML208 | Financial Management II | 2-0-2 | 3 |
| BSL203 | Human Resource Management | 2-0-2 | 3 |
| BSL207 | Introduction to Marketing Management | 2-0-2 | 3 |
| BSL209 | E-Commerce | 2-0-2 | 3 |
| BSL301 | Business Policy & Strategy | 2-0-2 | 3 |
| CML202 | Income Tax & Practice | 2-0-2 | 3 |
| CML203 | Fundamentals of Auditing | 2-0-2 | 3 |
| CML204 | Corporate Accounting | 2-0-2 | 3 |
| CML301 | Cost Accounting | 2-0-2 | 3 |
| CML302 | Management Accounting | 2-0-2 | 3 |
| CML303 | Indirect Taxation (GST) | 2-0-2 | 3 |
| CML304 | Micro Finance | 2-0-2 | 3 |
| ENL104 | Business Mathematics | 2-0-2 | 3 |
| ENL204 | Statistics & Research Methodology-II | 2-0-2 | 3 |
| ENL212 | Corporate Governance and Sustainability | 3-0-0 | 3 |

| General | Proficiency | С |
|---------|-------------|-----------|
| CMR101 | GP-I | 01 Credit |
| CMR102 | GP-II | 01 Credit |
| CMR201 | GP-III | 01 Credit |
| CMR202 | GP-IV | 01 Credit |
| CMR301 | GP-V | 01 Credit |
| CMR302 | GP-VI | 01 Credit |

| Commu | nity Service | |
|--------|----------------------------|-----------|
| CMS101 | Community Service (CS-I) | |
| CMS102 | Community Service (CS-II) | 02 Credit |
| CMS201 | Community Service (CS-III) | 02 Crodit |
| CMS202 | Community Service (CS-IV) | 02 Credit |
| CMS301 | Community Service (CS-V) | ما رسمطنه |
| CMS302 | Community Service (CS-VI) | 02 Credit |
| | | |

| Skill Enl | Skill Enhancement Courses L | | | | |
|-----------|---|-------|---|--|--|
| CSV100 | Basic Computer Skills for Professionals | 0-0-4 | 2 | | |
| BSV301 | Creativity and Negotiation Skills | 2-0-2 | 3 | | |
| (MI 110 | Communication & Documentation in Business | 2-0-2 | 3 | | |

| Ability I | Ability Enhancement | | С |
|-----------|------------------------------------|-------|---|
| CHL100 | Environmental Studies | 3-0-0 | 3 |
| CLL130 | Effective Communication I | 1-0-2 | 2 |
| CLL140 | Effective Communication II | 1-0-2 | 2 |
| CLL120 | Human Values & Professional Ethics | 2-0-0 | 2 |
| | Foreign Language Elective | 1-2-0 | 3 |

PROGRAMME ELECTIVES Financial Markets BSL351 Introduction to Portfolio Management 2-0-2 3

| CML309 | Behavioral Finance | 2-0-2 | 3 |
|--------|--|-------|---|
| CML308 | Equity Derivatives | 2-0-2 | 3 |
| CML307 | Fundamental & Technical Analysis | 2-0-2 | 3 |
| CML306 | Mutual Fund Distributors | 2-0-2 | 3 |
| CML305 | Securities Operations and Risk Management | 2-0-2 | 3 |
| CML206 | Security & Investment Management | 2-0-2 | 3 |
| BSL351 | Introduction to Portfolio Management | 2-0-2 | 3 |

| Other Courses | L-T-P | С |
|---------------------|-------|---|
| Open Elective – I | 2-0-2 | 3 |
| Open Elective – II | 2-0-2 | 3 |
| Open Elective – III | 2-0-2 | 3 |

| Project | Presentation & Training | L-T-P | C |
|---------|-------------------------------------|--------|---|
| CMD201 | Minor Project (for BCom (H))-FM | 0-0-8 | 4 |
| CMT301 | Summer Internship (for Bcom (H))-FM | 0-0-8 | 4 |
| CMD302 | Major Project (for Bcom (H))-FM | 0-0-12 | 6 |

Revision of Scheme of Study for B. A. (H) Economics

- > Highlights (Objectives of Change) of the Scheme
 - i. The Credit structure has been optimized
 - ii. Adjustment of courses to give more exposure to the students.
 - iii. Addition of Programme electives specifically focusing on Financial Markets
 - iv. Incorporation of SCALE framework

Major Changes

Nomenclature changed

| | NEW | | OLD |
|---------|---|---------|---------------------------------------|
| Subject | Name of Course | Subject | Name of Course |
| Code | | code | |
| CLL130 | Effective Communication I | CLL101 | Effective Communication I |
| CLL140 | Effective Communication II | CLL102 | Effective Communication II |
| ENL106 | Intermediate Microeconomics | ENL205 | Advanced Microeconomics |
| ENL216 | Intermediate Macroeconomics | ENL207 | Advanced Macroeconomics |
| ENL210 | Fundamentals of spreadsheet modelling | ENL340 | Fundamentals of spreadsheet modelling |
| CSV100 | Basic Computer skills for Professionals | CSV119 | Digital Literacy |
| ENL103 | History of Economic Thoughts | ENL201 | History of Economic Thoughts |
| ENL104 | Business Mathematics | ENL203 | Business Mathematics |
| ENL211 | Fundamentals of Money and Banking | ENL305 | Fundamentals of Money and Banking |
| ENL213 | Mathematical Economics | ENL336 | Mathematical Economics |
| ENL215 | Public Finance | ENL301 | Public Finance |
| ENL212 | Corporate Governance &Sustainability | ENL302 | Corporate Governance & Sustainability |

Changes in Contact Hours and Credits: L-T-P of following courses has been revisited

| Code | Subjects | New | Old |
|---------|-------------------|-----------|-----------|
| END3012 | Major project | (0-0-12)6 | (0-0-8)4 |
| END201 | Minor project | (0-0-8)4 | (0-0-10)5 |
| ENT301 | Summer internship | (0-0-8)4 | (0-0-6)3 |

Shifting of Courses from one Semester to another

| Code | Subjects | New | Old |
|-----------|------------------------------|-----|-----|
| CLL130 | Effective Communication I | II | I |
| CLL140 | Effective Communication II | III | II |
| ENL103 | History of Economic Thoughts | I | II |
| Foreign L | anguage Elective | IV | III |

COMPARISON

| Particulars | 2023 (NEW) | 2022 (OLD) |
|--|------------|------------|
| Number of Courses | 39 | 39 |
| Number of Credits | 136 | 134 |
| Credit for Core Courses | 72 | 69 |
| Credit for Program Electives | 12 | 12 |
| Credit for Training Projects/ Internship | 14 | 13 |

| Particulars | NCU | DU | Madras school of Economics |
|--|-----|-------------|----------------------------|
| Number of Courses | 39 | 22 | 26 |
| Number of Credits | 136 | 148 | 142 |
| Credit for Core Courses | 72 | 84 | 84 |
| Credit for Program Electives | 12 | 24 | 24 |
| Credit for Training Projects/ Internship | 13 | 02 | NA |
| Credit for Skill Enhancement | 05 | 04 | NA |
| On die fan Abilien Dabanaans | 10 | ΛA | 10 |

BA (H) ECONOMICS SCHEME OF STUDY 2023-2024

| | | | Semester Course Code, Course Name Community GP Hrs. | | Pe | r week | Credits | | | | | | |
|----------|--|--|---|---|--|---|---|--|------------------------------|---------|----------|-----|---------|
| Semester | | | | (L-T-P) Credits | | | | Service | | L | Т | Р | 5.55.15 |
| 1 | ENL103 History of Economic Thoughts (3-0-0)3 | CHL100 Environmental Studies (3-0-0)3 | ENL102 Principles of Economics (2-0-2)3 | ENL101 Statistics & Research Methodology-I (2-0-2)3 | BSL102 Principles of Management (2-0-2)3 | CSV100 Basic Computer skills for Professionals (0-0-4)2 | | ENS101 CS-I | ENR101 GP-I 1 Credit | 12 | 0 | 10 | 17+1=18 |
| 2 | CLL 130 Effective Comm I (1-0-2) 2 | ENL104 Business Mathematics (2-0-2)3 | ENL106 Intermediate Microeconomics (2-0-2)3 | CLL120 Human Values & Professional Ethics (2-0-0)2 | BSL101 Entrepreneurship (2-0-2)3 | CML110 Communication and Documentation in Business (2-0-2)3 | | ENS102 CS-II (140 Hrs) * 2 Credit | ENR102 GP-II 1 Credit | 11 | 0 | 10 | 16+3=19 |
| Summers | | | END201 Mir | nor Project (0-0-8)4 | | | | | | 0 | 0 | 8 | 4 |
| 3 | ENL211 Fundamentals of Money & Banking (4-0-0)4 | ENL213 Mathematical Economics (2-0-2)3 | ENL209 Behavioral Economics (4-0-0)4 | ENL215 Public Finance (4-0-0)4 | CLL 140 Effective Comm II (1-0-2) 2 | Open Elective 1 (2-0-2)3 | | ENS201 CS-II | ENR201 GP-III 1 Credit | 17 | 0 | 6 | 20+1=21 |
| 4 | ENL212 Corporate Governance &Sustainability (3-0-0)3 | ENL204 Statistics and Research Methodology-II (2-0-2)3 | ENL216 Intermediate Macroeconomics (2-0-2)3 | ENL208 Environmental Economics (2-0-2)3 | ENL210 Fundamentals of Spread Sheet Modelling (2-0-2)3 | Open Elective 2 (2-0-2)3 | Foreign Language Elective (1-2-0)3 | ENS202 CS-IV (140 Hrs) * 2 Credit | ENR202 GP-IV 1 Credit | 14 | 0 | 10 | 21+3=24 |
| Summers | | | ENT301 Summ | er Internship (0-0-8) | 4 | - | | | | 0 | 0 | 8 | 4 |
| 5 | ENL206 Introduction to Econometrics (2-0-2)3 | ENL337 Financial Economics (2-0-2)3 | ENL304 Indian Economy (4-0-0)4 | Programme Elective –I (2-0-2)3 | Programme Elective-II (2-0-2)3 | Open Elective 3 (2-0-2)3 | | ENS301 CS-V | ENR301 GP-V 1 Credit | 14 | 0 | 10 | 19+1=20 |
| 6 | ENL202 International Trade (4-0-0)4 | ENL342 Advanced Econometrics (2-0-2)3 | ENL306 Economics of Growth & Development (4-0-0)4 | Programme Elective-III (2-0-2)3 | Programme Elective –IV (2-0-2)3 | END302 Major Project (0-0-12)6 | | ENS302 CS-VI (140 Hrs) * 2 Credit | ENR302 GP-VI 1 Credit | 14 | 0 | 18 | 23+3=26 |
| | | | | Total | | | | | | Total C | Credit = | 136 | |

NOTE:

- The University shall conduct introductory sessions in the 1st semester on soft skills, which are a set of transferable skills and key personal traits essential for personality development.
- A value-added course over and above the programme scheme shall be offered during the 4th Semester to impart special skills to students for enhancing their employability.
- Advanced sessions on soft skills shall be conducted in the 5th Semester to cope up the preparedness of students for placements and make them industry ready for national and international jobs.
- Students shall complete the required 140 community service hours across the year.

BA (H) ECONOMICS SCHEME OF STUDY 2023-2024

| OVE | OVERALL CREDIT STRUCTURE | | | |
|------|---------------------------------|--------|--|--|
| S.No | Category | Credit | | |
| 1 | Programme Core | 72 | | |
| 2 | Ability Enhancement | 12 | | |
| 3 | Project Presentation & Training | 14 | | |
| 4 | Skill Enhancement | 5 | | |
| 5 | General Proficiency | 6 | | |
| 6 | Community Service | 6 | | |
| 7 | Program Electives | 12 | | |
| 8 | Open Electives | 9 | | |
| | Total Credits | 136 | | |

| To | etal Credits 136 | | | |
|-----------|---|-------|-------|---|
| | Programme core | | L-T-P | C |
| BSL101 | Entrepreneurship | | 2-0-2 | 3 |
| BSL102 | Principles of Management | | 2-0-2 | 3 |
| ENL102 | Principles of Economics | | 2-0-2 | 3 |
| ENL103 | History of Economic Thoughts | | 3-0-0 | 3 |
| ENL104 | Business Mathematics | | 2-0-2 | 3 |
| ENL106 | Intermediate Microeconomics | | 2-0-2 | 3 |
| ENL202 | International Trade | | 4-0-0 | 4 |
| ENL204 | Statistics and Research Methodology-II | | 2-0-2 | 3 |
| ENL206 | Introduction to Econometrics | | 2-0-2 | 3 |
| ENL216 | Intermediate Macroeconomics | | 2-0-2 | 3 |
| ENL208 | Environmental Economics | | 2-0-2 | 3 |
| ENL209 | Behavioral Economics | | 3-0-0 | 3 |
| ENL210 | Fundamentals of Spreadsheet Modelling | | 2-0-2 | 3 |
| ENL211 | Fundamentals of Money and Banking | | 4-0-0 | 4 |
| ENL212 | Corporate Governance & Sustainability | | 3-0-0 | 3 |
| ENL213 | Mathematical Economics | | 2-0-2 | 3 |
| ENL215 | ENL215 Public Finance | | | 4 |
| ENL304 | ENL304 Indian Economy | | | 4 |
| ENL306 | ENL306 Economics of Growth & Development | | | 4 |
| ENL337 | Financial Economics | | 2-0-2 | 3 |
| ENL342 | Advanced Econometrics | T | 2-0-2 | 3 |
| General F | Proficiency | Cred | lit | |
| ENR101 | GP-I | 01 Cr | | |
| ENR102 | GP-II | 01 Cr | | |
| ENR201 | GP-III | 01 Cr | edit | |
| ENR202 | GP-IV | 01 Cr | | |
| ENR301 | GP-V | 01 Cr | | |
| ENR302 | GP-VI | 01 Cr | edit | |
| | ity Service | C | | 1 |
| ENS101 | Community Service (CS-I) | 02 Cr | edit | |
| ENS102 | Community Service (CS-II) | 02 01 | | 1 |
| ENS201 | Community Service (CS-III) | 02 Cr | edit | |
| ENS202 | Community Service (CS-IV) | 02 01 | | 1 |
| ENS301 | Community Service (CS-V) | 02 Cr | edit | |
| ENS302 | Community Service (CS-VI) | | | 1 |
| | ancement Courses | L-T-P | C | |
| CSV100 | Basic Computer skills for Professionals | 0-0-4 | 2 | |
| CML110 | Communication and Documentation in Business | 2-0-2 | 3 | |

| Ability En | hancement | L-T-P | C | | | | |
|---------------------------------|--|--------|---|--|--|--|--|
| CHL100 | Environmental Studies | 3-0-0 | 3 | | | | |
| CLL130 | Effective Communication-I | 1-0-2 | 2 | | | | |
| CLL140 | Effective Communication-II | 1-0-2 | 2 | | | | |
| CLL120 | Human Values & Professional Ethics | 2-0-0 | 2 | | | | |
| Foreign La | inguage Elective - I | 1-2-0 | 3 | | | | |
| Programn | ne Electives | L-T-P | C | | | | |
| | ECONOMICS | | | | | | |
| ENL330 | Agricultural Economics | 2-0-2 | 3 | | | | |
| ENL331 | Industrial Economics | 2-0-2 | 3 | | | | |
| ENL332 | Comparative Economic Development | 2-0-2 | 3 | | | | |
| ENL333 | Labour Economics | 2-0-2 | 3 | | | | |
| ENL334 | Economics of Health & Education | 2-0-2 | 3 | | | | |
| ENL335 | Population Studies | 2-0-2 | 3 | | | | |
| ENL341 | Global economic monetary system | 2-1-0 | 3 | | | | |
| | FINANCE | | | | | | |
| BSL349 | Insurance & Risk Management | 2-0-2 | 3 | | | | |
| BSL348 | Financial Institutions and Market | 2-0-2 | 3 | | | | |
| BSL354 | Security Analysis & Portfolio Management | 2-0-2 | 3 | | | | |
| BSL347 | Financial Reporting & Analysis | 2-0-2 | 3 | | | | |
| | RESEARCH ANALYSIS | | | | | | |
| ENL338 | Introduction to Statistical Programming with R | 2-0-2 | 3 | | | | |
| BSL307 | Fundamentals of Data Mining | 2-0-2 | 3 | | | | |
| ENL339 | Forecasting Methods | 2-0-2 | 3 | | | | |
| BSL308 | Fundamentals of Data Visualization | 2-0-2 | 3 | | | | |
| | OTHER COURSES | | | | | | |
| Open Elec | tive – I | 2-0-2 | 3 | | | | |
| Open Elec | tive – II | 2-0-2 | 3 | | | | |
| Open Elec | tive – III | 2-0-2 | 3 | | | | |
| PROJECT PRESENTATION & TRAINING | | | | | | | |
| END201 | Minor Project | 0-0-8 | 4 | | | | |
| END301 | Summer Internship | 0-0-8 | 4 | | | | |
| END302 | Major Project | 0-0-12 | 6 | | | | |

Revision of Scheme of Study for B. A. (H) Psychology

Highlights (Objectives of Change) of the Scheme

- i. Opportunity for learners to choose the courses of their interest in Psychology
- ii. Restructuring of course plan in order for better deliverance and course offerings to the students.
- iii. Addition of significant and relevant courses of the standard of Honours program which may further enhance the competency of students.
- iv. Reduction of non-psychology courses and overlapping courses.
- v. Renaming and reordering of courses for progressive learning experience.
- vi. Incorporation of SCALE framework

Major Changes

Addition of New Courses

| Subject Code | Name of Course | L-T-P | Credits | Semester |
|---------------------|---|-------|---------|----------|
| PCL104 | Academic Reading and Writing | 2-2-0 | 4 | 1 |
| PCL112 | Statistical Methods and Psychological Research-I | 2-2-0 | 4 | 1 |
| PCL 211 | Introduction to Developmental Psychology | 3-1-0 | 4 | 3 |
| PCL213 | Statistical Methods and Psychological Research-II | 2-2-0 | 4 | 3 |
| PCL212 | Introduction to Cognitive Psychology | 3-1-0 | 4 | 4 |

Deleted Courses

| Course Code | Course Name | Credit | Semester |
|-------------|--|--------|----------|
| BSL101 | Entrepreneurship | 3 | 2 |
| BSL102 | Principles of Management | 3 | 1 |
| ENL101 | Statistics and Research Methodology-I | 3 | 1 |
| PCL102 | Psychology for Living | 3 | 2 |
| PCL207 | Statistical Methods and Psychological Research | 4 | 3 |
| PCL301 | Lifespan Approach to Developmental Psychology | 4 | 5 |
| PCL339 | Human Cognition-I | 3 | PE |
| PCL340 | Human Cognition-II | 3 | PE |
| | | | |

Nomenclature changed

| | NEW | | | OLD | |
|---------------------|--|--------|--------------|---------------------------------------|--------|
| Subject Code | Name of Course | Credit | Subject Code | Name of Course | Credit |
| PCL108 | Introduction to Physiological Psychology | 4 | PCL109 | Physiological Psychology | 4 |
| CSV100 | Basic Computer Skills for Professionals | 2 | CSV119 | Digital Literacy | 2 |
| PCL106 | Positive Psychology | 4 | PCL208 | Positive Psychology | 4 |
| PCL105 | Evolution of Psychological Thought | 4 | PCL203 | Evolution of Psychological Thought | 4 |
| PCL130 | Introduction to Psychology | 4 | PCL103 | Introduction to Psychology | 3 |
| PCL214 | Psychopathology and Well-being | 4 | PCL303 | Psychopathology and Well-being | 3 |
| PCL104 | Introduction to Social Psychology | 4 | PCL205 | Introduction to Social Psychology | 3 |

Shifting of Courses from one Semester to another

| Course Code | Course Name | Old | New |
|-------------|--|-----|-----|
| CLL131 | Effective Communication I | 1 | 2 |
| CLL142 | Effective Communication II | 2 | 3 |
| PCL202 | Industrial and Organisational Psychology | 4 | 5 |
| PCL206 | Counselling Psychology | 4 | 5 |
| PCL214 | Psychopathology and Well-being | 5 | 4 |
| CHL100 | Environmental Studies | 1 | 2 |
| PCL105 | Evolution of Psychological Thought | 3 | 1 |
| PCL104 | Introduction to Social Psychology | 3 | 2 |
| PCL106 | Positive Psychology | 3 | 2 |
| PCL204 | Applied Social Psychology | 4 | 3 |
| | Foreign Language-I | 5 | 4 |

B.A. (Hons.) PSYCHOLOGY SCHEME OF STUDY 2023-2024

| Semester | | Semester Course Code, Course Name (L-T-P) Credits | | | | Community Service | GP | | Hrs. er wee | ek | Contact Hours per Sem | Credits | | |
|----------|--|---|--|--|--|--|--------------|---|------------------------------|----|-----------------------------|---------|-----------|-----|
| | | | | | | | | | | L | T | P | | |
| 1 | CLL120 Human Values & Professional Ethics (2-0-0)2 | PCL130 Introduction to Psychology (4-0-0)4 | PCL105 Evolution of Psychological Thought (3-1-0)4 | PCL111 Understanding Individual Differences (3-1-0)4 | PCL107 Academic Reading and Writing (2-0-2)3 | CHL100 Environmental Studies (3-0-0)3 | | PCS101 CS-I | PCR101 GP-I 1 Credit | 17 | 2 | 2 | 21*15=315 | 21 |
| 2 | CLL130 Effective Comm-I (1-0-2)2 | PCL104 Introduction to Social Psychology (2-2-0)4 | PCL106 Positive Psychology (3-1-0)4 | PCL108 Introduction to Physiological Psychology (3-1-0)4 | PCL112 Statistical Methods and Psychological Research – I (2-2-0)4 | CSV100 Basic Computer Skills for Professionals (0-0-4)2 | | PCS102 CS-II (140 Hrs)* 2 Credit | PCR102 GP-II 1 Credit | 11 | 6 | 6 | 23*15=345 | 23 |
| Summers | | PCD | 201 | | | Minor Project | (0-0- 8)4 | | | | | 8 | | 4 |
| 3 | CLL140 Effective Comm-II (1-0-2)2 | PCL204 Applied Social Psychology (2-2-0)4 | PCL211 Introduction to Developmental Psychology (3-1-0)4 | PCL201 Cultural Psychology (2-0-2)3 | PCL213 Statistical Methods and Psychological Research – II (2-2-0)4 | PCP201 Psy Practical (Experiment) (2-0-2)3 | | PCS201 CS-III | PCR201 GP-III 1 credit | 12 | 5 | 6 | 23*15=345 | 21 |
| 4 | PCL212 Introduction to Cognitive Psychology (3-1-0)4 | PCL214 Psychopathology and Well Being (2-2-0)4 | Programme Elective – I (2-0-2)3 | Open Elective – I (2-0-2)3 | Foreign Language (1-2-0)3 | PCP202 Psy Practical (Testing) (2-0-2)3 | | PCS202 CS-IV (140 Hrs)* 2 Credit | PCR202 GP-IV 1 credit | 12 | 5 | 6 | 23*15=345 | 23 |
| Summers | | PCT | 301 | | Su | mmer Internship | (0-0- 8)4 | | | | | 8 | | 4 |
| 5 | PCL202 Industrial and Organizational Psychology (3-1-0)4 | PCL206 Counselling Psychology (3-1-0)4 | Programme Elective-II (2-0-2)3 | Programme Elective-III (2-0-2)3 | Open Elective-II (2-0-2)3 | PCP301 Psy Practical (Survey) (0-0-4)2 | | PC301 CS-V | PCR301 GP-V 1 credit | 12 | 2 | 10 | 24*15=360 | 20 |
| 6 | PCL302 Applied Clinical Psychology (3-1-0)4 | PCD302 Major Project## (0-0-12)6 | Open Elective- III (2-0-2)3 | Creative think | SV301 ing and Negotiation Skills 2-0-2)3 | PCP302 Psy Practical (Qualitative Analysis) (1-0-4)3 | | PCS302 CS-VI (140 Hrs) 2 Credit | PCR302 GP-VI 1 credit | 8 | 1 | 8 | 17*15=255 | 22 |
| | | | | TOT | AL | | | | | 70 | 21 | 42 | | 138 |

NOTE: i. The University shall conduct introductory sessions in the 1st semester on soft skills, which are a set of transferable skills and key personal traits essential for personality development.

ii. The University shall conduct special sessions in the 4th semester to reinforce the learnings of introductory training sessions conducted in the first year.

iii. Two value-added courses over and above the programme scheme shall be offered during the 5th & 6th semesters to impart special skills to students for enhancing their employability.

^{*}Students shall complete the required 140 community service hours across the year.

^{**} If the student is not undertaking any research based project then Student has to do MOOC Courses of equivalent credits.

[#] Student taking exit after one year has to do Internship I/ Vocational Course.

^{##} The student will be allotted the major project guide in 5th semester and would work on it for one academic year.

Complete scheme of the BA (H) Psychology programme

| OVERALL CREDIT STRUCTURE | | | | |
|---------------------------------|---------|--|--|--|
| Category | Credits | | | |
| Programme Core | 77 | | | |
| Ability Enhancement | 15 | | | |
| Project Presentation & Training | 14 | | | |
| Skill Enhancement | 2 | | | |
| General Proficiency | 6 | | | |
| Program Electives | 9 | | | |
| Open Electives | 9 | | | |
| Community Service | 6 | | | |
| Total Credits | 138 | | | |

| Ability Enhance | ement | L-T-P | C |
|---------------------|---|-------|---|
| CHL100 | Environmental Studies | 3-0-0 | 3 |
| CLL120 | Human Values & Professional Ethics | 2-0-0 | 2 |
| CLL130 | Effective Communication I | 1-0-2 | 2 |
| CLL140 | Effective Communication II | 1-0-2 | 2 |
| Foreign Languag | ge Elective | 1-2-0 | 3 |
| Programme Co | re | L-T-P | C |
| PCL130 | Introduction to Psychology | 4-0-0 | 4 |
| PCL105 | Evolution of Psychological Thought | 3-1-0 | 4 |
| PCL111 | Understanding Individual Differences | 3-1-0 | 4 |
| PCL107 | Academic Reading and Writing | 2-0-2 | 3 |
| PCL104 | Introduction to Social Psychology | 2-2-0 | 4 |
| PCL106 | Positive Psychology | 3-1-0 | 4 |
| PCL108 | Introduction to Physiological Psychology | 3-1-0 | 4 |
| PCL112 | Statistical Methods and Psychological Research – I | 2-2-0 | 4 |
| PCL204 | Applied Social Psychology | 2-2-0 | 4 |
| PCL211 | Introduction to Developmental Psychology | 3-1-0 | 4 |
| PCL201 | Cultural Psychology | 2-0-2 | 3 |
| PCL213 | Statistical Methods and Psychological Research – II | 2-2-0 | 4 |
| PCL212 | Introduction to Cognitive Psychology | 3-1-0 | 4 |
| PCL214 | Psychopathology and Well-Being | 2-2-0 | 4 |
| PCL202 | Industrial and Organizational Psychology | 3-1-0 | 4 |
| PCL206 | Counselling Psychology | 3-1-0 | 4 |
| PCL302 | Applied Clinical Psychology | 3-1-0 | 4 |
| PCP201 | Psy Practical (Experiment) | 2-0-2 | 3 |
| PCP202 | Psy Practical (Testing) | 2-0-2 | 3 |
| PCP301 | Psy Practical (Survey) | 0-0-4 | 2 |
| PCP302 | Psy Practical (Qualitative Analysis) | 1-0-4 | 3 |

PROGRAMME ELECTIVES

| Clinical Psycho | | L-T-P | \mathbf{C} |
|-------------------------|--|---------|--------------|
| PCL331 | | 2-0-2 | C 3 |
| PCL331 | Health Psychology Stress Management | 2-0-2 | 3 |
| | | 2-0-2 | 3 |
| Consumer Psyc BSL204 | Consumer Behaviour | 2-0-2 | 3 |
| PCL338 | | 2-0-2 | 3 |
| | Psychology of Advertising | 2-0-2 | 3 |
| PCL336 | Media Psychology | 2-0-2 | 3 |
| Environmental | | 202 | 1 |
| PCL334 | Sustainability and Conservation Behaviour | 2-0-2 | 3 |
| PCL335 | Foundation of Environmental Stress | 2-0-2 | 3 |
| Organizational | | 202 | 1 2 |
| BSL344 | Organization Change and Development | 2-0-2 | 3 |
| BSL340 | Performance Management and Competency Management | 2-0-2 | 3 |
| BSL203 | Human Resource Management | 2-0-2 | 3 |
| BSL302 | Leadership | 2-0-2 | 3 |
| Forensic Psych | | | |
| PCL341 | Foundations of Forensic Psychology | 2-0-2 | 3 |
| PCL342 | Forensic Psychology in practice | 2-0-2 | 3 |
| General Profic | iency | C | |
| PCR101 | GP-I | 01 Cred | it |
| PCR102 | GP-II | 01 Cred | it |
| PCR201 | GP-III | 01 Cred | it |
| PCR202 | GP-IV | 01 Cred | it |
| PCR301 | GP-V | 01 Cred | it |
| PCR302 | GP-VI | 01 Cred | it |
| Community Se | rvice | | |
| PCS101 | Community Service (CS-I) | 02 | |
| PCS102 | Community Service (CS-II) | Credit | |
| PCS201 | Community Service (CS-III) | 02 | |
| PCS202 | Community Service (CS-IV) | Credit | |
| PCS301 | Community Service (CS-V) | 02 | |
| PCS302 | Community Service (CS-VI) | Credit | |
| | | | |
| Skill Enhancen | nent Courses | L-T-P | C |
| BSV301 | Creative thinking and Negotiation Skills | 3-0-0 | 3 |
| CSV100 | Basic Computer Skills for Professionals | 0-0-4 | 2 |
| Other Courses | Duote Computer orano for Frotessionars | L-T-P | \mathbf{C} |
| Open Elective – | | 2-0-2 | 3 |
| Open Elective – | | 2-0-2 | 3 |
| Open Elective – | | 2-0-2 | 3 |
| Spen Licente | | | 1 2 |
| Project Present | tation & Training | L-T-P | C |
| PCD201 | Minor Project (for Psychology) | 0-0-8 | 4 |
| PCD302 | Major Draiget (for Dayshalogy) | 0.0.12 | 6 |
| PCD302 | Major Project (for Psychology) | 0-0-12 | 6 |

Revision of Scheme of Study for Bachelors of Business Administration (BBA) with Specialization in Digital Marketing

- > Highlights (Objectives of Change) of the Scheme
 - i. The Credit structure has been optimized
 - ii. Adjustment of courses to give more exposure to the students
 - iii. Incorporation of SCALE framework

Major Changes

Nomenclature/ Subject Code changed

| | NEW | | OLD |
|--------------|--|--------------|--|
| Subject Code | Name of Course | Subject Code | Name of Course |
| CSV100 | Basic Computer Skills for Professionals | CSV119 | Digital Literacy (Lab Training + Python) |
| ENL210 | Fundamentals of Spreadsheet Modelling | ENL340 | Fundamentals of Spreadsheet Modelling |

Shifting of Courses from one Semester to another

| Course Code | Course Name | Old | New |
|--------------------|--|-----|-----|
| CLL130 | Effective Communication I | 1 | 2 |
| CLL140 | Effective Communication II | 2 | 3 |
| ENL 204 | Statistics and Research Methodology II | 4 | 3 |
| | Foreign Language Elective | 3 | 4 |

| OVERALL CREDIT STRUCTURE of BBA Specialisations | | | |
|---|---------|---------|--|
| Catagoriu | Credits | Credits | |
| Category | OLD | NEW | |
| Programme Core | 60 | 60 | |
| Ability Enhancement | 16 | 15 | |
| Project Presentation & Training | 12 | 14 | |
| Skill Enhancement | 8 | 8 | |
| General Proficiency | 6 | 6 | |
| Program Electives | 12 | 12 | |
| Open Electives | 9 | 9 | |
| Community Service | 6 | 6 | |
| Total Credits | 129 | 130 | |

BBA-DM SCHEME OF STUDY 2023-2024

| Semester | | | Samastar Course | e Code, Course Name | (I -T-P) Cradits | | | Community GP | Hrs. Per week Contact Hours per | | | Credits | | |
|----------|---|---|--|--|--|--|---|---|---------------------------------|----|---|---------|---------------|---------|
| Jemester | | | Jemester Course | code, codise ivallie | (L-1-r) credits | | | Service | ι . | | т | Р | Sem | Credits |
| 1 | BSL102 Principles of Management (2-0-2)3 | ENL102 Principles of Economics (2-0-2)3 | CLL120 Human Values & Professional Ethics (2-0-0)2 | CML 101 Professional Accounting (2-0-2)3 | CML109 Business Laws (2-0-2)3 | CML 110 Communication & Documentation in Business (2-0-2)3 | CSV 100 Basic Computer Skills for Professionals (0-0-4)2 | BSS101 CS-I | BSR101 GP-I 1 Credit | 12 | 0 | 14 | 26*15= 390 | 20 |
| 2 | CLL 130 Effective Comm-I (1-0-2)2 | CHL100 Environmental Studies (3-0-0)3 | BSL101 Entrepreneurs hip (2-0-2)3 | ENL101 Statistics & Research Methodology- I (2-0-2)3 | CML107 Introduction to Banking (2-0-2)3 | CML 108 Financial Management- I (2-0-2)3 | | BSS102 CS-II (140 Hrs)* 2 Credit | BSR102 GP-II 1 Credit | 12 | 0 | 10 | 22*15= 330 | 20 |
| Summers | | | D201 Minor Pr | | | 0-8)4 | | | | | | | 8 | 4 |
| 3 | BSL201 Fundamentals of Operations Management (2-0-2)3 | BSL203 Human Resource Management (2-0-2)3 | CML 208 Financial Management- II (2-0-2)3 | ENL204 Statistics and Research Methodology-II (2-0-2)3 | BSL209 Ecommerce (2-0-2)3 | BSL207 Introduction to Marketing Management (2-0-2)3 | CLL 140 Effective Comm-II (1-0-2)2 | BSS201 CS-III | BSR201 GP-III 1 credit | 13 | 0 | 14 | 27*15= 405 | 21 |
| 4 | BSL202 Introduction to Organizational Behavior (2-0-2)3 | BSL204 Fundamentals of Consumer Behavior (2-0-2)3 | BSL302 Leadership (2-0-2)3 | ENL 210 Fundamental s of Spreadsheet Modelling (2-0-2)3 | Foreign Language Elective (1-2-0)3 | Open Elective 1 (2-0-2)3 | | BSS202 CS-IV (140 Hrs)* 2 Credit | BSR202 GP-IV 1 credit | 11 | 2 | 10 | 23*15= 345 | 21 |
| Summers | | BST3 | 01 Summer Int | ernship | (0-0 | 0-8)4 | | | | | | | 8 | 4 |
| 5 | BSL303 International Business (2-0-2)3 | BSV301 Creative Thinking and Negotiation Skills (2-0-2)3 | BSL301 Business Policy & Strategy (2-0-2)3 | Open Elective 2 (2-0-2)3 | Programme Elective –I (2-0-2)3 | Programme Elective-II (2-0-2)3 | | BSS301 CS-V | BSR301 GP-V 1 credit | 12 | 0 | 12 | 24*15= 360 | 19 |
| 6 | BSL304 Investment Management (2-0-2)3 | BSD302 Major Project (0-0-12)6 | Open Elective 3 (2-0-2)3 | Programme Elective –III (2-0-2)3 | Programme Elective –IV (2-0-2)3 | | | BSS302 CS-VI (140 Hrs)* 2 Credit | BSR302 GP-VI 1 credit | 8 | 0 | 8 | 16*15= 240 | 21 |
| | | | | TOTAL | | | | | | | | | | 130 |

Note: The University shall conduct introductory sessions in the 1st semester on soft skills, which are a set of transferable skills and key personal traits essential for personality development.

^{*} A value-added course over and above the programme scheme shall be offered during the 4th Semester to impart special skills to students for enhancing their employability.

* Advanced sessions on soft skills shall be conducted in the 5th Semester to hone up the preparedness of students for placements and make them industry ready for national and international jobs. * "Students shall complete the required 140 community service hours across the year."

OVERALL CREDIT STRUCTURE

| Category | Credits |
|---------------------------------|---------|
| Programme Core | 60 |
| Ability Enhancement | 15 |
| Project Presentation & Training | 14 |
| Skill Enhancement | 8 |
| General Proficiency | 6 |
| Program Electives | 12 |
| Open Electives | 9 |
| Community Service | 6 |
| Total Credits | 130 |

| Programme Core | | | | | | |
|----------------|--|-------|--------|--|--|--|
| Code | Name | L-T-P | Credit | | | |
| BSL101 | Entrepreneurship | 2-0-2 | 3 | | | |
| CML108 | Financial management I | 2-0-2 | 3 | | | |
| ENL101 | Statistics & Research Methodology-I | 2-0-2 | 3 | | | |
| ENL102 | Principles of Economics | 2-0-2 | 3 | | | |
| CML101 | Professional Accounting | 2-0-2 | 3 | | | |
| CML107 | Introduction to Banking | 2-0-2 | 3 | | | |
| CML109 | Business Laws | 2-0-2 | 3 | | | |
| BSL102 | Principles of Management | 2-0-2 | 3 | | | |
| BSL201 | Fundamentals of Operations Management | 2-0-2 | 3 | | | |
| BSL203 | Human Resource Management | 2-0-2 | 3 | | | |
| CML208 | Financial management II | 2-0-2 | 3 | | | |
| BSL207 | Introduction to Marketing Management | 2-0-2 | 3 | | | |
| BSL209 | E-Commerce | 2-0-2 | 3 | | | |
| BSL202 | Introduction to Organizational Behavior | 2-0-2 | 3 | | | |
| BSL204 | Fundamentals of consumer Behavior | 2-0-2 | 3 | | | |
| BSL303 | International Business | 2-0-2 | 3 | | | |
| BSL301 | Business Policy & Strategy | 2-0-2 | 3 | | | |
| BSL302 | Leadership | 2-0-2 | 3 | | | |
| BSL304 | Investment Management | 2-0-2 | 3 | | | |
| ENL204 | Statistics and Research Methodology II | 2-0-2 | 3 | | | |

| Other Courses | L-T-P | Credit |
|---------------------|-------|--------|
| Open Elective – I | 2-0-2 | 3 |
| Open Elective – II | 2-0-2 | 3 |
| Open Elective – III | 2-0-2 | 3 |
| | | |
| | | |

| General Proficiency | | | | | | |
|-----------------------------------|---------------------------|--------|--|--|--|--|
| Code | Credit | | | | | |
| BSR101 | GP-I | 1 | | | | |
| BSR102 | GP-II | 1 | | | | |
| BSR201 | GP-III | 1 | | | | |
| BSR202 | GP-IV | 1 | | | | |
| BSR301 | GP-V | 1 | | | | |
| BSR302 | GP-VI | 1 | | | | |
| | Community Service | | | | | |
| Code | Name | Credit | | | | |
| BSS101 | Community Service (CS-I) | 2 | | | | |
| BSS102 | Community Service (CS-II) | | | | | |
| BSS201 Community Service (CS-III) | | - 2 | | | | |
| BSS202 | Community Service (CS-IV) | | | | | |
| BSS301 | Community Service (CS-V) | 2 | | | | |
| BSS302 | Community Service (CS-VI) | 2 | | | | |

| Skill Enhancement Courses | | | | | | |
|---------------------------|---|-------|--------|--|--|--|
| Code | Name | L-T-P | Credit | | | |
| CSV100 | Basic Computer Skills for Professionals | 0-0-4 | 2 | | | |
| CML110 | Communication and Documentation in Business | 2-0-2 | 3 | | | |
| BSV301 | Creative thinking and Negotiation Skills | 2-0-2 | 3 | | | |

| Ability Enhancement | | | | | |
|---------------------|--|-------|------------|--|--|
| Code | Name | L-T-P | Credi t | | |
| CHL100 | Environmental Studies | 3-0-0 | 3 | | |
| CLL130 | Effective Communication I | 1-0-2 | 2 | | |
| CLL140 | Effective Communication II | 1-0-2 | 2 | | |
| CLL120 | Human Values & Professional Ethics | 2-0-0 | 2 | | |
| ENL210 | Fundamentals of Spreadsheet Modelling | 2-0-2 | 3 | | |
| | Foreign Language Elective – I | 1-2-0 | 3 | | |

Project Presentation & Training

| Code | Name | L-T-P | Credit |
|--------|--|--------|--------|
| BSD201 | Minor Project (for BBA in Digital Marketing) | 0-0-8 | 4 |
| BST301 | Summer Internship (for BBA in Digital Marketing) | 0-0-8 | 4 |
| BSD302 | Major Project (for BBA in Digital Marketing) | 0-0-12 | 6 |

PROGRAMME ELECTIVES

| Digital Marketing | | | | | |
|---|---|---|--|--|--|
| Name | L-T-P | Credit | | | |
| Fundamentals of Big Data Analytics | 2-0-2 | 3 | | | |
| Content Development and Marketing | 2-0-2 | 3 | | | |
| Design Thinking and Innovation | 2-0-2 | 3 | | | |
| Digital Analytics and Campaign Planning | 2-0-2 | 3 | | | |
| Digital Futures | 2-0-2 | 3 | | | |
| Digital Media Planning and Management | 2-0-2 | 3 | | | |
| E-CRM | 2-0-2 | 3 | | | |
| Internet and Related Technologies | 2-0-2 | 3 | | | |
| Lead Generation & E-Mail Marketing | 2-0-2 | 3 | | | |
| Mobile Marketing | 2-0-2 | 3 | | | |
| Search Engine Optimization | 2-0-2 | 3 | | | |
| Strategic Digital Marketing | 2-0-2 | 3 | | | |
| Data Visualization | 2-0-2 | 3 | | | |
| Digital Media Ethics and Laws | 2-0-2 | 3 | | | |
| Web Design & Development | 2-0-2 | 3 | | | |
| Social Media and Web Analytics | 2-0-2 | 3 | | | |
| Digital Business | 2-0-2 | 3 | | | |
| | Fundamentals of Big Data Analytics Content Development and Marketing Design Thinking and Innovation Digital Analytics and Campaign Planning Digital Futures Digital Media Planning and Management E-CRM Internet and Related Technologies Lead Generation & E-Mail Marketing Mobile Marketing Search Engine Optimization Strategic Digital Marketing Data Visualization Digital Media Ethics and Laws Web Design & Development Social Media and Web Analytics | NameL-T-PFundamentals of Big Data Analytics2-0-2Content Development and Marketing2-0-2Design Thinking and Innovation2-0-2Digital Analytics and Campaign Planning2-0-2Digital Futures2-0-2Digital Media Planning and Management2-0-2E-CRM2-0-2Internet and Related Technologies2-0-2Lead Generation & E-Mail Marketing2-0-2Mobile Marketing2-0-2Search Engine Optimization2-0-2Strategic Digital Marketing2-0-2Data Visualization2-0-2Digital Media Ethics and Laws2-0-2Web Design & Development2-0-2Social Media and Web Analytics2-0-2 | | | |

| Semester | | | Semester Cours | e Code, Course Name | e (L-T-P) Credits | | | Community Service | GP | Pe | Hrs. | | Contact Hours per Sem | Credits |
|----------|---|---|---|--|--|--|---|---|--------------------------------|----|------|----|-----------------------------|---------|
| | BSL102 Principles of Management | ENL102 Principles of Economics | CLL120 Human Values & Professional | CML 101 Professional Accounting | CML109 Business Laws (2-0-2)3 | CML 110 Communication & | CSV 100 Basic Computer | BSS101 CS-I | BSR101 GP-I | | | | 26*15= | |
| 1 | (2-0-2)3 | (2-0-2)3 | Ethics (2-0-0)2 | (2-0-2)3 | (= 5 = 7,5 | Documentation in Business (2-0-2)3 | Skills for Professionals (0-0-4)2 | | 1 Credit | 12 | 0 | 14 | 390 | 20 |
| 2 | CLL 130 Effective Comm-I (1-0-2)2 | CHL100 Environmental Studies (3-0-0)3 | BSL101 Entrepreneurs hip (2-0-2)3 | ENL101 Statistics & Research Methodology- I (2-0-2)3 | CML107 Introduction to Banking (2-0-2)3 | CML 108 Financial Management- I (2-0-2)3 | | BSS102 CS-II (140 Hrs)* 2 Credit | BSR102 GP-II 1 Credit | 12 | 0 | 10 | 22*15= 330 | 20 |
| Summers | | B: | SD201 Minor Pr | oject | (0- | 0-8)4 | | | | | | | 8 | 4 |
| 3 | BSL201 Fundamentals of Operations Management (2-0-2)3 | BSL203 Human Resource Management (2-0-2)3 | CML 208 Financial Management- II (2-0-2)3 | ENL204 Statistics and Research Methodology-II (2-0-2)3 | BSL209 Ecommerce (2-0-2)3 | BSL207 Introduction to Marketing Management (2-0-2)3 | CLL 140 Effective Comm-II (1-0-2)2 | BSS201 CS-III | BSR201 GP-III 1 credit | 13 | 0 | 14 | 27*15= 405 | 21 |
| 4 | BSL202 Introduction to Organizational Behavior (2-0-2)3 | BSL204 Fundamentals of Consumer Behavior (2-0-2)3 | BSL302 Leadership (2-0-2)3 | ENL 210 Fundamental s of Spreadsheet Modelling (2-0-2)3 | Foreign Language Elective (1-2-0)3 | Open Elective 1 (2-0-2)3 | | BSS202 CS-IV (140 Hrs)* 2 Credit | BSR202 GP-IV 1 credit | 11 | 2 | 10 | 23*15= 345 | 21 |
| Summers | | BST3 | 01 Summer Int | ternship | (0- | 0-8)4 | | | | | | | 8 | 4 |
| 5 | BSL303 International Business (2-0-2)3 | BSV301 Creative Thinking and Negotiation Skills (2-0-2)3 | BSL301 Business Policy & Strategy (2-0-2)3 | Open Elective 2 (2-0-2)3 | Programme Elective –I (2-0-2)3 | Programme Elective-II (2-0-2)3 | | BSS301 CS-V | BSR301 GP-V 1 credit | 12 | 0 | 12 | 24*15= 360 | 19 |
| 6 | BSL304 Investment Management (2-0-2)3 | BSD302 Major Project (0-0-12)6 | Open Elective 3 (2-0-2)3 | Programme Elective –III (2-0-2)3 | Programme Elective –IV (2-0-2)3 | | | BSS302 CS-VI (140 Hrs)* 2 Credit | BSR302 GP-VI 1 credit | 8 | 0 | 8 | 16*15= 240 | 21 |
| | , , | | | TOTAL | | | | | | | | | | 130 |

^{*} The University shall conduct introductory sessions in the 1st semester on soft skills, which are a set of transferable skills and key personal traits essential for personality development.

^{*} A value-added course over and above the programme scheme shall be offered during the 4th Semester to impart special skills to students for enhancing their employability.

^{*} Advanced sessions on soft skills shall be conducted in the 5th Semester to hone up the preparedness of students for placements and make them industry ready for national and international jobs.

^{*&}quot;Students shall complete the required 140 community service hours across the year."

BBA Business Analytics

OVERALL CREDIT STRUCTURE

| Category | Credits |
|---------------------------------|---------|
| Programme Core | 60 |
| Ability Enhancement | 15 |
| Project Presentation & Training | 14 |
| Skill Enhancement | 8 |
| General Proficiency | 6 |
| Program Electives | 12 |
| Open Electives | 9 |
| Community Service | 6 |
| Total Credits | 130 |

| Programme Core | | | | | | |
|----------------|---|-------|--------|--|--|--|
| Code | Name | L-T-P | Credit | | | |
| BSL101 | Entrepreneurship | 2-0-2 | 3 | | | |
| CML108 | Financial management I | 2-0-2 | 3 | | | |
| ENL101 | Statistics & Research Methodology-I | 2-0-2 | 3 | | | |
| ENL102 | Principles of Economics | 2-0-2 | 3 | | | |
| CML101 | Professional Accounting | 2-0-2 | 3 | | | |
| CML107 | Introduction to Banking | 2-0-2 | 3 | | | |
| CML109 | Business Laws | 2-0-2 | 3 | | | |
| BSL102 | Principles of Management | 2-0-2 | 3 | | | |
| BSL201 | Fundamentals of Operations Management | 2-0-2 | 3 | | | |
| BSL203 | Human Resource Management | 2-0-2 | 3 | | | |
| CML208 | Financial management II | 2-0-2 | 3 | | | |
| BSL207 | Introduction to Marketing Management | 2-0-2 | 3 | | | |
| BSL209 | E-Commerce | 2-0-2 | 3 | | | |
| BSL202 | Introduction to Organizational Behavior | 2-0-2 | 3 | | | |
| BSL204 | Fundamentals of consumer Behavior | 2-0-2 | 3 | | | |
| BSL303 | International Business | 2-0-2 | 3 | | | |
| BSL301 | Business Policy & Strategy | 2-0-2 | 3 | | | |
| BSL302 | Leadership | 2-0-2 | 3 | | | |
| BSL304 | Investment Management | 2-0-2 | 3 | | | |
| ENL204 | Statistics and Research Methodology II | 2-0-2 | 3 | | | |

| General Proficiency | | | | | | |
|---------------------|--------|--------|--|--|--|--|
| Code | Name | Credit | | | | |
| BSR101 | GP-I | 1 | | | | |
| BSR102 | GP-II | 1 | | | | |
| BSR201 | GP-III | 1 | | | | |
| BSR202 | GP-IV | 1 | | | | |
| BSR301 | GP-V | 1 | | | | |
| BSR302 | GP-VI | 1 | | | | |

| Community Service | | | | | |
|-------------------|----------------------------|--------|--|--|--|
| Code | Name | Credit | | | |
| BSS101 | Community Service (CS-I) | 2 | | | |
| BSS102 | Community Service (CS-II) | 7 2 | | | |
| BSS201 | Community Service (CS-III) | 2 | | | |
| BSS202 | Community Service (CS-IV) | 2 | | | |
| BSS301 | Community Service (CS-V) | 2 | | | |
| BSS302 | Community Service (CS-VI) | 2 | | | |

Skill Enhancement Courses

| Code | Name | L-T-P | Cre dit | | | | |
|---------------------|---|-------|------------|--|--|--|--|
| CSV100 | Basic Computer Skills for Professionals | 0-0-4 | 2 | | | | |
| CML110 | Communication and Documentation in Business | 2-0-2 | 3 | | | | |
| BSV301 | 2-0-2 | 3 | | | | | |
| Ability Enhancement | | | | | | | |

| Ability Enhancement | | | | | | | |
|---------------------|---------------------------------------|-------|------|--|--|--|--|
| Code | Name | L-T-P | Cred | | | | |
| CHL100 | Environmental Studies | 3-0-0 | 3 | | | | |
| CLL130 | Effective Communication I | 1-0-2 | 2 | | | | |
| CLL140 | Effective Communication II | 1-0-2 | 2 | | | | |
| CLL120 | Human Values & Professional Ethics | 2-0-0 | 2 | | | | |
| ENL210 | Fundamentals of Spreadsheet Modelling | | 3 | | | | |
| | Foreign Language Elective – I | | | | | | |

PROGRAMME ELECTIVES

| Business Analytics | | | | | | | |
|--------------------|--------------------------------------|-------|--------|--|--|--|--|
| | Programme Electives | L-T-P | Credit | | | | |
| BSL355 | Consumer Behaviour and Analysis | 2-0-2 | 3 | | | | |
| BSL356 | Applications in Digital Marketing | 2-0-2 | 3 | | | | |
| BSL357 | Fundamentals of Econometrics | 2-0-2 | 3 | | | | |
| BSL358 | Multi-criteria decision making | 2-0-2 | 3 | | | | |
| BSL359 | Fundamentals of Predictive Modelling | 2-0-2 | 3 | | | | |
| BSL360 | Supply Chain Analytics | 2-0-2 | 3 | | | | |
| BSL361 | Fundamentals of Time Series Analysis | 2-0-2 | 3 | | | | |
| BSL362 | Social Media and Web Analytics | 2-0-2 | 3 | | | | |

| BSL216 | Digital Businesses | 2-0-2 | 3 |
|--------|------------------------------------|-------|---|
| BSL306 | Fundamentals of Big data analytics | 2-0-2 | 3 |
| BSL307 | Fundamentals of data mining | 2-0-2 | 3 |
| BSL308 | Data visualization | 2-0-2 | 3 |

Project Presentation & Training

| Code | Name | L-T-P | Credi t | |
|------------|--|--------|------------|--|
| BSD201 | Minor Project (for B Business Analytics) | 0-0-8 | 4 | |
| BST301 | Summer Internship (Business Analytics) | 0-0-8 | 4 | |
| BSD302 | Major Project (for Bl Business Analytics) | 0-0-12 | 6 | |
| Other Cou | rses | L-T-P | Credit | |
| Open Elect | ive – I | 2-0-2 | 3 | |
| Open Elect | ive – II | 2-0-2 | 3 | |
| Open Elect | ive – III | 2-0-2 | 3 | |

| Semester | | Semester Course Code, Course Name (L-T-P) Credits Communit Service | | | | Community | GP | Pe | Hrs. er we | | Contact Hours per | Credits | | |
|----------|---|---|--|--|--|--|---|---|--------------------------------|----|-------------------------|---------|---------------|-----|
| | | | | | | | | Scrvice | | L | Т | Р | Sem | |
| 1 | BSL102 Principles of Management (2-0-2)3 | ENL102 Principles of Economics (2-0-2)3 | CLL120 Human Values & Professional Ethics (2-0-0)2 | CML 101 Professional Accounting (2-0-2)3 | CML109 Business Laws (2-0-2)3 | CML 110 Communication & Documentation in Business (2-0-2)3 | CSV 100 Basic Computer Skills for Professionals (0-0-4)2 | BSS101 CS-I | BSR101 GP-I 1 Credit | 12 | 0 | 14 | 26*15= 390 | 20 |
| 2 | CLL 130 Effective Comm-I (1-0-2)2 | CHL100 Environmental Studies (3-0-0)3 | BSL101 Entrepreneurship (2-0-2)3 | ENL101 Statistics & Research Methodology- I (2-0-2)3 | CML107 Introduction to Banking (2-0-2)3 | CML 108 Financial Management- I (2-0-2)3 | | BSS102 CS-II (140 Hrs)* 2 Credit | BSR102 GP-II 1 Credit | 12 | 0 | 10 | 22*15= 330 | 20 |
| Summers | | В | SD201 Minor Proje | ct | (0 | -0-8)4 | | | | | | | 6 | 3 |
| 3 | BSL201 Fundamentals of Operations Management (2-0-2)3 | BSL203 Human Resource Management (2-0-2)3 | CML 208 Financial Management- II (2-0-2)3 | ENL204 Statistics and Research Methodology-II (2-0-2)3 | BSL209 Ecommerce (2-0-2)3 | BSL207 Introduction to Marketing Management (2-0-2)3 | CLL 140 Effective Comm-II (1-0-2)2 | BSS201 CS-III | BSR201 GP-III 1 credit | 13 | 0 | 14 | 27*15= 405 | 21 |
| 4 | BSL202 Introduction to Organizational Behavior (2-0-2)3 | BSL204 Fundamentals of Consumer Behavior (2-0-2)3 | BSL302 Leadership (2-0-2)3 | ENL 210 Fundamental s of Spreadsheet Modelling (2-0-2)3 | Foreign Language Elective (1-2-0)3 | Open Elective 1 (2-0-2)3 | | BSS202 CS-IV (140 Hrs)* 2 Credit | BSR202 GP-IV 1 credit | 11 | 2 | 10 | 23*15= 345 | 21 |
| Summers | | BST3 | 301 Summer Intern | ship | (0 | -0-8)4 | | | | | | | 10 | 5 |
| 5 | BSL303 International Business (2-0-2)3 | BSV301 Creative Thinking and Negotiation Skills (2-0-2)3 | BSL301 Business Policy & Strategy (2-0-2)3 | Open Elective 2 (2-0-2)3 | Programme Elective –I (2-0-2)3 | Programme Elective-II (2-0-2)3 | | BSS301 CS-V | BSR301 GP-V 1 credit | 12 | 0 | 12 | 24*15= 360 | 19 |
| 6 | BSL304 Investment Management (2-0-2)3 | BSD302 Major Project (0-0-12)6 | Open Elective 3 (2-0-2)3 | Programme Elective –III (2-0-2)3 | Programme Elective –IV (2-0-2)3 | | | BSS302 CS-VI (140 Hrs)* 2 Credit | BSR302 GP-VI 1 credit | 8 | 0 | 8 | 16*15= 240 | 21 |
| | | | | TOTAL | | | | | | | | | | 130 |

^{*} The University shall conduct introductory sessions in the 1st semester on soft skills, which are a set of transferable skills and key personal traits essential for personality development.

^{*} A value-added course over and above the programme scheme shall be offered during the 4th Semester to impart special skills to students for enhancing their employability.

^{*} Advanced sessions on soft skills shall be conducted in the 5th Semester to hone up the preparedness of students for placements and make them industry ready for national and international jobs.

^{*&}quot;Students shall complete the required 140 community service hours across the year."

BBA SPECIALIZATION IN ENTREPRENEURSHIP AND FAMILY BUSINESS

OVERALL CREDIT STRUCTURE

| Category | Credits |
|---------------------------------|---------|
| Programme Core | 60 |
| Ability Enhancement | 15 |
| Project Presentation & Training | 14 |
| Skill Enhancement | 8 |
| General Proficiency | 6 |
| Program Electives | 12 |
| Open Electives | 9 |
| Community Service | 6 |
| Total Credits | 130 |

| Programme Core | | | | | |
|---|---|-------|--------|--|--|
| Code | Name | L-T-P | Credit | | |
| BSL101 | Entrepreneurship | 2-0-2 | 3 | | |
| CML108 | Financial management I | 2-0-2 | 3 | | |
| ENL101 | Statistics & Research Methodology-I | 2-0-2 | 3 | | |
| ENL102 | Principles of Economics | 2-0-2 | 3 | | |
| CML101 | Professional Accounting | 2-0-2 | 3 | | |
| CML107 | Introduction to Banking | 2-0-2 | 3 | | |
| CML109 | Business Laws | 2-0-2 | 3 | | |
| BSL102 | Principles of Management | 2-0-2 | 3 | | |
| BSL201 | Fundamentals of Operations Management | 2-0-2 | 3 | | |
| BSL203 | Human Resource Management | 2-0-2 | 3 | | |
| CML208 | Financial management II | 2-0-2 | 3 | | |
| BSL207 Introduction to Marketing Management | | 2-0-2 | 3 | | |
| BSL209 | E-Commerce | | 3 | | |
| BSL202 | Introduction to Organizational Behavior | | 3 | | |
| BSL204 | Fundamentals of consumer Behavior | | 3 | | |
| BSL303 | International Business | 2-0-2 | | | |
| BSL301 | Business Policy & Strategy | 2-0-2 | 3 | | |
| BSL302 | Leadership | 2-0-2 | 3 | | |
| BSL304 | Investment Management | 2-0-2 | 3 | | |
| ENL204 | Statistics and Research Methodology II | 2-0-2 | 3 | | |
| | Skill Enhancement Courses | | | | |
| Code | Name | L-T-P | Credit | | |
| CSV100 | Basic Computer Skills for Professionals | 0-0-4 | 2 | | |
| CML110 | Communication and Documentation in Business | 2-0-2 | 3 | | |
| BSV301 | Creative thinking and Negotiation Skills | 2-0-2 | 3 | | |

| P | RO | GR | AIV | IME | ELEC | TIVE | <u>-S</u> |
|---|-----|-----|-----|-----|-------|------|-----------|
| | Ent | tre | pre | neu | rship | and | l Fa |

| PROGRAMMINE ELECTIVES | | | | |
|-----------------------|--|-------|---|--|
| Entrepreneurs | Entrepreneurship and Family Business | | | |
| BSL376 | Fundamentals of Family Business | 2-0-2 | 3 | |
| BSL377 | Social Entrepreneurship | 2-0-2 | 3 | |
| BSL378 | Entrepreneurial Marketing | 2-0-2 | 3 | |
| BSL379 | SME Financing | 2-0-2 | 3 | |
| BSL386 | Corporate Governance and Ethics | 2-0-2 | 3 | |
| BSL384 | Human Resource Management in Family Business | 2-0-2 | 3 | |
| BSL385 | Formulating Business Plan | 2-0-2 | 3 | |
| BSL383 | B2B Marketing | 2-0-2 | 3 | |

| General Proficiency | | | |
|---------------------|--------|--------|--|
| Code | Name | Credit | |
| BSR101 | GP-I | 1 | |
| BSR102 | GP-II | 1 | |
| BSR201 | GP-III | 1 | |
| BSR202 | GP-IV | 1 | |
| BSR301 | GP-V | 1 | |
| BSR302 | GP-VI | 1 | |

| | OI VI | | | |
|-------------------|----------------------------|--|--------|--|
| Community Service | | | | |
| Code | Name | | Credit | |
| BSS101 | Community Service (CS-I) | | 2 | |
| BSS102 | Community Service (CS-II) | | | |
| BSS201 | Community Service (CS-III) | | 2 | |
| BSS202 | Community Service (CS-IV) | | ۷ | |
| BSS301 | Community Service (CS-V) | | 2 | |
| BSS302 | Community Service (CS-VI) | | ۷ | |

| Ability Enhancement | | | | | |
|---------------------|--|-------|--------|--|--|
| Code | Name | L-T-P | Credit | | |
| CHL100 | Environmental Studies | 3-0-0 | 3 | | |
| CLL130 | Effective Communication I | 1-0-2 | 2 | | |
| CLL140 | Effective Communication II | 1-0-2 | 2 | | |
| CLL120 | Human Values & Professional Ethics | 2-0-0 | 2 | | |
| ENL210 | Fundamentals of Spreadsheet Modelling | 2-0-2 | 3 | | |
| | Foreign Language Elective – I | 1-2-0 | 3 | | |

| Other Courses | L-T-P | Credit |
|---------------------|-------|--------|
| Open Elective – I | 2-0-2 | 3 |
| Open Elective – II | 2-0-2 | 3 |
| Open Elective – III | 2-0-2 | 3 |

Project Presentation & Training

| Code | Name | L-T-P | Credit |
|--------|-------------------------------|--------|--------|
| | Minor Project (for BBA in | | |
| BSD201 | Entrepreneurship & Family | 0-0-8 | 4 |
| | Business) | | |
| | Summer Internship (for BBA in | | |
| BST301 | Entrepreneurship & Family | 0-0-8 | 4 |
| | Business) | | |
| | Major Project (for BBA in | | |
| BSD302 | Entrepreneurship & Family | 0-0-12 | 6 |
| | Business) | | |

Agenda Item No 3. The following course codes are presented for approval through BOS. These courses are offered to PhD scholars as part of their coursework.

| Code | Course Name | Credit | LTP | Nature of course |
|----------|---|--------|-------|------------------|
| SMM706 | Leadership for India Inc: Practical Concepts and Constructs | 3 | 3-0-0 | MOOC |
| SMM708 | Behavioural And Personal Finance | 3 | 3-0-0 | MOOC |
| SMM710 | Leadership & Team Effectiveness | 3 | 3-0-0 | MOOC |
| SMM712 | Investment Decision | 3 | 3-0-0 | MOOC |
| Coursera | Mindfulness and wellbeing specialisation | 3 | | MOOC |

1. Leadership for India Inc: Practical Concepts and Constructs

Course Code: SMM 706

Credits: 3-0-0

Course Objectives:

- To provide a framework for the students to understand the importance of Leadership and team effectiveness in organizations.
- To develop an understanding of the interpersonal processes and group dynamics.
- To provide a theoretical understanding of leadership practices in organizations.
- To provide an understanding of factors influencing teamwork and team leadership.
- To evaluate the role of leadership in the development of an institution.

Course Learning Outcomes:

By the end of the course the student should be able to:

- Explain how global leadership skills contribute to leadership effectiveness.
- Understand the leader's role in team-based organizations.
- Explain the potential contribution of outdoor training to the development of team leadership.
- Explain the basics of leadership during a crisis.
- Explain how evidenced based leadership can contribute to contingency and situational leadership.

Course Contents:

Week 1: Introduction to Leadership & Team Management; Leadership Myths; Interactional Framework for analyzing leadership; Leadership Development: The First 90 Days as a Leader; Leader Development- The Action-Observation-Reflection Model

Week 2: LMX Theory and Normative Decision Model; Situational Leadership Model; Contingency Model and Path Goal Theory; Emotional Approach Charismatic and Transformational Leadership; Leadership for Tomorrow

Week 3: Leadership Attributes; Personality Traits and Leadership; Personality Types and Leadership; Intelligence and Leadership; Emotional Intelligence and Leadership

Week 4: Power and Leadership; The art of influence in leadership; Leadership and "Doing the Right Things; Character-Based Approach to Leadership; Role of Ethics and Values in Organisational Leadership

Week 5: Leadership Behaviour; Leadership Pipeline; Assessing Leadership Behaviors: Multi-rater Feedback Instruments; The Dark Side of; Leadership- Destructive Leadership; Managerial Incompetence and Derailment Conflict Management

Week 6: Negotiation and Leadership; Leadership under a crisis situation; The Situation and the Environment; Culture and Leadership; Global Leadership

Week 7: Motivation and Leadership; Introduction to Groups and Teams; Characteristics of Leader, Follower and Situation; Group Dynamics; Team Formation

Week 8: Delegation and Empowerment; Leading teams: Enhancing teamwork within a group; The leader's role in teambased organizations; Leader actions that foster Teamwork Effectiveness; Offsite training and team development

Approved in BOS dated 12.05.2023

Week 9: Understanding Team processes and Team Coaching; Team decision making and conflict management; Virtual teams; Managing Multicultural teams; Building great teams

Week 10: Experiential Learning; Action Learning; Development Planning: GAP Analysis; Coaching and Mentoring; Women in Leadership Roles

Week 11: Building Effective Relationship with subordinates and peers; Fostering Followers satisfaction; The Art of Communication; Setting Goals and Providing Constructive Feedback; Enhancing Creativity problem solving skills

Week 12: Building High-Performance Teams: The Rocket Model; Building Credibility and Trust; Skills for Developing Others; Team Building at the Top; Community Leadership

Books and references

Leadership: Enhancing the lessons of experience by Hughes, R.L., Ginnett, R.C., & Curphy, G.J. (2019), 9th Edition, McGraw Hill Education, Chennai, India.

2. Behavioral And Personal Finance

(Credits 3)

Code-SMM 708

Introduction to behavioral economics and finance: the concept of expected utility, the von Neumann Morgenstern framework, Non-expected utility preferences and its applications in finance. Beliefs, biases and heuristics in financial markets. Basics of personal finance, financial planning, and budgeting. Investment decision-making and behavioral finance. Investment strategies for individual investors. Purchasing decisions, consumer credit, and related issues. Alternative investment and structured finance.

Text Books:

- 1. Behavioral Finance: Psychology, Decision-Making and Markets, L. F. Ackert and R. Deaves, South-Western College Publication.
- 2. Investor Behavior: The Psychology of Financial Planning and Investing, H K Baker and V Ricciardi, Wiley, 2018.
- 3. Personal Finance (11th ed.), Jack Kapoor, Les Dlabay and R. J. Hughes, McGraw Hill.

Reference Books:

Behavioral Finance, William Forbes, Wiley, 2009.

3. Leadership & Team Effectiveness

Course Code: SMM 710

Credits: 3-0-0

Course Overview

This course on Leadership provides a comprehensive and detailed overview of the multi-faceted domain of leadership and management, blending theory and practice in a very distinctive manner. It demonstrates the importance of leadership as the engine of industrial and business growth. It brings out several new constructs based on real-life case examples, and practical applications of theory, in a multi-disciplinary approach. The course helps the participants acquire soft-skills and develop a leadership personality in appropriate interface with technology, business and socio-economic factors. The course incorporates several models for executives to be successful, and details the pathways for them to attain positions of leadership in their professions and organizations. The Course is reinforced with real-life examples of leadership based on the instructor's multi-decade industrial and business experience spanning multiple industries, multi-nationally and at senior leadership levels.

Week 1: INTRODUCTION TO LEADERSHIP

Introduces the course. Discusses various aspects of leadership and management as important domains of study. Multiple thought streams of management and related thought leaders are presented.

Week 2: LEADERSHIP THEORIES

Reviews the important theories of leadership that have had chronological evolution and recognition in management literature.

Week 3: LEADERSHIP FOR SUSTAINABLE GROWTH

Discusses the role of leadership in contemporaneous and futuristic contexts, defining roles and responsibilities for a new world socio-economic order of sustainable growth. The connect leadership has with technology, business and sustainability is established.

Week 4: COMPETENCY LEADERSHIP

Approved in BOS dated 12.05.2023

Reviews various leadership qualities including traits, skills and attributes, and identifies certain common essential qualities. The apex leadership competency framework is unique to this course.

Week 5: LEADERSHIP PROCESSES

Focusses on processes and methodologies for developing leaders in organizations, including through self-development.

Week 6: LEADERSHIP STRUCTURES

Discusses the importance of reinforcing as well as disrupting established product and service structures, and leveraging organizational structures to create new growth niches.

Week 7: LEADERSHIP DEVELOPMENT AND SUCCESSION

Examines the critical aspects of leadership transitions and CEO successions, based on Indian and global case studies.

Week 8: Functional Leadership Models

Functional leadership, being a prerequisite for organizational leadership, is discussed in terms of five key domain-specific leadership models.

Week 9: Transformational Leadership Models – 1

Discusses unique aspects of transformational leadership models, with examples based on specific organizational and business contexts.

Week 10: Transformational Leadership Models – 2

Presents additional transformational leadership models, with examples based on specific people development approaches.

Week 11: Leadership Philosophies

Identifies and analyses various philosophical conundrums involved in leadership and presents ways to resolve such dilemmas and paradoxes for individual and organizational effectiveness.

Week 12: Legendary Leadership

Studies five leaders from the fields of public eminence, academic excellence, industrial competitiveness, pharmaceutical innovation and conglomerate development for unique Indian leadership models. The Course concludes with a tribute to Mahatma Gandhi, a leader who defies any comparison, nationally and internationally. The lecture builds a model of authentic leadership drawing ten instructive lessons from his life, relevant for leadership in any organization.

Books and references

Bass, B.M. Bass and Stogdill's Handbook of Leadership: A Survey of Theory and Research, New York, Free Press, 2008 Bennis, Warren. On Becoming a Leader. Basic Books, NY, 2009

Northouse, Peter G. Leadership: Theory and Practice, (8th Edition) Sage

Yuki, G. Leadership in Organizations (3rd Edition), Englewood Cliffs, NJ: Prentice Hall.

4. Investment Management

(Credits 3)

Code-SMM 712

Introduction to financial markets, institutions, and assets; Investment as a process; and Investment philosophies, Fixed income securities: Term structure of interest rates; Bonds, their valuation, pricing, yield and duration, convexity, and their interrelationships, Equity as an asset class: risk-return tradeoff; Valuation approaches, DCF versus multipliers; Equity investment strategies, Pricing of equity assets: Index models; Capital asset pricing model (CAPM) and arbitrage pricing theory (APT), Mutual funds as investment; Advantages and disadvantages of investing in mutual funds; Hedge funds, index funds, ETFs, and other categories, Security Analysis and portfolio management; Fundamental and technical analyses; Portfolio theory and asset allocation; Investment strategies, New asset classes and alternative investments; Introducing new-age assets in a portfolio; Cryptocurrencies as an asset class, Portfolio performance evaluation; Factors driving portfolio performance; Investment strategies and market timing.

Text Books:

- 1. Bodie, Kane, and Marcus (2019), Investments, McGraw Hill.
- 2. Damodaran, A.(2014), Applied Corporate Finance, Wiley India

Reference Books:

1. Luenberger, D. G. (2017), Investment Science, Oxford University Press.

- 1. ENL106 Introductory Microeconomics
- 2. ENL102 Principles of Economics

| _ | | | | | E TEMPLAT | E | | |
|--|---|---|--|--|--|--|---|--|
| 1. | Departm | ent: | School of Ma | nagement | | | | |
| Cod | | | | | Code | 4. | | 5. Credits |
| | | | | | Code: ENL106 | 2-0-2 | | 3 |
| 6. | Type of C | | | | 1 | | | |
| | (Check o | ne): | Programme C | ore 🗸 | Programme E | lective • (| Open Elective | 0 |
| 7. | Frequenc | cy of offering (| (check one): O | odd • Eve | n 	✓ Either s | emester Ev | ery semester | |
| in sen bel top | microecon nesters, ma naviour of ics under i | omic theory. Sathematical too the consumer nformation eco | is a sequel to Pr Since students ols are used to and the produce conomics. and Practical | are already f facilitate unde eer and covers | amiliar with terstanding of terms general equil | he quantitative he basic conce ibrium and we | techniques in pts. This cours lfare, imperfec | the previous se looks at the t markets and |
| Le | ctures: 30 | hours | | Tutorials: 0 | hours | | Practical: 15 | <u> </u> |
| 9. CC | Possible u | Discover abo | s) is course after ut how a firm ir ontrol the mark | an oligopoly | | • | | |
| CC |) 2 | | comprehensive | | nsumer behav | or and revealed | d preference | |
| CC | | | oncept of econo | | | | · · · | |
| CC | | Analysis of the selection | ne issues of mar | ket failure in | different situat | ions, analyse m | oral hazard, ad | lverse |
| 10. | UNIT W | ISE DETAILS | S | No. of U | Jnits:5 | | | |
| Co Oli sim of j Un Co Car lea | nple model joint profit it Number ntent Sum rtels: joint- dership mo | d duopoly mar and reaction comaximization r: 2 No. of I mary: profit maximization | ket structure; Parve approach (gin industry; Statectures: 12 zing cartels, maprice leader, Doatment of a price | rice-output de graphical and r ckelberg's mo Title: C rket sharing cominant firm p | mathematical dodel. Collusive Oligo artels, mathemorice leader, To | y's kinked-demerivation); Bertopoly atical represent | and's model w | ith the concep |
| | it Number | | Lectures: 1 | | Consumer Tl | neory | | |
| Co Co imp der | ntent Sum nsumer buo pact of tax | nmary: dget constraint /subsidy and r eriving demand | and budget line ationing on bud curves: Hicks | equation; shif dget line; util versus Slutsky | t and rotation of ity functions a | of budget line (cound choice und an demands; N | er constraints | (mathematica |
| Co Im | ntent Sum portance of | mary: f revealed prefe | erence; weak ax | iom of reveale | d preference (V | WARP); strong | axiom of revea | led preferenc |

Unit Number: 5 No. of Lectures: 12 Title: Uncertainty and Market Failure Content Summary:

Choice under uncertainty and risk: utility analysis; risk averse, risk loving and risk-neutral consumers; Basics of externalities; publics goods; markets with asymmetric information: moral hazard and adverse selection.

11. Brief Description of Self-learning component by students (through books/resource material etc.):

12.Books Recommended:

Text Books:

- Varian Hal R., Intermediate Microeconomics: A Modern Approach, W. W. Norton & Company; Eighth Edition, 2009 [V]
- Pindyck Robert S., Daniel L. Rubinfeld, Microeconomics, 8th Edition, Pearson Series in Economics, 2013 [P&R]
- Pindyck, Rubinfield & Mehta, Microeconomics, latest edition, Pearson India
- Hal R. Varian, Intermediate Microeconomics: A Modern Approach, 8th edition, W.W. Norton and Company/Affiliated East-West Press (India), 2010. The workbook by Varian and Bergstrom could be used for problems.

Reference Books:

- C. Snyder and W. Nicholson, Fundamentals of Microeconomics, Cengage Learning (India), 2010.
- Lipsey and Chrystal, An Introduction to Positive Economics, latest edition, Frank Cowell, Microeconomics Principles and Analysis, latest edition.

13. Guided Project (No. of Hours): NA Unguided Project (No. of Hours): NA

| Following shall be the distribution of marks for the purposes of evaluation of a students' performance in the course: -Category | Parameter | Allotted Marks | Total | Pass Criteria |
|---|------------------------------------|-------------------|-------|--------------------------------------|
| Theory (A) | Major Examination | 30% | 50% | |
| Theory (A) | Minor Examination | 20% | 50% | |
| | Class Participation and Promptness | 05% | | |
| | In-Class Assessments | 05% | | At least 40% marks in |
| Practical (B) | Class / Home Worksheets | 10% | 50% | Theory and Practical Individually |
| | Reflection Paper | 10% | | |
| | Final Project | 20% | | |
| TOTAL (A + B) | | 100% | | |

16.Tutorial content: To be picked up at faculty's discretion

Case study, Practice Assignment, Industrial Visits, Group Discussion, Student Driven Presentation, MCQs, etc.

14. Evaluation Scheme

Following shall be the distribution of marks for the purposes of evaluation of a students' performance in the course: -

| S.No | Title of the Experiment/Case | le of the Experiment/Case Submission/ Unit | | Number of Practical |
|------|--|--|---------|---------------------|
| | Study/Article/Assignment | Assessment | covered | required (50 mins) |
| 1. | Record your daily routine and mention when did you applied the OC concept in one day time. Apply demand and supply analysis to real world issues and problems taking example from personal experience. Illustrate deadweight losses due to over or under production of an economic good. | Individual Assignment | 01 | 03 |

| 2. | Use the utility maximization rule to determine how you will allocate a fixed pocket money in the purchase of two goods of your choice. | Individual Assignment | 02 | 01 |
|----|--|--------------------------|-----------|----|
| 3. | GDP & economic well being | Case Study | 04 | 01 |
| | Measuring cost of living | | | |
| 4. | Group project to be evaluated by Industry Experts: Rahul Bhattacharya, Co-Founder & MD at Microgravity Ventures & Partner at Yellow Brick | Group Project | 05 | 02 |
| | Road. | | | |
| | Akhilesh K Verma, Economist at PwC India. | | | |
| 5. | Government Budget Analysis and impact on different industries. | Panel Discussion | 05 | 01 |
| | Indian Economic scenario at present times. | | | |
| 6. | Various Practice Quizes, minimum one in every unit | Practice Quiz | All Units | 01 |
| 7. | 10-12 mins presentation or flip teaching by | Presentation/Flip | All Units | 02 |
| | students on different topics allocated timely | teaching | | |
| 8. | International lectures | International University | All Units | 02 |
| | | - | TOTAL | 15 |

actical / Experiential learning Component is described as below: -

CO-PO Mapping for BA ECONOMICS

1: Slight (Low), 2: Moderate (Medium), 3: Strong(High), -: No relation

| со | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PSO1 | PSO2 | PSO3 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| CO1 | 2 | 2 | 1 | 1 | 3 | 1 | 3 | 3 | 1 | 2 | 1 | 3 | 3 | 2 |
| CO2 | 2 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 1 |
| CO3 | 3 | 2 | 2 | 1 | 3 | 1 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 2 |
| CO4 | 3 | 2 | 2 | 1 | 2 | 1 | 3 | 1 | 3 | 2 | 3 | 2 | 2 | 2 |
| CO5 | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 2 | 1 | 2 | 2 | 3 | 3 | 2 |

| | COURCE | | | | | | | | | | |
|--|---|------------------------------------|---|--|--|--|--|--|--|--|--|
| COURSE TEMPLATE | | | | | | | | | | | |
| 1. Department: | SCHOOL OF MAN | NAGEMENT AND LIBER | RAL STUDIES | | | | | | | | |
| 2. Course | 3. Course Code | 4. L-T-P | 5. Credits | | | | | | | | |
| Name: PRINCIPLES | ENL 102 | 2-0-2 | 3 | | | | | | | | |
| OF | EIVE 102 | | | | | | | | | | |
| ECONOMICS | | | | | | | | | | | |
| 6. Type of Course (Check one): | ☑ Programme Core☐ Programme Elective☐ Open Elective | | | | | | | | | | |
| 7. Pre-requisite(s), if any (Mention course code and name) | | | | | | | | | | | |
| NONE | | | | | | | | | | | |
| 8. Frequency of offering (check one): | □ Odd □ Even | ⊠ Either semester □Ev | very semester | | | | | | | | |
| 9. Focus: | ☐ Employability ☐ Skill Developmen | ☐ Entrepreneurship Basic Knowledg | | | | | | | | | |
| 10. Brief Introd | duction: | | | | | | | | | | |
| understanding th | ne any nation's econom producers, the determi | y. A model of efficiency is | lysis and macroeconomics concepts relevant for constructed to understand the behaviour of individual commodities and resources. Use economic analysis | | | | | | | | |
| | | Hours for this course (Ta | ake 14 teaching weeks per semester) | | | | | | | | |
| Lectures: 30 | Tutorials: NIL | Practical: 30 | , | | | | | | | | |
| 11. Course Out | tcomes (Cos) After the | e completion of this course | students will be able to: | | | | | | | | |
| CO 1 | Demonstrate knowle | dge and understanding of c | ore economics concepts, tools and models | | | | | | | | |
| CO 2 | Explain the behavior equilibrium. | of consumers and produce | rs in terms of the demand for products, utility and | | | | | | | | |
| CO 3 | • | | nt market structures and explain how markets for | | | | | | | | |
| CO 4 | • | | flow of Income which provide basis for the | | | | | | | | |
| CO 5 | Apply economic concepts to real world scenarios, and use that analysis to make informed judgements and decisions. | | | | | | | | | | |
| 12. UNIT WISE | No. of U | nits: 05 | | | | | | | | | |
| DETAILS | | | | | | | | | | | |
| , , | Title: Basic Princip | oles of Economics and Mo | deling | | | | | | | | |
| No. of Lectures: | | | | | | | | | | | |
| 06 | | | | | | | | | | | |
| | conomics, types of eco | onomics: positive versus no | ormative economics; micro versus macroeconomics. | | | | | | | | |
| _ | | | oles of Economics. Production Possibility Frontier. | | | | | | | | |
| • | | | y. Elasticity of demand: percentage and mid-point | | | | | | | | |
| | | and elasticity and Deadwe | | | | | | | | | |
| Unit#: 2 (CO2) | Title: Consumer an | id Producer Behaviour: It | 's applications | | | | | | | | |

| No. of | | | |
|-------------------|---------------------------|---|---|
| Lectures: | | | |
| 07 | | | |
| | viour: Utility: Total & N | Marginal, DMU, Utility: c | ardinal (Marshallian) versus ordinal (Hicks- Allen). |
| | • | - | ome and price. Indifference curves and deriving a |
| • | | • | e proportion and returns to scale. |
| | | venue and Cost in Micro | |
| No. of | - | | |
| Lectures: | | | |
| 07 | | | |
| Revenue concep | ts, cost concepts. Compo | etitive market and profit m | aximization: TR-TC approach (Video) and MR-MC |
| | down point under perfec | - | |
| Unit#: 4 (CO4) | No of Ti | tle: Forms of Market | |
| Lectures: | 110.01 | ue: Forms of Market | |
| 0.4 | | | |
| 04 | C.D. C | 1: .: | |
| | - | | tion; Demand curves under monopolistic market |
| | | _ | poly. Public policy towards monopolies. Monopoly |
| | • | <u> </u> | e theory: Prisoner's Dilemma. Deconomics & Macroeconomics Policies |
| 04 (COS) | No. of Lectures. | e. Introduction to Macro | becondinies & Macroecondinies 1 ducies |
| Basic Concepts | and macroeconomics va | riables. National Income- | Meaning (Slides), Concepts in National Income, |
| • | | | ar Flow of Income-Two, Three and Four Sector |
| | • | • | lides); Monetary Policy-Meaning, Objectives and |
| Instruments (Sli | | | |
| 13. Title of Prac | tical, Assignment if ap | plicable: | |
| The students | shall also be actively in | volved in various Case Stu | idies, Group activities: market scenario and |
| industry visit | S. | | • |
| 14. Brief Descrip | otion of Self-learning c | omponents by students (| through books/resource material etc.): |
| Khan A | cademy videos | | |
| Bloomb | erg Business week (Mag | gazines) | |
| | onomist (Magazines) | | |
| | ic review, hodder educa | tion (Magazines) | |
| > Swayan | n Portal | | |
| > ASU | | | |
| 15. Books Reco | | | |
| | | peconomics, W W Norton | |
| - | ck and D Rubinfeld: Mi | | |
| | | of Microeconomics, CEN of Macroeconomics, CEN | |
| N. Greg | | or wracioeconomics, CEN | NUAUE |
| 10. Evaluation S | CHEIRE | | |
| C 4 | n . | Allotted Marks | T () |
| Category | Parameter | | Total |
| | | | |
| | | i l | |

| | Major Examination | 45% | |
|---------------|----------------------------|-----|------|
| Theory (A) | Minor Examination | 25% | 70% |
| | Case Study Evaluation | | |
| Practical (B) | In-Class Assessments | 10% | 30% |
| | Class / Home Worksheets | 10% | |
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| | | | |
| | | | |
| TOTAL (A + | B) | | 100% |

The Practical / Experiential learning Component is described as below: -

| S.No | Title of the Experiment/Case Study/Article/Assignment | Submissi on/ Assessm ent | Unit covered | Number of Practical required (50 mins) | |
|------|---|-----------------------------------|-----------------|---|--|
| 1. | Record your daily routine and mention when did you applied the OC concept in one day time. | Individual Assignment | 01 | 03 | |
| | • Apply demand and supply analysis to real world issues and problems taking example from personal experience. | | | | |
| | • Illustrate deadweight losses due to over or under production of an economic good. | | | | |
| 2. | • Use the utility maximization rule to determine how you will allocate a fixed pocket money in the purchase of two goods of your choice. | Individual Assignment | 02 | 01 | |
| 3. | GDP & economic well beingMeasuring cost of living | Case Study | 04 | 01 | |
| 4. | Group project to be evaluated by Industry Experts: Rahul Bhattacharya, Co-Founder & MD at Microgravity Ventures & Partner at Yellow Brick Road. Akhilesh K Verma, Economist at PwC India. | Group Project | 05 | 02 | |
| 5. | Government Budget Analysis and impact on different industries. Indian Economic scenario at present times. | Panel Discussion | 05 | 01 | |
| 6. | Various Practice Quizes, minimum one in every unit | Practice Quiz | All Units | 01 | |
| 7. | 10-12 mins presentation or flip teaching by students on different topics allocated timely | Presentation/Flip teaching | All Units | 02 | |
| 8. | International lectures | International University | All Units | 02 | |

TOTAL 15

Mapping of Course Outcomes with POs and PSOs of BA (H) ECO Programme:

| c o | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 | PO 9 | PO1 0 | PO1 1 | PSO 1 | PSO 2 | PSO 3 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|
| | | | | | | | | | | | | | | |
| CO1 | 2 | 2 | 1 | 1 | 3 | 1 | 3 | 3 | 1 | 2 | 1 | 3 | 3 | 2 |
| CO2 | 2 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 1 |
| CO3 | 3 | 2 | 2 | 1 | 3 | 1 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 2 |
| CO4 | 3 | 2 | 2 | 1 | 2 | 1 | 3 | 1 | 3 | 2 | 3 | 2 | 2 | 2 |
| CO5 | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 2 | 1 | 2 | 2 | 3 | 3 | 2 |

Agenda Item No 5. Introduction of Minor Specialization

MINOR SPECIALIZATION OFFERED BY SCHOOL OF MANAGEMENT & LIBERAL STUDIES

Minor Specialization in People Management

INTRODUCTION

People management is defined as a set of practices that encompass the end-to-end processes of talent acquisition, talent optimization, and talent retention while providing continued support for the business and guidance for the employees of an organization.

People management refers to the practice of recruiting, training, engaging, and retaining people to optimize their talent and maximize their productivity. A subcategory of Human Resource Management (HRM), people management includes Training and development. Recruitment.

Managing people and client relations is an important skill to acquire in business, and this is just one aspect of HR that you can apply to any job. Other useful skills you will learn include organisation, administration, multitasking, presentations, reporting and communication.

NEED

- Courses under People Management can help a student develop a strategic approach to leadership, recruitment, training, analysis, managing stress and every other intricacy of HR.
- Moreover, students will gain exposure to the design, process, and execution of such strategies in a global scenario.
- Students will learn about Create, Comprehend, Communicate, Collaborate, and Confront. These are the framework for a successful approach to people management.

USPs & HIGHLIGHTs

- The courses are industry-oriented and strengthens the standardizing practicalities.
- Cutting Edge Curriculum.
- People Management enables the students to understand all stakeholders.

BENEFITS

- Acquire a Universal Skillset: Every organisation needs strong HR professionals with in-depth understanding and knowledge of what they are expected to do and how they are going to do it. This is why you should study people management. It can help you gain exposure to every aspect of people management along with the challenges you'll face and how to overcome them.
- Job Diversity: It is a domain that encompasses several smaller disciplines.
- Job Satisfaction: There may be a hundred different things you expect from your career, but job satisfaction is the one common thread that binds every employee in the world.
- Stay Up to Date with the Current Developments in HR: HR is a rapidly evolving domain focusing on shifting from administrative tasks to strategic input and having a seat at the management table. This is facilitated by the progressing needs of current organisations and technology, enabling efficient processing and onboarding of employees, budgets, and other HR activities.

COURSE SCHEME AND DELIVERY MODEL

List of courses

Pre-requisite if any- NA

1. Stress Management (PCL332)

This course will help student understand the causal factors of stress, the consequences of stress and the measures to reduce stress with an overall objective to empower them with the means to tackle the stressful situations and times of personal as well as professional life.

2. Leadership: Past, Present & Future (BSL655)

Leadership Fundamentals; Evolution of the Leadership Concept; Traits Approach to Leadership; Skills Approach to Leadership; Behavioural Approach to Leadership and Situational/Contingency Approach to Leadership. Authentic Leadership; Spiritual Leadership; Servant Leadership and Adaptive Leadership. Psychodynamic Approach; Leadership Ethics; Team Leadership; Gender and Leadership and Culture and Leadership. VUCA Suited Leadership Traits, Attributes and/or competencies.

3. Cross Cultural HRM & Inclusive workplace management (BSL665)

Recent definitions concern IHRM with activities of how MNCs manage their geographically decentralized employees in order to develop their HR resources for competitive advantage, both locally and globally. The role and functions of IHRM, the relationship between subsidiaries and headquarters, and the policies and practices are considered in this more strategic approach. IHRM is also defined as a collection of policies and practices that a multinational enterprise uses to manage local and non-local employees it has in countries other than their home countries.

Delivery model

3-1-0 – 3 lectures in a week and 1 tutorial classes. (4 Credits)

Offered by:

School of Management & Liberal Studies

Agenda Item No 6. Revision of POs of B.Com(H)

Program Outcomes for B.Com (H) 2023-24

- PO1. Demonstrate the basic knowledge of various disciplines to real business issues in a holistic manner. (Multidisciplinary Knowledge)
- PO2. Understand the Fundamentals of finance, accounting, financial markets, and banking systems (Core Functional Knowledge).
- PO3. Acquire various soft skills to achieve business objectives (Communication)
- PO4. Understand various environmental problems and their impact on society and business. (Environment)
- PO5. Demonstrate IT knowledge and skills for competitive advantage. (IT proficiency)
- PO6. Demonstrate ethical conduct in personal and professional decision-making (Ethics & Social Responsibility)
- PO7. Develop entrepreneurial capabilities to start their own business ventures or for their employer organization. (Entrepreneurship)
- PO8. Develop expertise in a specific domain of business operations for further specialization. (Specialization)
- PO9. Understand contemporary research areas techniques and skills for analyzing modern challenges (Analysis and Research).

Program Outcomes for B.Com (H) (Financial Markets) 2023-24

- PO1. Demonstrate the basic knowledge of various disciplines to real business issues in a holistic manner. (Multidisciplinary Knowledge)
- PO2. Acquire various soft skills to achieve business objectives (Communication)
- PO3. Understand various environmental problems and their impact on society and business. (Environment)
- PO4. Demonstrate ethical conduct in personal and professional decision-making. (Ethics & Social Responsibility)
- PO5. Develop entrepreneurial capabilities to start their own business ventures or for their employer organization. (Entrepreneurship)
- PO6. Understand contemporary research areas techniques and skills for analyzing modern challenges (Analysis and Research).
- PO7. Acquire knowledge of the fundamentals and core concepts of financial markets.
- PO8. Analyse market sentiments and the interplay of investor psychology and stock market operations.
- PO9. Understand investment strategies, portfolio management and trading platforms.

DETAILED COURSE DESCRIPTIONS OF MBA

BSD602 Major Project 6 credits (0-0-12)

Research Project is a hands-on project that would let a student to apply what he/she learned in his/her specialization to a practical question or problem related to the specialization topic. The student would be assigned a faculty mentor who would guide him/her through stages of problem identification, research design and development, research process until report writing and submission. An expected outcome of the capstone could be writing an in-depth research paper.

BSL501 Management Principles and Practices 3 credits (2-0-2)

Nature & Purpose, Evolution, Patterns of Mgmt Analysis and system Approach to management, Roles, Skills, and Functions of managers. Review of Various Schools of Management Thought. Planning - Concepts & importance, Strategic, Tactical & Operational Types, Stepsin Planning, Limitations of Planning and Planning Premises. Management by Objectives (MBO), SWOT analysis; System Dynamics Models for policy planning; Vision, Mission, and Core values. Decision Making. Organizing - Nature and Types of Organizations; Departmentalization; Span of Management; Centralization and decentralization; line & Staff Authority, Authority & Responsibility; Matrix form of organization structure. Motivation - Concepts and various theories of Motivation: McGregor's theory X and Theory Y, Maslow's Hierarchy of Needs, Alderfer's ERG Theory, Herzberg's Motivation- Hygiene theory, Vroom's Theory and Porter and Lawler's Model of Motivation. Leadership - Concepts and various theories of leadership; The Michigan Studies, The Ohio State Leadership Studies, Fiedler's Contingency theory, path-Goal theory, The managerial Grid, Charismatic leadership, Transactional & Transformational Leadership; Johari Window, Transaction Analysis and Communication. Controlling - Controlling Process and ControlTechniques; types of control; proactive vs. reactive controls; Selective; Feedback and Feed forward control; design of cost-effective controls; management by exception and selective control policies.

BSL502 Management of Human Resources 3 credits (2-0-2)

Introduction to Human Resource Management - Nature, Scope and Objectives of HRM; Evolution of HRM; HRM Environment - Internal and External; Changing Trends in Business Environment; Changing Nature of Employment Patterns; Changing Nature of Demographic, Societal and Workforce Trends; Strategic HRM; HRM models. Human Resource Planning - Concept, need for and Importance of HRP; Factors affecting HRP; Methods of Human Resource Planning; Job Analysis. Recruiting and Selecting Employees

- Meaning and factors governing Recruitment, Recruitment sources and techniques; Meaning and process of Selection, Selection tests and Interview; Problems associated with Recruitment and Selection; Induction/Orientation: Concepts, Process, Benefits and Problems. Employee Turnover, Employee Retention Strategies; Separations: Voluntary & Involuntary, Exit Interviews, Legal Issues in Staffing. Training the Workforce - Concept and Need, Designing Training and Development Programmes. Rewarding Performance - Meaning Purpose, Essentials of effective Performance Appraisal system, components, biases, methods/techniques, Pay for Performance, psychological contracts, potential appraisal, Career Management & Succession Planning. Managing Compensation. International HRM.

BSL503 Organizational Behaviour

3 credits (2-0-2)

Introduction to Organizational Behaviour: Emergence & OB as a Discipline; Reasons for Studying OB; Challenges in OB. Individual behavior and Processes: Values in the Workplace and across work cultures; Ethical Behaviour. Personality in Organizations – Determinants, Personality Theories, Traits. Perception, Workplace Attitudes & Ethics, Learning, Emotions and Moods, Job Satisfaction. Motivation and Applied Performance Practices. Stress Management. Group Processes and Team Effectiveness: Decision making and Creativity; Model of Team Effectiveness; Organizational & Team Environment; Team Design Features; Team Diversity Challenges; Team Processes & Problems (Process Losses & Brook's Law and Social Loafing); Self- directed Work- Teams; Virtual Teams; Team Trust; Team Decision Making and Team Building. Communication, Power& Influence and Conflict management: Communication Channels, Barriers, and Process; Crosscultural and Cross- Gender Communication; Improving Interpersonal Communication through Transactional Analysis; Communicating in Organizational Hierarchies; etc. Thomas Kilmann's Conflict Management's styles. Leadership in Organizational Settings – Different Perspectives. Organizational Structure and Design, Organizational Culture, Climate and Change.

BSL504 Financial Management

3 credits (2-0-2)

Overview of financial management -Evolution of finance, The Basic Goal: Creating shareholder Value, Agency Issues, Business Ethicsand Social Responsibility, Time value of money concept. Strategic investment decisions -Capital Budgeting Decisions – Capital Budgeting: Process and Techniques - Payback period, accounting rate of return, NPV, IRR, MIRR, Profitability index, Discounted payback period, Estimation of cash flows, NPV vs. IRR, Risk analysis in Capital Budgeting -Sensitivity analysis, Certainty EquivalentApproach. Cost of Capital - Meaning and Concept, Calculation of WACC, The CAPM Approach, Adjusting cost of capital for risk, International Dimensions in cost of capital. Strategic financing decisions -Capital Structure, Theories and Value of the firm -Net income approach, Net operating income approach, Traditional approach, Modigliani Miller model, HAMADA model; Determining the optimalcapital structure, Checklist for capital structure decisions, Costs of bankruptcy and financial distress, Trade off models, Pecking OrderTheory. Leverage analysis and EBIT-EPS Analysis: Concept of leverage, Types of leverage: Operating leverage, financial leverage, Combined leverage; EBITEPS Analysis, Guidelines for capital structure planning, Link between capital structure and capital budgeting. Dividend Decisions -Factors determining dividend policy, Theories of dividend - Gordon model, Walter model, MM Hypothesis, Formsof dividend - Cash dividend, Bonus shares, Stock split, Dividend policies in practice, Patterns observed in payout policies worldwide. Working Capital Management - Working capital policies, Risk - Return trade off, Cash management, Receivables management, Inventory management, Credit management, Working capital financing.

BSL505 Marketing Management 3 credits (2-0-2)

Defining Marketing for the 21st Century: Marketing Concept and Process; The changing marketing Landscape and Developing Marketing Strategies and Plans: Role of marketing in company's strategic planning; Customer drives marketing strategy and integrated marketing mix; managing the marketing effort. Scanning the Marketing Environment, Forecasting Demand, and Conducting Marketing Research; Creating Customer Value and Customer Relationships; Analyzing Consumer Markets and Analyzing Business Markets. Identifying Market Segments and Targets; Competitive Dynamics; Crafting the Brand Positioning; and Creating Brand Equity. Designing Value: Setting Product Strategy; Designing and Managing Services and Developing Pricing Strategies and Programs. Delivering Value: Designing and Managing Integrated Marketing Channels and Managing Retailing, Wholesaling, and Logistics. Communicating Value: Designing and Managing Integrated Marketing Communications; Managing Mass Communications; Managing Personal Communications. Creating competitive advantages; marketing in the global environment; managing the holistic marketing effort; introducing new marketing offerings; social responsibility of marketing.

BSL506 Decision Science 3 credits (2-0-2)

Role of effective decision making in management; Process of decision making; types of decisions; qualitative Vs. quantitative approaches to decision making; Bowman's management coefficient model; Counter-intuitive behaviour of social systems and role of system dynamics models in complex non-linear dynamical systems modeling. Operations Research / Decision Science / Management Science – Concepts and processes; types of OR models – deterministic stochastic, multi-criteria decision making; Decision Theory – DMUC, DMUR, DMUU, sequential decision making – decision tree; competitive decision making – theory of games. Models of decision making – Deterministic models – linear Programming, Simplex method; duality theory; special cases of linear programming – transportation, transshipment; assignment models; sensitivity analysis; shortest route; t raveling salesman problem; dynamic programming. Probabilistic models of decision making – waiting line models – M/M/I, M/G/I, M/M/S queues; Monte Carlo simulation – application to various manufacturing and service systems; Markov Decision Process. Multi-criteria Decision making– Paired comparison; Decision Matrix; AHP; Goal programming; Group Decision Making. Case Studies employing various models from manufacturing & service systems.

BSL509 Managerial Economics 3 credits (2-0-2)

Basics of Managerial Economics - Introduction to Managerial Economics: Definition, Nature & Scope, Relationship with other subjects, Objectives of Business Firms, Economic v/s Accounting Profit. Decision Making in the Household Consumer Choice; Theory of Demand and Elasticity of Demand: Meaning, Determination, Types, Estimation and Forecasting. Decision Making in the Firm - Theory of Production and Cost; Product Price Determination in Perfect Competition, Monopoly, Monopoly Completion, and Oligopoly Markets. Macroeconomics Concepts National Income Determination using Keynes and IS-LM Models, Inflation, Fiscal and Monetary Policy, Game Theory.

BSL510 Supply Chain Management 3 credits (2-0-2)

Introduction to Supply Chain. Transportations, Facility Decisions and Page 200 of 349

NetworkDesign in Supply Chain: The role of transportation - factors affecting the transportation decisions - modes of transportation - design options for transportation network - tradeoffs in transportation design, tailored transportation- routing and scheduling in transportation - role of facility decisions in supply chain - factors influencing network design decisions - models for facility location and capacity allocation - making network design decisions in practice. Inventory Management and Risk Pooling the Bullwhip Effect, Quantifying the Bullwhip Effect, The Impact of Centralized Information on the Bullwhip Effect, Methods for Coping with the Bullwhip Effect. Effective Forecasts. Lead- Time Reduction - Information and Supply Chain Trade- offs - Conflicting Objectives in the Supply Chain - Designing the Supply Chain for Conflicting Goals. Push, Pull and Push- Pull Systems, Identifying the Appropriate Supply Chain Strategy, Implementing a Push-Pull Strategy, Demand-Driven Strategies, Distribution Strategies. Strategic Alliances. Procurement and Outsourcing Strategies. International Issues in Supply Chain Management. Coordinated Product and Supply Chain Design. Information Technology for SCM. Decision- Support Systems for SCM.

BSL511 Business Statistics

3 credits (2-0-2)

Measures of Central tendency, Dispersion (variation) and kurtosis their measures, their characteristics (merits and demerits) and application. Proof- Sum of the Deviations taken from AM is zero. Combined Mean and problems on missing figures application- Individual, Discrete and continuous series. Correlation and linear Regression Analysis scatter Diagram, Karl Person's & Rank Correlation Method, Standard Error and Probable Error of Correlation and Significance of Correlation Regression- Difference between Correlation & Regression, why Coefficient of Correlation lies between -1 and+1 why there are two regression lines & their properties and the properties of Regression Coefficients, Explained & Unexplained Variation. Solution of the regression lines and standard error of the estimates of regression. Probability, Random variable, Expectations and probability Distributions, Binomial, Poisson's & Normal Distributions fitting of Distribution and their properties and solution of problems. Central limit theorem. Sampling Fundamentals and Sampling Distributions, sampling error and standard error of the estimated parameter & estimator, Estimation & Hypothesis Testing, Parametric, Algebra of Expectations and decision making.

BSL512 Business Research Methods

3 credits (2-0-2)

Foundations of Research: Meaning, Objectives, Motivation, Utility. Concept of theory, empiricism, deductive and inductive theory. Characteristics of scientific method – Understanding the language of research – Concept, Construct, Definition, Variable. Research Process. Problem Identification & Formulation – Research Question – Investigation Question – Measurement Issues

- Hypothesis - Qualities of a good Hypothesis -Null Hypothesis & Alternative Hypothesis. Hypothesis Testing - Logic & Importance. Research Design: Concept and Importance in Research - Features of a good research design - Exploratory Research Design - concept, types and uses. Experimental Design: Concept of Independent & Dependent variables. Qualitative and Quantitative Research: Qualitative research - Quantitative research - Concept of measurement, causality, generalization, replication. Merging the two approaches. Measurement: Concept of measurement- what is measured? Problems in measurement in research - Validity and Reliability. Levels of measurement - Nominal, Ordinal, Interval, Ratio. Sampling: Concepts of Statistical Population, Sample, Sampling Frame, Sampling Error, Sample Size, Non-Response. Characteristics of a good sample. Probability Sample - Simple Random Sample, Systematic Sample, Stratified Random Sample & Multi-stage sampling. Determining size of the sample - Practical considerations in sampling and sample size. Data Analysis: Data Preparation - Univariate analysis (frequency tables, bar charts, pie charts, percentages), Bivariate analysis - Cross tabulations and Chi-square test including testing hypothesis of association. Questionnaire Construction. Measurement, Basic Scales, Validity Analysis, Reliability Analysis, Attitude Measurement Scales. Multivariate Analysis. Factor Analysis, Regression Analysis, Cluster Analysis, etc.

BSL513 Operations Management

3 credits (2-0-2)

Introduction: The field of operations management, production systems, O.M. in the organizational chart, historical development of O.M,role of services in the postindustrial society, service operations management, current issues in O.M. Product Design: Designing for the Customer – Quality Function Deployment, Value Analysis, Value Engineering, Designing Products for Manufacturing and Assembly, Measuring Product Development Performance. Manufacturing Process Selection and Design: Process Selection - Types of Processes, Process Flow Structure, Product Process Matrix. Service Process Selection and Design: The Nature of Services, An Operational Classification of Service, Designing Service Organizations, Structuring the Service Encounter, Service System Design Matrix, ServiceBlueprinting and Fail Sating. Facility Location and Layout. Waiting Line Management. Capacity Management: Capacity Management in Operations, Capacity Planning Concepts, Capacity Planning, Planning Service Capacity Aggregate Sales and Operations 349

Overview of Sales and Operations Planning Activities, The Aggregate Operations Plan, Aggregate Planning Techniques. Inventory Control: Definition of Inventory, Purposes of Inventory, Inventory Costs, Independent Versus Dependent Demand, Inventory Systems.

Fixed Order Quantity Models, Fixed Time Period Models, Selective Control, Including ABC, VED Classifications, Optional Replenishment System, 2Bin System. Managing queues. Supply Chain Management: Supply Chain Drivers, Supply Chain Strategy, Measuring Supply Chain Performance, Push Strategy/Pull Strategy/Push Pull Strategy, Bullwhip Effect, Outsourcing, Design for Logistics, Global Sourcing, Mass Customization, Efficiency of Service Delivery. Total Quality Management.

BSL518 Legal & Ethical Aspects of Business

3 credits (2-0-2)

The Indian Contract Act, 1872; The Companies Act, 1956; The Partnership Act, 1932, The Negotiable Instruments Act, 1881 - As Amended by The Negotiable Instruments (Amendment and Miscellaneous Provisions) Act, 2002. Indian Companies Act, 2013 with Amendments up to date. Consumer Protection Act, 1986 and Competition Act, 2002, IPR. Ethics and Business Ethics, Concepts, Values and Theories of Business Ethics: Shareholder Theory, Normative Theories, Utilitarianism, Kantianism, The Stockholder Theory, The Social Contract Theory. Teachings of the Church, Gandhian Principles, Business and Gita, Business, and Islam. Ethical models that guide decision making, Applying Moral Philosophy to Ethical Decision Making, Ethical Dilemma, The Process of making good ethical decisions. Globalization and Business Ethics. Corporate Ethics: Good Governance, Investors Protection. Corporate Social Responsibility - Definitions of CSR, CSR models, CSR as a business strategy for sustainable development, External standards on CSR, Future of Indian CSR, Consumer Protection Act, 1986. Environmental Ethics & Ethics in Indian Business- History of Environmentalism, Environment Preservation: Role of Stakeholders, Media; Industrial Pollution, Waste Management and Pollution Control, Carbon Emissions, Environment Protection Act, 1986; Major Indian Scams, Corruption, Black Money, Coercion, Insider Trading, Tax Evasion, Pollution, etc.

BSP504 Advanced Excel 2 Credits (0-0-4)

Microsoft Excel is one of the most used products of Microsoft office. It is used for data entry, data analysis, data presentation, or calculation. The best thing about Microsoft Excel is that this totally depends on your skill level. You can use MS Excel for any beginner or advanced level task, it will be equally efficient & easy to use in either case. This MS Excel course is Advance Level or Expert Level training especially for students, teachers, or researchers, or for anyone who has basic or intermediate level Microsoft Excel knowledge & now wants to learn Advance Level, MS Excel.

BSL515 Communication for Managers

3 Credits (2-0-2)

Workplace Communication, its theory and its Psychology - Understanding workplace communication, Use of Transactional Analysis and Strokes in Communication, Utilizing Emotional Intelligence while Communicating, overcoming individual barriers and biases in communication, Effective Communication, Communication Principles, Forms of Communication – Written, Oral and Non-verbal, Listening. Mastering Written Business Communication Basic patterns of business messages - Choosing the Best Process and Form, getting to the Point in Good-News and Neutral Messages, Maintaining Goodwill in Bad-News Messages, Making Your Case with Persuasive Messages and Proposals and Conducting a Winning Job Campaign. Report Writing - Preparing Informative and Influential Business Reports, Choosing the Right Type of Report, Conducting Research for Decision Makers, and Using Visuals to Make Your Point. Applications of Business Writing – Making Persuasive PPTs, Using Excel to Generate Charts, Writing Business Correspondences, Writing for Digital Media – Websites, Emails, Blogs, social media, etc., Storytelling with Data, Letters, Memos, etc. Mastering Spoken Business Communication Communicating effectively in business meetings and conversations, delivering oral reports and business speeches, Managing Non-verbal communication effectively, Dale Carnegie's Fundamentals of Effective Speaking, Business Talks – short talk to get action, talk to inform, talk to convince, Impromptu Talks, Organizing longer talks, etc. Business Etiquette Introduction, establishing rapport, maintaining a professional image, dining etiquette, etiquette, and career.

BSL516 Entrepreneurship and Innovation 3 credits (2-0-2)

Innovation and Entrepreneurship course focuses on the interconnection between entrepreneurial thinking and innovation. The course will introduce students to the fundamentals of innovation and entrepreneurship, providing them with a blueprint for the ideas and strategies to build a successful venture. This course attempts to address critical areas for successful growth,

including design thinking, open innovation, business models, product-market fit, and financing. This course will teach students to think like entrepreneurs and provides the models, tools, and frameworks to further develop your business or idea.

BSL603 Strategic Management

3 credits (2-0-2)

The course enables students to understand the concept of Strategy. It provides insights into the highly competitive markets where firms with competitive advantage only survive. It helps students analyze the business environment in which business operates not only the external environment but also the internal environment in order to understand the business environment better. The course explains howstrategy is formulated, implemented, and evaluated in an organization, taking them through the process and techniques used in leading organizations globally.

BSL632 Services Marketing 3 credits (2-0-2)

This course is especially designed for those students who may be interested in working in the service industry and in addressing the distinctneeds and challenges of managing services and delivering quality service to customers. The course focuses on the key elements that marketers must integrate to establish and sustain service excellence and provide customer value. The objective of the course is to makestudents understand how to develop profitable customer relationships in the services marketing area by designing effective service marketing strategies.

Topics include an overview of services marketing; understanding the customer in services marketing; standardizing and aligning the delivery of services; the people who deliver and perform services; managing demand and capacity; promotion and pricing strategies inservices marketing. Application of services marketing concepts to actual business situations is through company examples, case analysisand outside projects. At the end of the course students would demonstrate an understanding of unique challenges of the service industry and an ability to apply the knowledge for designing and executing service marketing strategies.

BSL633 Business to Business Marketing (B2B)

3 credits (2-0-2)

Business to Business Marketing (B2B) covers a wide territory. From agro inputs and mineral products, it covers metal sales, capital equipment, polymers, chips, tires, specialty chemicals or computers. The entire range of services sold to corporations, institutions and government offices fall within B2B Marketing. While the basic tenets of consumer marketing are applicable to B2B, there are many unique characteristics in Business Markets that demand special attention: Forces that affect Business Demand, Composition of Business Markets, Nature of Business Buyers, Buying Decision Making Process, Pricing Strategies, Role of Promotion, Advertising and Branding. The marketplace is also undergoing constant change - markets are commoditizing, customer firms are consolidating, companies are becoming global, and technology is transforming the business environment. This course explores the challenges in the marketplace by delying into unique problems confronting Business-to-Business Markets today across a broad spectrum of organizations ranging from traditional industries to hightech enterprises. It has been specially customized to meet the specific requirements of practicing managers by raising intriguing questions, debating options and possible alternatives based on the challenges faced daily. The students will benefit from the superior career opportunities offered by B2B Marketers through developing an in-depth understanding of, and skills in select dimensions of B2B marketing such as the alignment of B2B operations of firms with their respective markets, practices followed by real companies in real situations such as Key Account Management including Key Account Mapping of their corporate and institutional customers, and process of e-procurement, e-tendering etc. specifically followed by governments, international bodies and public agencies.

BSL634 Rural Marketing 3 credits (2-0-2)

Rural India has undergone significant development in the last three to four decades, making it a very attractive opportunity for businesses. Companies no longer hesitate in going that extra mile to woo rural consumers. As more and more companies look to rural markets for growth and revenues, present-day marketers need to understand the rural set-up and the fundamentals of rural marketing. This course provides an overview of rural markets and emerging perspectives of rural marketing in India. It mainly includes rural marketing environment, segmenting and targeting rural markets, product, pricing, distribution, and communication strategies for rural markets. It also discusses the challenges and opportunities in the field of rural marketing and builds a strong foundation of applied knowledge, concepts, and analytical skills for successful marketing of products to rural consumers. On successful completion of the course students would gain an insight into concepts, techniques, and processes of marketing in a rural context. The course would enable them to understand and develop marketing strategies that are unique to rural India and know about the mantra for success for any company going rural.

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BSL635 International Marketing

3 credits (2-0-2)

For most businesses, understanding the process involved in assessing the international marketplace for opportunities to expand operations abroad is a major key to success. This course addresses the opportunities and challenges associated with the development and implementation of marketing strategy in international markets. It aims to develop frameworks and knowledge that will enable future managers to better formulate and effectively implement marketing plans in different regions of the world.

Topics include an overview of international marketing; social, cultural, political, and legal environments; international market-entry opportunities; planning and managing market entry strategies and products; global distribution and pricing; international promotion, sales, and negotiation; and international market planning. On completion of this course the students will be able to understand all aspects of marketing from a global perspective to better respond to international opportunities and competitive situations. They will be able to Identify and analyze opportunities within international marketing environments.

BSL636 Integrated Marketing Communication 3 credits (2-0-2)

Designed from the perspective of executives who are often involved in making strategic as well as tactical marketing decisions to solve contemporary business problems, this course is intended for students whose career plans include consulting and new business ventures(especially those that are related to emerging media), apart from those thinking of careers in marketing. The objective of the course is to help students understand the principles and practices of marketing communications, involving tools used by marketers to inform consumers and to provide a managerial framework for integrated marketing communications planning. Main topics include the role of integrated marketing communications, organizing for advertising and promotion, consumer behaviour perspective, the communication process, promotional objectives and budgets, creative strategy, media planning and strategy, broadcast/print & support media, direct marketing, sales promotions, PR and publicity, personal selling, international promotion, business-to-business promotions, and regulations and ethics. This course is designed to sharpen students' grasp of the strategic and tactical avenues that lead to competitive advantages in the marketplace.

BSL637 Retail Management

3 credits (2-0-2)

Retailing is changing today, and the successful business will know how to identify, adapt, and plan with the changes, without moving away from its core competencies. Retail Management graduates can reflect upon, understand, and articulate the dynamics of establishing, operating, and growing a retail sector business. The course is designed to provide an in-depth understanding of retail marketing, building sustainable relationships, decision making skills related to retailing, buyer's behavior, pricing strategies and deliverychannels to the end users.

Topics may include merchandise and expense planning, store layout, product line and resource determination, pricing, promotional strategies, customer service, financial planning and control, the development of a retail format and its strategy, the analysis of a target market, demographic analysis related to site selection, retail personnel issues, and category management. The course will investigate the changing role of e-commerce in retailing as a major topic. This course provides the student with a comprehensive view of retailing and an application of marketing concepts in a practical retail managerial environment.

BSL638 Digital Marketing and Social Media 3 credits (2-0-2)

The course will provide students with an overview of the fundamental elements, principles, tools and techniques of digital marketing and communication. They will be able to understand and apply the core principles, concepts and nuances of digital marketing and communications in the context of the overall product/service/brand marketing. The students will also get an orientation in using some of the popular digital marketing techniques like Search Engine Optimization, Search Engine Marketing, Social Media Marketing, Behavioral Targeting, Retargeting, e-CRM and some digital marketing planning and analytics tools like Google AdWords, Google Keyword Tool, Google Webmaster, Google Analytics, etc. The building blocks of this course require having a sound understanding of marketing planning and management processes. On completion of the course, the students should have a developed and practical understanding of how to create a digital marketing plan and how to approach and leverage various available digital marketing channelsin an integrated manner to market products and services – be it to create awareness, acquire new customers or retain existing customers. The course will help the students in making a good career in the field of digital marketing by having sound understanding of the concepts along with practical orientations.

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BSL640 Strategic Marketing Management

3 credits (2-0-2)

The course examines the development and implementation of marketing strategy by providing a framework from which to identify and evaluate strategic options and programs. Topics: forecasting and contextual possibilities, product-market definition, relationships with channels of distribution, relationships with customers, competitive analysis, financial models for marketing strategists, portfolio models, strategic assessment of offerings, marketing strategy implementation systems. This course requires that students have a strong foundation of marketing knowledge gained from Introduction to Marketing (in particular a knowledge of market segmentation).

BSL641 Security Analysis and Investment Management 3 credits (2-0-2)

Security analysis is the analysis of tradeable financial instruments called securities. It deals with finding the proper value of individual securities (i.e., stocks and bonds). These are usually classified into debt securities, equities, or some hybrid of the two. Tradeable credit derivatives are also securities. It enables the investor to establish the expected return and risk for a stock and to evaluate its desirability in a logical, rational manner. The main topics to be addressed in this course are Introduction to Investment and Securities, Investment Planning and Alternatives, New Issue Market, Secondary Market, Stock Market Indices, SEBI, Risk, Bond return and valuation, Stock return and valuation, Fundamental analysis, technical analysis, and Efficient market theory.

BSL642 International Financial Management 3 credits (2-0-2)

With the rapid globalization of the world economy, the managers of a firm have to understand that their decisions will be greatly influenced by variables such as exchange rate policies, trade policies, international accounting standards, etc. The goal of this course isto help students understand how the managers of a firm function in this increasingly uncertain environment. This course will focus on four main areas of international finance: key economic theories; various financial instruments for risk management; exchange risk management; and international financing and investment issues. On completion of this course, students should be able to: understand the environment and factors associated with foreign exchange rate determination; demonstrate knowledge of foreign exchange terminology; demonstrate knowledge of the various forms of financial instruments available for foreign exchange risk management; understand key economic theories that underlie the foundation of foreign exchange risk management; demonstrate knowledge of basic strategies and techniques associated with foreign exchange risk management.

BSL643 Financial Derivatives

3 credits (2-0-2)

Financial derivatives have grown phenomenally over the last three decades — in response to unpredictable movements in exchange rates, interest rates, commodity prices and other risks. This course will give an essential understanding of financial derivatives: how they work; how to use them to reduce risk (hedge) or take on risk (speculate); how to measure the associated risks and rewards; and how to manage the risk of a derivative position. Instruments covered include forwards, futures, swaps, structured products, standard and exoticoptions — across the currency, equity, commodity, credit, and interest rate markets. On completion of this course, students should be ableto: understand the basic types of derivatives, their payoff functions, their developments, and the economic roles they play in the financialmarkets; understand the basic risk management and trading strategies using derivatives; understand the design and pricing of a forwardrate agreement; understand the payoff of a euro dollar futures; understand the design of swaps and how to determine the swap rate by using no-arbitrage principle; understand no-arbitrage principle and its role in pricing financial forwards and futures; understand the put-call parity and other pricing relations between calls and puts using no-arbitrage principle.

BSL644 Management of Financial Services 3 credits (2-0-2)

This course reviews the organization, management, and regulation of financial service providers. It investigates the regulatory frameworkin which the financial service industry operates. It dwells on the financial instruments at the disposal of the industry and on their specificuse at the hands of financial service providers. It analyses the techniques developed by financial services to cope with the nature of them. It includes activities, such as managing assets and liabilities, managing credit risk, or managing investment portfolios to meet specific targets. It also considers how recent developments, including technological advances and economic globalization, have instilled renewed vigor in activities such as acquisitions and mergers, and contemplates the future of the industry. Topics include Non-Banking Financial Services, Insurance Services, Merchant Banking, Credit Rating Services, Factoring and Forfaiting, Venture Capital, Plastic Money (Credit cards) Lease & Hire Page 205 of 349

Purchasing, Housing Finance On completion of this course, students should be able to: learn the many roles and responsibilities of financial services in the economy; understand how the financial service industry is regulated; identify the financial instruments at the disposal of the financial service industry; explain the problems of asset and liability management;

BSL645 Management Accounting and Control 3 credits (2-0-2)

Any organization's long-term competitive success is critically dependent on (1) its ability to appropriately organize and analyze high- quality information about its products, services, processes, organizational units, suppliers, and customers that fits its decision needs, (2) its ability to act rationally on that information, and (3) its ability to control its performance consistent with that information. The term management accounting refers to the set of information concepts, models and systems that provide this information and control for managers. This course examines management accounting and related analytical methodologies for decision making and control in organizations. Topics include product costing, budgetary control systems, and performance evaluation systems for planning, coordinating, and monitoring the performance of a business. At the completion of this course, the student will be able to: understand the fundamentals of management accounting, including the strategic focus, and other basic cost terms and concepts; determine product costs; use costs and other critical success factors in management planning and decision making, operational control & management control; analyze the use of cost-volume-profit analysis in investment and financing decisions; apply the principles of activity-based costing in decision making and profit planning to long and short term strategic financial planning; analyze how standard cost and relevant cost impact decisions.

BSL646 Business Analysis Using Financial Statements 3 credits (2-0-2)

This course provides a broad framework for using financial statements and other regulatory disclosures in business analyses. Emphasisis placed on developing a critical, general manager's perspective for interpreting required financial disclosures, understanding the types of financial information available in the public domain and their purposes, developing an appreciation of the inherent ethical conflicts that may color managers' and sell-side analysts' disclosures, and formulating an approach to evaluating an enterprise's overall financial reporting and the implications of that analyses from the perspective of a potential shareholder or creditor. It presents a framework for business analysis and provides students with tools for financial statement analysis, including strategic, accounting, financial, and prospective analysis. This course is designed to prepare the students to interpret and analyze financial statements effectively. Upon completion of this subject, students should be able to: interpret financial statements and the footnotes to the statements; assess and measure the impact of reporting diversity on a reported company's profitability and book value; use accounting information to conduct thorough profitability and risk analyses across time and companies.

BSL647 Money and Banking 3 credits (2-0-2)

Money and banking are exciting and diverse field of study. It studies the role of money and banking in the economic system. The objective of this course is to provide an integrated framework for the management of commercial banks and demonstrate the many tools and techniques employed in commercial bank management. Topics include central banks and creation of money; the term structure of interest rates; functions of a bank in the economy; financial statements of a bank and measurement of profitability via ratios; bank lending policies and procedures and lending regulations; investment function in banking; risk management in banks; liquidity management; reserve requirements; estimating a bank's liquidity need; bank sources of funds: deposits, non-deposit liabilities, and equity.

Upon completion of this subject, students should be able to: understand the forms, and functions, of money; understand the financial statements of a bank; understand the financial statements of a bank and measurement of profitability via ratios; become familiar with bank lending policies and procedures as well as lending regulations; get acquainted with the investment function in banking; understandasset liquidity management, reserve requirements; estimate a bank's liquidity needs; and develop an understanding of bank sources of funds.

BSL648 Mergers and Acquisitions: The Market for Corporate Control 3 credits (2-0-2)

Probably the most dramatic events in a corporation's history involve the decision to acquire another firm or the decision to oppose being acquired. This is also one of the areas of management most thoroughly documented in the financial press and academic literature. The course explores three aspects of the merger and acquisition process: the strategic decision to acquire, the valuation decision of howmuch to pay, and the financing decision on how to fund the acquisition. This course will cover all major elements of the acquisition process including corporate strategy, valuation, due diligence, financing decisions, transaction structures, restructuring options, takeoverdefense, and integration.

Upon completion of this course, students will have a well-rounded understanding of the major strategic, econ Paige 206 of, 349

and governance issues of mergers and acquisitions. They be able to: understand the main theories on the various forms of M&As; become familiar with valuation methods and practices; get acquainted with the legal framework and corporate governance, and the main features relating to accounting and taxation.

BSL649 Principles of Risk & Insurance

3 credits (2-0-2)

In everyday life, we are exposed to numerous risks that can affect our persons or our property. We do not know when such an event may occur, not how large a loss it may cause. An individual's own financial means are usually not sufficient to meet a large loss. Similarly, companies look for financial protection elsewhere, usually by way of insurance. This course introduces the principles of risk management and insurance and provides a structured methodology in the identification, analysis, and management of risks. An introduction to the basic principles of insurance, as one possible risk financing tool, is presented. Topics include Risk identification andmeasurement, Pooling arrangement, and Diversification of risk; Types of insurers and marketing systems; Insurance CompanyOperations; Government Regulation of Insurance; Risk Aversion and Risk Management by Individuals and Corporations; Insurability of Risk, Contractual Provisions and Legal doctrines; Analysis of Insurance Contracts; Insurance Pricing.

Upon completion of this course, the student will become familiar with the basic concepts of risk and insurance, introductory and advanced topics in risk management, legal principles, property and liability insurance, life and health insurance, and functional and financial operations of insurers.

BSL650 Portfolio Management

3 credits (2-0-2)

Portfolio management presents the best investment plan to the individuals as per their income, budget, age, and ability to undertake risks. Portfolio management minimizes the risks involved in investing and increases the chance of making profits. One proven way to spread risk comfortably throughout your portfolio is to make sure you sufficiently diversify your investments. However, it remains a vital strategy for minimizing the risk that often helps investors to achieve their financial goals. The main topics to be addressed in this course are portfolio construction, Markowitz model, the Sharpe Index model, capital asset pricing theory, arbitrage pricing theory, portfolio evaluation, and revision.

BSL651 Foreign Exchange Management

3 credits (2-0-2)

Foreign Exchange determines the value of foreign investment. A volatile exchange rate discourages foreign investment, as does a high, stable one. A low, stable exchange rate, however, encourages foreign investment, but at the price of the low-valued currency's economy. There is a wide variety of dealers in the foreign exchange market. The most important among them are the banks. Banks dealing in foreign exchange have branches with substantial balances in different countries. Through their branches and correspondents, the services of such banks, usually called Exchange Banks, are available all over the world. The main topics to be addressed in this course are foreign exchange risk, management of foreign exchange exposure, spot exchange market, foreign exchange market, and forecasting exchange rates.

BSL652 Financial Institutions and Markets

3 Credits (2-0-2)

This course focuses on the role of financial markets and financial institutions in facilitating the flow of funds to finance investments by corporations and governments. This course systematically evaluates each market and describes the participants and types of instruments offered. The basic purpose of this course is to develop a broad understanding of the various markets comprising the Indian Financial System in a global context and the roles played by various institutions in the functioning of this system.

BSL653 Bank Management 3 credits (2-0-2)

This course aims at enabling the students to understand and to contribute to the strategic operational policies and practices of commercialbank management in a competitive environment. The broad topics involved in the syllabus are classification of Indian banking system, reforms in Indian banking system. Liquidity – Purpose – Sources – Measurement – Liquidity / profitability problem – Theories of liquidity management – Priorities in the employment of bank funds – Problem of resource allocation in Indian commercial banks. Capital Adequacy in Banks - Functions of capital funds in commercial banks – Capital adequacy – Basal norms on capital adequacy. Asset Liability Management, Non-Performing Assets and Marketing strategies for a commercial bank.

BSL654 Microfinance Management

3 credits (2-0-2)

This course will introduce students the concept of Micro credit and Micro finance. Features and Benefits of Micro Finance. Important role of Micro Finance and why it is needed. Micro Finance refers to the provision of affordable financial services such as small loans, small savings, micro insurance, and funds transfer facilities extended to socially and economically poor and disadvantaged segments of the society to enable them to increase their income levels and improve standard of living. The main aim of microfinance is to provide small loans to poor people particularly living below poverty line, who are not able to raise loan for productive purposes from other sources and to improve their standard of living by increasing their earning and saving covering associated risks.

BSL655 Leadership- Past, Present and Future 3 credits (2-0-2)

Foundation Building and Self-Awareness - Understanding the importance of leaders managing group processes; Why is this important; Understanding self-using the Reflected Best Self exercise; Paying attention to self-in-relation; Working in presentation teams. Managing Visibility: What is meant by visibility and why it is important for this competency to be honed; Understanding how we see ourselves and may be perceived by others using the Social Identity Profile exercise; Discussing cases of leaders and how they manage visibility. Team Building: What are the components to managing a team and why are they important? Where are the areas of tension that typically accompany team dynamics, using a case to explore the challenges and opportunities of leading a team. Navigating Power: What is meant by power and why is it important; Seeing power dynamics through a power simulation exercise; Being aware of your sources of power. Strategic Networking: What is networking and why is it important – networking for what? Mapping and analyzing your network; Determining who is helping you in meeting your career goals; Considering the role of family in your career trajectory. Group Processes: Leaders as agents of change; What is meant by change and how do these group processes support leaders in driving and welcoming change; Key insights from across the classes/course concepts; Goals for the future and how these concepts can assist you as leader.

BSL656 Industrial Relations & Labour Laws 3 credits (2-0-2)

The objective of the course is to provide an emphasis on the practical application of basic skills required to manage in a unionized workplace. The students will be acquainted with the industrial relations framework in our country, the importance of maintenance of industrial peace and efforts to reduce the incidence of Strikes and Lockout will be emphasized. The main theme underlying the course is to critically examine the provisions in the Trade Unions Act, 1926; the machineries contemplated under the provisions of the Industrial Disputes Act for the prevention and settlement of Industrial Disputes. Further, the objectives underlying the Industrial Employment (Standing Orders) Act, 1946 and Disciplinary Enquiry for misconduct are to be studied.

The course is designed to provide an understanding of the social security measures, its importance and constitutional basis for the same in India. The main theme underlying the course is to critically examine the provisions in the Workmen's Compensation Act, 1923, the machinery provided for protecting the interests of workers, Factories Act, 1948, E.S.I. Act, 1948, Employees provident Fund Act, 1952.

BSL657 Workforce Planning, Recruitment & Selection 3 credits (2-0-2)

In the 21st century HR is influenced by various factors like size of the workforce, rising employee expectations, composition of workforce, new skills and competencies required. The Course will provide the tools needed to analyze the workforce, develop a strategy to matchdemand for staff with the right people at the right time, and create a plan for talent management and retention. The course will help in analyzing the role of recruitment and selection in relation to the organization's business and HRM objectives in Indian context. This includes demonstrating the appropriate use of job descriptions, application forms and related staffing tools such as internet recruiting. The course contents broadly are Manpower Planning, Recruitment Challenges, Interviewing, Selection, and Orientation & Onboarding. At the end of the course the student will be able to use manpower planning techniques; identify, define, assess, and optimally apply appropriate sources of recruitment; define and utilize various selection tools, techniques and tests; plan appropriate selection strategies and formulate selection procedures across a variety of verticals and business situations; plan and devise orientation and onboarding programs.

BSL658 Competency Mapping 3 credits (2-0-2)

The course throws light on ways to develop and map competencies and design competency models. It seeks to help learners understand the complexities and dynamics of competency models and related decision making. It aims to help management students understand the application and know-how of competency mapping, which is primarily to develop the page 1208 of 349

implement, and bring performance improvement in the workplace.

Main topics in the course include concepts in competency; development of competency models; issues pertaining development of competency models; establishment and running of competency-based HR systems; competency framework formulation; competency-based application and assessment; competency models for leadership roles in organizations; HR positions competency models; etc. At the end of this course, students shall display ability in identifying and describing core competencies for various positions in any organization and be able to devise competency-based selection, assessment, and other relevant HR frameworks for a variety of taskroles.

BSL659 Contemporary Issues in HRM 3 credits (2-0-2)

Keeping with the pace of change, this course would help the students understand the workplace complexities and along with it the challenges faced. It would familiarize the students with the current issues and challenges in HRM.

A student will get exposure as to how the HRM processes have taken shape with the changing environment and expectations of high performing organizations? There has been a dramatic change in the psychological contract and careers have undergone change from traditional, organizational career to boundary-less to protean. Workplace flexibility has become commonplace, contributing to employeecommitment and employer branding. Learning, training, and development can no longer be left to choose. The newer methods of continuous training and development have assumed a lot of relevance. The changing context of work and managing organizational change requires the student to understand the issues faced in a downsizing, M & A, and outsourcing environment. Students also need torealize the importance of leveraging technology in managing human resources. How high performing organizations are managing their reward practices? Competitive compensation has become a challenge for organizations in terms of attracting and retaining talent.

BSL660 Performance and Compensation Management 3 credits (2-0-2)

In today's world of competition, a lot of emphasis is being given to employee performance. Closely associated with employee performance is the reward and compensation that s/he deserves. The course would help the students to understand the role of the employee as well as the employer in managing performance. Apart from understanding the whole process, students would understand its relationship with competencies, compensation, and rewards.

The course is designed to provide students with an understanding of how organizations have changed the way they look at employee performance. Organizations have gradually moved from performance appraisal to a holistic performance management cycle. While being conversant with the cycle it becomes important to understand the relevance of competencies in the context of employee performance. It is important for students to understand the different methods used to appraise performance and which method to use, keeping in mind the business objectives. Rewards are expected to follow performance evaluations. Students need to understand the basic compensation concepts, job evaluation methods and the context of compensation practice. While doing so the ethical and legal principles with reference to performance and compensation need to be kept in mind.

BSL661 Training and Development 3 credits (2-0-2)

Training presents a prime opportunity to expand the knowledge base of all employees. The contribution training makes to an organization is significant at individual employee, departmental and overall organizational levels. This course aims at imparting experiential learning of training and development to students who seek to specialize in the HR domain or more specifically aim at building a career in the training field.

The main topics that shall be addressed are: training concepts and relevance; training process; TNI process and methods; training calendars; training budget and cost; ROI on training; training methodologies; Logic and Process of Learning; Principles of Learning; Criteria for Method Selection; Skills of an Effective Trainer; Use of Audio-Visual Aids in training; Computer Aided Instruction; E- Learning, Technologies Convergence and Multimedia Environment; Training in the empirical domain; Audio Visual Techniques and use of outside consultants; Training Evaluation – principles; cycle; criteria and evaluation of user system training, trainee, trainer and the organization; problems of measurement and evaluation; application of measurement and evaluation; statistical methods available toevaluator; evaluating effectiveness of training of workers, administrators, trainers, managers and technicians; theory and methods of testconstruction; Training and its use as a feedback mechanism; Electronic Enabled Training Systems; etc.

BSL662 Organizational Development 3 credits (2-0-2)

Organizational Development (OD) is a field of research, theory, and practice dedicated to expanding the knowledge and effectiveness of people to accomplish more successful organizational change and performance. The course shall enable the students to understand thephilosophical, historical, theoretical, political, and practical underpinnings of OP age: 349

of practice within HRD; increase awareness of different tools that are used to diagnose organizations as well as interventions used through hands-on experience and enhance skills in facilitation, OD skills, group process, communication, and collaboration.

Main topics shall include introduction to organization development; the nature of planned change; the od practitioner; entering and contracting; diagnosing organizations, groups, and jobs – collecting and feeding information; designing individual, group and organizational level interventions; strategic change interventions; action research; etc. At the end of the course, the students shall have a basic theoretical and competency base in OD that they will need to be able to assist with and facilitate positive, planned change efforts within the organizations in which they work.

BSL663 People Analytics 3 credits (2-0-2)

People analytics is a data-driven approach to managing people at work. People analytics enables business leaders to make decisions about their people based on deep analysis of data rather than the traditional methods of personal relationships, decision making based on experience, and risk avoidance. In this course, the following shall be taught to students: people analytics advantages and utility; sevenpillars of people analytics success; workforce planning analytics; talent sourcing analytics; talent acquisition analytics; talent engagement analytics; analytical performance management; employee lifetime value and cost modelling; retention analytics; advancedHR analytic techniques; etc. After successful completion of the course, the students shall be able to: drive short, long and medium termresults through effective application of analytics; develop strong foundational skills in statistics to deliver quality results; approach HR problems with a critical thinking mindset and use critical questions to gain relevant insights; develop the foundation blocks of data analysis; leverage data visualization tools and techniques effectively and proactively avoid failures; use hypothesis testing to validate assumptions and refine proposed plans; leverage accumulated insights through effective communication to stakeholders.

BSL664 Strategic HRM 3 credits (2-0-2)

Through a sequence of readings, lectures, cases, and experiential exercises, this course will introduce students to strategic human resource management. The course focuses on developing a strategic approach to topics such as recruitment & selection, performance appraisal, measuring employee behaviors, outsourcing, and strategic integration. The students will prepare foremost classes by completing assigned readings, including readings of business cases.

BSL665 Cross Cultural HRM and Inclusive Workplace Management 3 credits (2-0-2)

Recent definitions concern IHRM with activities of how MNCs manage their geographically decentralized employees to develop their HR resources for competitive advantage, both locally and globally. The role and functions of IHRM, the relationship between subsidiaries and headquarters, and the policies and practices are considered in this more strategic approach. IHRM is also defined as a collection of policies and practices that a multinational enterprise uses to manage local and non-local employees it has in countries other than their home countries.

BSL666 Talent Management 3 credits (2-0-2)

The course intends to make students aware of the concept of talent management and its importance in 21st century. Students will learnthe role of the environment and various innovative practices that businesses go for to manage their talent. The role of IT in effective talentmanagement is also highlighted.

BSL671 Supply Chain and Logistics Analytics3 credits (2-0-2)

In the present time of intense global competition, customers are demanding more and more variety, with better quality and service at the lowest cost. This means that to be successful, firms need to develop supply chain strategies and logistical capabilities that serve theneeds of their customers whilst maximizing overall profitability. All supply chains, to function properly, must focus on the huge opportunity that exists in their analytics. On completing this course, the students will be able to: Understand the importance of the basicsof Business Analytics, Supply Chain Analytics, and optimization, analyze the level of uncertainty associated with the supply of products and services to targeted customer segments and justify the choice of a supply chain strategy and its fit with competitive strategy, explainthe role and applications of descriptive and predictive analytics in a Supply Chain and the basics of Modelling through R Language.

BSL674 Selling Negotiations and Business Development3 credits (2-0-2)

Business development, Selling & Negotiation assumes prime importance in terms of future opportunities. The world of business nowadays is increasingly driven by global negotiations across multiple countries, with most leading companies setting up shop in almost every market. This, in turn, contributes to the increasing importance of the Selling & Negotiation function in most mature and emerging sectors. Though Selling is a vital part of the overall Marketing process, it requires a different set of skills and competencies. Negotiation goes hand in hand with Selling because it plays a vital role in closing deals. This course introduces additional dimensions that need to be understood and incorporated into the existing Marketing Dynamics, so that students can better understand the Selling function, apart from developing key negotiation techniques. This will be ensured using innovative concepts like SPIN, FAB, BATNA etc. to impart the cutting edge, considering the developments of data driven insights from customeranalysis, segmentation analysis, etc. While students are exposed to multiple selling & negotiation situations they will be able to get a connect with how this course can be linked with various other courses like Consumer Behaviour & B2B Marketing (since consumers, be it B2B or B2C, are whom you sell to); Retail marketing & Services marketing (since the point of contact with customer could be selling a product in retail outlets or providing services); Digital Marketing & Integrated Marketing Communication (since a lot of sales is dependent nowadays on a company's online presence & its advertising strategy). This course will also compliment other courses such as Finance, Human Resource and Operations, as in this contemporary era the corporate departments have become more cross functional than ever before and look for various insights of business development sales and negotiations.

BSL675 Applied Econometrics 3 credits (2-0-2)

This course aims at providing students a thorough understanding of core techniques of econometrics with focus on applied microeconomics techniques and how to apply them to test economic theories and quantify relevant factors for economic policy and otherdecisions. This course will help students to rigorously understand issues in connecting data, statistics and economic theory. The approachwould be hands-on practice to help students get comfortable with working with dataset. The course would address the problems typically encountered in conducting empirical econometric research, in evaluating results and testing hypotheses in making predictions.

The main contents of this course are introduction to econometrics, simple linear regression model (concepts, estimation, properties and testing of hypothesis), multiple regression models, functional forms and testing for model specification, identifying and correcting for violation of CLRM assumptions, dummy variables, logit and probit models, simultaneous equation model.

BSL676 Big Data Analytics-3 credits (2-0-2)

This course introduces big data and how it impacts business. The objective behind this course is to provide an understanding of what insights big data can provide through hands-on experience with the tools. Students will be guided through the basics of using Hadoop with MapReduce, Spark, Pig and Hive. By following along with provided code, they will experience how one can perform predictive modeling and leverage graph analytics to model problems. This specialization will prepare students to ask the right questions about data, communicate effectively with data scientists, and do basic exploration of large, complex datasets. At the end of the course, students willpossess the skills necessary for utilizing tools (including deploying them on Hadoop/MapReduce) to handle a variety of big data analytics, and to be able to apply the analytics techniques on a variety of applications. Specific course topics include introduction to Big Data and Hadoop, Hadoop Architecture, MapReduce, R-Hadoop, PIG, HIVE, H-Base, Mahout.

BSL677 Applications in CRM

3 credits (2-0-2)

This course is focused on the holistic understanding of customer relationship management. Such a course must give students a real- world understanding of CRM. How do organizations implement CRM such that it benefits their business needs? How has CRM helpeddefine best practices and customer management methodology? How has CRM allowed for decision making, evolved relationships to a higher level of understanding, and more meaningful interactions? The course seeks to give students exposure to all these questions andmore. The course is divided into five sections viz. CRM concepts, CRM in Marketing, Sales Force Automation, Analytical CRM, and CRM Implementation.

BSL678 Data Mining

3 credits (2-0-2)

Modern databases can contain massive volumes of data. Within this data lies important information that can only be effectively analyzedusing data mining. Data mining tools and techniques can be used to predict future trends and behaviours, allowing individuals and organizations to make proactive, knowledge-driven decisions. The objective of thageu241sdf 349

provide individuals with the skills necessary to design, build, verify, and test predictive data models. The students will be able to understand various DM techniques for building competitive advantage through proactive analysis and predictive modelling and identifying new trends and behaviours.

The Data Mining Specialization attempts to teach data mining techniques for both structured data which conform to a clearly defined schema, and unstructured data which exist in the form of natural language text. Specific course topics include Thinking with Data, DataMining Process, Business Context of Data Mining, Data Cleaning & Preparation, Data Mining Models: Advance Regression Models, Association Analysis, Classification and Clustering, Decision Trees, Neural Networks, Text Mining, Model Deployment.

BSL679 Data Privacy and Data Security

3 credits (2-0-2)

This course will examine legal, policy, and enterprise issues and problems related to security and privacy. Electronic data will be the focus, but other forms of information also will be considered. This course will examine: 1) security issues related to the safeguarding of sensitive personal and corporate information against inadvertent disclosure; 2) policy and societal questions concerning the value of security and privacy regulations, the real-world effects of data breaches on individuals and businesses, and the balancing of interests among individuals, government, and enterprises; 3) current and proposed laws and regulations that govern information security and privacy; 4) private sector regulatory efforts and self-help measures; 5) emerging technologies that may affect security and privacy concerns; and 6) issues related to the development of enterprise data security programs, policies, and procedures that take into account the requirements of all relevant constituencies; e.g., technical, business, and legal.

BSL682 Functional Analytics- Financial Risk & Fraud

3 credits (2-0-2)

Financial analytics explores how financial statement data and non-financial metrics can be linked to financial performance. In this course, students will learn how data is used to assess what drives financial performance and to forecast future financial scenarios. Whilemany accounting and financial organizations deliver data, accounting analytics deploys that data to deliver insight, and this course willexplore many areas in which accounting data provides insight into other business areas including consumer behaviour predictions, corporate strategy, risk management, optimization, and more. By the end of this course, students will understand how financial data and non-financial data interact to forecast events, optimize operations, and determine strategy.

This course is aimed at creating a pool of data scientists with expertise in handling complex financial data with the help of advanced level statistical modelling and risk analytics tools. Specific course topics include application of descriptive, predictive, and prescriptive analytics in finance & risk management, risk-based pricing, fraud detection and prediction, recovery management, loss risk forecasting, risk profiling, portfolio stress testing.

BSL683 Functional Analytics-Marketing

3 credits (2-0-2)

Organizations large and small are flooded with data about consumer choices. Knowing how to interpret data is the challenge and marketers are increasingly expected to use analytics to inform and justify their decisions. This course introduces the students to the tools to measure brand and customer assets, perform regression analysis, and design experiments as a way to evaluate and optimizemarketing campaigns. This course is ideal for learners who want to grow their knowledge, develop their career portfolio, and improve the effectiveness of their marketing campaigns. Upon successful completion of the requirements for this course, students will be able to apply their understanding of utility theory to measure customer preferences, identify what customers' value in a product, segment customers and determine the most effective target marketing strategies.

The broad areas covered are resource allocation, product management: segmentation, conjoint analysis, marketing mix allocation, customer management: customer profits and retention using logistic regression, cross selling and optimization, digital marketing.

BSL684 Functional Analytics- People

3 credits (2-0-2)

People analytics is a data-driven approach to managing people at work. People analytics enables business leaders to make decisions about their people based on deep analysis of data rather than the traditional methods of personal relationships, decision making based on experience, and risk avoidance. In this course, the following shall be taught to students: people analytics advantages and utility; sevenpillars of people analytics success; workforce planning analytics; talent sourcing analytics; talent acquisition analytics; talent engagement analytics; analytical performance management; employee lifetime value and cost modelling; retention analytics; advancedHR analytic techniques; etc. After successful completion of the 349

course, the students shall be able to: drive short, long and medium term results through effective application of analytics; develop strong foundational skills in statistics to deliver quality results; approach HR problems with a critical thinking mindset and use critical questions to gain relevant insights; develop the foundation blocks of data analysis; leverage data visualization tools and techniques effectively and proactively avoid failures; use hypothesis testing to validate assumptions and refine proposed plans; leverage accumulated insights through effective communication to stakeholders.

BSL685 Predictive Modelling

3 credits (2-0-2)

This course will introduce the students to some of the most widely used predictive modeling techniques and their core principles. By taking this course, the students will form a solid foundation of predictive analytics, which refers to tools and techniques for building statistical or machine learning models to make predictions based on data. After going through this course, students will learn how to carry out exploratory data analysis to gain insights and prepare data for predictive modeling, an essential skill valued in business. Thecourse enables students to learn, how to develop models to predict categorical and continuous outcomes, using such techniques as neuralnetworks, decision trees, logistic regression, support vector machines, and Bayesian network models; and to know the use of the binaryclassifier and numeric predictor nodes to automate model selection.

BSL687 SAS Programming

3 credits (2-0-2)

This course is for students who want to learn how to write SAS programs to access, explore, prepare, and analyze data. It is the entry point to learning SAS programming for data science, machine learning, and artificial intelligence. It is a prerequisite to many other SAS courses. By the end of this course, the students will know how to use SAS Studio to write and submit SAS programs that access SAS, Microsoft Excel, and text data. Students will know how to explore and validate data, prepare data by subsetting rows and computing new columns, analyze and report on data, export data and results to other formats, use SQL in SAS to query and join tables.

BSL688 Social Network Analysis

3 credits (2-0-2)

Social networks have always been at the heart of human interaction, but with the explosive growth of the internet over the last two decades, network analysis has become increasingly central to all branches of the social sciences: sociology, economics, political science, psychology, and so on. How do people influence each other, bargain with each other, exchange information, or communicate online? Adiverse array of deep questions about human behaviour can only be answered by examining the social networks encompassing and shifting around us. At the end of the course, the students will be able to build competitive strategies around data-driven insights and derive value from vast amounts of untapped data.

This course seeks to teach students the foundations of the new and quite coherent field of network analysis. The course will use social network analysis, both its theory and computational tools, to make sense of the social and information networks. Specific course topics include basics of networks, Random network models, Network centrality, Community, Optimization, and Application of social networkanalysis.

BSL689 SQL For Data Analytics and Business Intelligence

3 credits (2-0-2)

This course is designed to give a primer in the fundamentals of SQL and working with data so that the students can begin analyzing it for data science purposes. This course starts with the basics and assumes that the students do not have any knowledge or skills in SQL. At the end of this course, students will be able to identify a subset of data needed from a column or set of columns and write a SQL query to limit to those results; use SQL commands to filter, sort, and summarize data; create an analysis table from multiple queries using the UNION operator; and manipulate strings, dates, & numeric data using functions to integrate data from different sources into fields with the correct format for analysis.

BSL691 Spreadsheet Modelling

3 credits (2-0-2)

The basic spreadsheet is one of the most powerful and indispensable tools for data analysis that exists. The spreadsheet approach to problem solving is more accessible to managers, as they usually find spreadsheets a natural medium for organizing information and performing "what if' analyses. The emphasis of the course will be on systematic, logical thinking, and problem solving on spreadsheets, illustrated by building and analyzing models of a variety of problems in operations, finance, and marketing.

In this course, students will learn how to structure, analyze, and solve business decision problems on Excel spreadsheets. The focus willbe on problems involving optimal resource allocation and risk analysis for decisions involving auacortainty, 349

some data analysis and forecasting methods. While the underlying concepts, models, and methods of this course are mathematical in nature, we will develop them on a more intuitive and user-friendly platform of spreadsheets, analyze them using the available Excel commands, tools, and add-ins, perform sensitivity analyses of the solutions, and study their economic interpretations.

BSL692 Time Series Analysis 3 credits (2-0-2)

Analysis of financial and time series data has received substantial attention in today's business. A thorough understanding of the appliedtimes series analysis is essential for modeling, analyzing, and predicting the behaviour of such variables. Due to growing importance and relevance of applied time series econometrics in finance and other related fields, the course is designed to help the students to understandthe concepts, methods, applications, and usefulness of time series analysis to various problems relating to marketing, finance, and other avenues of business. The students will get acquainted with the main concepts of Time Series theory and methods of analysis and knowhow to use them in examining financial processes. The main topics covered in this course are introduction to time series, time series components, smoothing methods (moving average, exponential smoothing), models with trend, models with seasonality, models with trend and seasonality, stationarity, test for stationarity (unit root test), random walk models, autocorrelation and partial autocorrelation functions, ARIMA models, VAR models, cointegration, error correction models, ARCH and GARCH models.

BSL 680 Data Visualization and Expression3 credits (2-0-2)

This course is all about data visualization, the art and science of turning data into readable graphics. We'll explore how to design and create data visualizations based on data available and tasks to be achieved. This process includes data modeling, data processing (such as aggregation and filtering), mapping data attributes to graphical attributes, and strategic visual encoding based on known properties of visual perception as well as the task(s) at hand. Students will also learn to evaluate the effectiveness of visualization designs, and thinkcritically about each design decision, such as choice of color and choice of visual encoding. Students will create their own data visualizations and learn to use Open-Source data visualization tools, especially D3.js. Students will also read papers from the current and past visualization literature and create video presentations of their findings.

BSL 681 Econometrics 3 credits (2-0-2)

The course involves the economic applications of the statistical techniques of simple and multiple regression analysis. These techniques are dependent on certain assumptions which may be violated. So, part of the course involves what techniques to use if these violations occur. The course is evenly divided between the theoretical and the applied approaches to econometric analysis. The course assumes a basic knowledge of statistical analysis, e.g., hypothesis testing and interval estimation, and builds upon this knowledge.

BSL694 Marketing of Luxury Products 3 credits (2-0-2)

Marketing of luxury product's provide learning for successfully managing and marketing products and services in the luxury segment which requires a proper understanding of the corresponding markets in general, the customers and the challenges the luxury industry is facing. The course aims at exploring the fundamental strategies and business models of different companies with a high-end positioning. The course will develop a framework for understanding the essential ingredients of effective marketing of luxury products across sectors. The course will help students understand the demands and challenges faced by those seeking to become marketers in the arena of luxurymarketing. Managing business in the ever-changing markets of design, fashion, and luxury goods is a challenging task. Managers of thesector have to handle creativity, corporate image, and volatility while pursuing long term profitability through sound marketing strategies, efficient distribution plans, quality sourcing, etc. The course hails its foundation from marketing in the field of luxury products. The course helps students in addressing the interpretation of economic, commercial, marketing and communication logic specific to the luxury sector. The course is related to international business area courses to identify and interpret various barriers of international trade and business. The course also has implications from the sustainable business perspective as the luxury is always seenwith negative eyes in socio economic sense. The course also takes into consideration the possible employment in brands which are premium, super premium, bridge to luxury etc.

BSL686 Python for Data Science 3 credits (2-0-2)

This course will introduce the learner to the basics of the python programming environment, including fundamental python programming techniques such as lambdas, reading and manipulating csv files, and the numpy library. The course will **Page 214 of 349**

introduce data manipulation and cleaning techniques using the popular python pandas data science library and introduce the abstraction of the Series and Data Frame as the central data structures for data analysis, along with tutorials on how to use functions such as group by, merge, and pivot tables

BSL693 Web and Social Media Analytics

3 credits (2-0-2)

The phenomenal growth of social media has transformed the social, political, and technological landscapes. Social media sparked a revolution by putting knowledge production and communication tools in the hands of the masses. This course will examine topics in social data analysis, including influence and centrality in social media, information diffusion on networks, topic modeling and sentimentanalysis, identifying social bots, and predicting behavior. This course focused on how AI, network analysis, and statistical methods can be used to study these topics.

BSL694 Marketing of Luxury Products

3 credits (2-0-2)

Marketing of luxury product's provide learning for successfully managing and marketing products and services in the luxury segment which requires a proper understanding of the corresponding markets in general, the customers and the challenges the luxury industry is facing. The course aims at exploring the fundamental strategies and business models of different companies with a high-end positioning. The course will develop a framework for understanding the essential ingredients of effective marketing of luxury products across sectors. The course will help students understand the demands and challenges faced by those seeking to become marketers in the arena of luxurymarketing. Managing business in the ever-changing markets of design, fashion, and luxury goods is a challenging task. Managers of thesector must handle creativity, corporate image, and volatility while pursuing long term profitability through sound marketing strategies, efficient distribution plans, quality sourcing, etc. The course hails its foundation from marketing in the field of luxury products. The course helps students in addressing the interpretation of economic, commercial, marketing and communication logic specific to the luxury sector. The course is related to international business area courses to identify and interpret various barriers of international trade and business. The course also has implications from the sustainable business perspective as the luxury is always seenwith negative eyes in socio economic sense. The course also takes into consideration the possible employment in brands which are premium, super premium, bridge to luxury etc.

BSP502 Management Lab (Python) 1 Credit (0-0-2)

The course deals with core fundamentals of programming, Data Structures, Algorithms and its functioning using the programming language, Python. The involvement of the practical technique of problem-solving will provide better understanding of the concepts of the course. Students can learn to design efficient algorithms in this course and become ready for future job requirements.

BSP601 R-Programming for Analytics 2 Credit (0-0-4)

Over the recent years, R language has become the leading software tool for statistical computing and graphics. The software is greatly enhanced by numerous contributed packages submitted by users. The purpose of this course is to set a foundation for full exploitation and creative use of the statistical language for computing and graphics in R. In this course, students will learn to program in R and how to effectively use R for statistical computing. The course emphasis is on data manipulation and basic statistical analysis. Students will identify appropriate statistical methods for the data or problems and conduct their own analysis using the R environment.

The main topics covered are introduction to R and RStudio, general introduction to computing, data types, basic operations, control structures and looping in R, data manipulation, probability distributions and simulations, plotting, exploratory data analysis, basic statistical analysis, linear regression.

BST601 Summer Training 4 credits (0-0-8)

At the completion of the second semester, each student would be expected to undergo a six to eight-week internship in a business organization. The student would be expected to identify a particular business issue and suggest ways to see improvements in that field of business.

BSL517 Negotiation & Influence 3 Credits (2-0-2)

This course will strive to dispel the common and pervasive belief that people are either good or bad at negotiation and little can be done about it. Some of this stems from the thought that negotiation is a zero-sum game. The same basic communication and cognitive skills that got you where you are today - advancing toward your personal and professional goals - are the ones you need to negotiate effectively. Negotiation is not based on simple intuition. Inste**Rage 215**at6349

rooted in understanding people, process, perception, and presentation. Together, we will work to give you the confidence to build your own reputation as a negotiator and to strengthen your practice through rehearsal, discussion, and debate. A student will learn critical frameworks and bargaining tactics to build alliances, strengthen interpersonal dynamics, allocate resources, balance competing interests, and resolve conflicts of all kinds. At the conclusion of this course, a student will have gained critical skill sets, techniques, and communication methods to become a completer and more collaborative negotiator. Student will learn how to build trust and rapport, to establish fairness and maximize value, and to apply trust-based influence in his/her relationships.

BSL518 Legal & Ethical Aspects of Business 3 credits (2-0-2)

The Indian Contract Act, 1872; The Companies Act, 1956; The Partnership Act, 1932, The Negotiable Instruments Act, 1881 - As Amended by The Negotiable Instruments (Amendment and Miscellaneous Provisions) Act, 2002. Indian Companies Act, 2013 with Amendments up to date. Consumer Protection Act, 1986 and Competition Act, 2002, IPR. Ethics and Business Ethics, Concepts, Values and Theories of Business Ethics: Shareholder Theory, Normative Theories, Utilitarianism, Kantianism, The Stockholder Theory, The Social Contract Theory. Teachings of the Church, Gandhian Principles, Business and Gita, Business, and Islam. Ethical models that guide decision making, Applying Moral Philosophy to Ethical Decision Making, Ethical Dilemma, The Process of making good ethical decisions. Globalization and Business Ethics. Corporate Ethics: Good Governance, Investors Protection. Corporate Social Responsibility - Definitions of CSR, CSR models, CSR as a business strategy for sustainable development, External standards on CSR, Future of Indian CSR, Consumer Protection Act, 1986. Environmental Ethics & Ethics in Indian Business- History of Environmentalism, Environment Preservation: Role of Stakeholders, Media; Industrial Pollution, Waste Management and Pollution Control, Carbon Emissions, Environment Protection Act, 1986; Major Indian Scams, Corruption, Black Money, Coercion, Insider Trading, Tax Evasion, Pollution, etc.

BSP504 Advanced Excel 2 Credits (0-0-4)

Microsoft Excel is one of the most used products of Microsoft office. It is used for data entry, data analysis, data presentation, or calculation. The best thing about Microsoft Excel is that this totally depends on your skill level. You can use MS Excel for any beginner or advanced level task, it will be equally efficient & easy to use in either case. This MS Excel course is Advance Level or Expert Level training especially for students, teachers, or researchers, or for anyone who has basic or intermediate level Microsoft Excel knowledge & now wants to learn Advance Level, MS Excel.

BSL695 Security & Portfolio Management 3 Credits (2-0-2)

This course is designed to teach the fundamentals of investments along with the analysis and strategies to become successful investor. It will start from the investment introduction to the performance evaluation of securities and portfolio. To understand deeper how market works, students will be taught the stock market fundamental. It discusses the risk return trade-off of an individual investor; it also persists how investment in securities market is evaluated based on Fundamental are page 216 of 349

and Technical analysis. It also discusses application of Modern Portfolio Theory, analysis of active and passive investment strategies, and measurement of portfolio performance. This course will also emphasize students to learn forces that affect security market. This course provides a broad overview of investment management, focusing on the application of finance theory to the issue faced by portfolio managers and investors in general and to provide conceptual foundation for the purpose of undertaking Investment analysis for securities as well as portfolios. At the end of this course students should be able to have a theoretical and practical background in the field of investments. A student can design and manage the bond as well as equity portfolios in the real word & valuing equity and debt instruments. Student will be measuring the portfolio performances.

BSL696 Behavioural & Personal Finance 3 Credits (2-0-2)

This course will cover the behavioural aspects of financial decision making and personal finance planning. The students shall be introduced to the theoretical, mathematical, and empirical underpinnings of anomalies and biases that investors face in financial markets. The course also focuses the behavioural approach of investment and personal financial planning. Through this course, we do not hope to make you 'financially literate' or advise you what to do with your money. Instead, the course will help you explore some of the most common biases and mistakes that we, as individuals, make while dealing with money (or something of that sort). With the help of discussions on related theories, mathematical illustrations, and experimental exercises, participants should be able to become familiar with terminology, techniques and approaches used in denationalized financial services industry. Most of techniques can also be relevant to traditional financial advisory services, the products, and services in the fintech domain, and public policy.

DETAILED COURSE DESCRIPTIONS FOR BBA PROGRAMME

BSL101 Entrepreneurship 3 Credits (2-0-2)

This course gives students an overview of -Introduction to Entrepreneurship, Benefits of Entrepreneurship, As a Career option, Entrepreneurial Entrepreneurial spirit. competencies, Entrepreneurship development programs, Entrepreneurial support, Policy initiatives for entrepreneurial growth, Ease of doing business; Social Entrepreneurship; Family Business. MSME's, Opportunity identification, Idea Generation; Conducting Feasibility analysis, Property, Business Intellectual Preparation, Business Models, Porter's forces, Resource Mobilization: Entrepreneurial finance. Managing operations, Marketing strategies, Talent acquisition for new ventures; Project Management, Project appraisal, E-Business, Growth, Exit strategies, Social Responsibility.

BSL102 Principles of Management 3 Credits (2-0-2)

This course includes - Management and analysis of basic organizing, leading, directing, and controlling for establishing and accomplishing business objectives, the scope of this study will also include aspects of the principles of management on individuals and organizations. The design of the course includes the basic mechanics business operations; manufacturing, marketing and maintaining financial focus in a rapidly changing and competitive market.

BSL103 Fundamentals of Marketing Management 3 Credits (2-0-2)

This course includes - Defining Marketing for the 21st Century: Marketing Concept and Process; The changing marketing Landscape and Developing Marketing Strategies and Plans: Role of marketing in company's strategic planning; Customer drives marketing strategy and integrated marketing

mix; managing the marketing effort. Scanning the Marketing Environment, Forecasting Demand, and Conducting Marketing Research; Creating Customer Relationships: Value and Customer Analyzing Consumer Markets Analyzing Business Markets. Identifying Market Segments and Targets; Competitive Dynamics; Crafting the Brand Positioning; and Creating Brand Equity. Designing Value: Setting Product Strategy; Designing and Managing Services and Developing Pricing Strategies and Programs. Delivering Value: Designing and Managing Integrated Marketing Channels and Managing Retailing. Wholesaling. and Logistics. Communicating Value: Designing and Managing Integrated Marketing Communications: Managing Mass Communications: Managing Personal Communications. Creating competitive advantages; marketing in the global environment; managing the holistic marketing effort; introducing new marketing offerings; social responsibility of marketing.

BSL104 Introduction to Human Resource Management

3 Credits (2-0-2)

This course includes - Nature and scope of Human Resource Management; Human Resource Planning; Job Analysis - Job description - Job specification; Recruitment and Selection - Types – Interview types and selection process. Employee testing -Importance of Selection - Psychological tests – Other information; Development of Human Resources - Types of training and Executive Development - Performance appraisal – Methods and uses; Maintenance of Human Resource - Motivation and Reward System.-Job evaluation Compensation – Wage and salary, Incentive patterns - Collective Bargaining – Types and process; Employee problems – Disciplining, Promotion. Transfer and Separations -Employee welfare safety health benefits and services - Industrial Counselling and Intervention Programmes; Participative management – Quality circles – Total quality

management – Industrial relations – Employee communication – Human Engineering – Working conditions – Improvement in work environment – International Human Resource Management.

BSL105 Fundamentals of Organizational Behavior

3 Credits (2-0-2)

This course includes - Introduction to Organizational Behavior: Emergence & OB as a Discipline; Reasons for Studying OB; Challenges in OB. Individual behavior and Processes: Values in the Workplace and across work cultures; Ethical Behavior. Organizations Personality in Determinants, Personality Theories, Traits. Perception, Workplace Attitudes & Ethics, Learning, Emotions and Moods, Satisfaction. Motivation and **Applied** Performance Practices. Stress Management. Group Processes and Team Effectiveness: Decision making and Creativity; Model of Team Effectiveness; Organizational & Team Environment; Team Design Features; Team Diversity Challenges; Team Processes & Problems (Process Losses & Brook's Law and Social Loafing); Self-directed Work-Teams; Virtual Teams; Team Trust; Team Decision Making and; Team Building. Communication, Power & Influence and Conflict management: Communication Channels, Barriers and Process; Crosscultural and Cross-Gender Communication; Improving Interpersonal Communication through Transactional Analysis; Communicating in Organizational Hierarchies: Thomas Kilmann's etc. Conflict Management's styles. Leadership in Organizational Settings _ Different Perspectives. Organizational Structure and Design, Organizational Culture, Climate and Change.

BSL201 Fundamentals of Operations Management 3 Credits (2-0-2)

This course is an introduction to the concepts, principles, problems, and practices

of operations management. Emphasis is on managerial processes for effective operations in both goods-producing and service-rendering organization. Topics include operations strategy, process design, capacity planning, facilities location and design, forecasting, production scheduling, inventory control, quality assurance, and project management. The topics are integrated using a systems model of the operations of an organization.

BSL204 Fundamentals of Consumer Behavior

3 Credits (2-0-2)

course includes This Consumer Demographics, Life Styles, Retailing Implications of Consumer Demographics and Lifestyle, Consumer Profiles, Lifestyle Marketing, Environmental Factors and Individual Factors affecting Consumers. Consumer as an Individual, Motivation, Needs, Goals, Personality, Self and Self Images, Perception, Imagery, Learning, Cues, Response, Reinforcement, Behavioral Learning and Cognitive Learning Theory, Brand Loyalty, Attitude Formation and Change, Shopping Attitudes and Behavior, Consumer Buying Decision Process, Types of Consumer Decision Making, Impulse Purchases and Customer Loyalty, Group Dynamics and Reference Groups, Family Decision Making, Social Class, Culture, Subculture, Opinion Leadership Process, Diffusions of Innovations. Adoption Process.

BSL206 Basics of Leadership 3 Credits (2-0-2)

The course includes concepts pertaining to understanding people leadership, importance of self-awareness and seeing the other's point of view through their lens, self-awareness, making effective choices, building relationships, active listening, building a team, communicating with people. The course aims to make the students conversant with the concept of leadership and its relevance especially in today's dynamic business environment. Includes

theories of leadership, development of leaders and succession planning, building a team, ethics and leadership and contemporary issues in leadership.

BSL209 E-Commerce 3 Credits (2-0-2)

This course includes - Present concepts and skills for the strategic use of e-commerce and related information technology from three perspectives: business to consumers, business-to-business, and intraorganizational. Examination of e-commerce in altering the structure of entire industries, and how it affects business processes including electronic transactions, supply chains, decision making and organizational performance.

BSL301 Business Policy and Strategy 3 Credits (2-0-2)

The nature of business planning and strategic management: Key terms of SM. Levels of strategies, Decision making criteria and approaches. management Strategic processes: The SM Model and its limitations. Business vision and mission, Importance and characteristics. Issues in setting the objectives. Environment scanning **SWOT** analysis: Environment components, Industry analysis Competitive forces. Competitive analysis:

Porters 5- forces. Formulation of strategies: Business forecasting- Need and steps. Forecasting techniques; Internal analysis, Nature of internal environment, Value chain analysis, Evaluation of key internal factors, financial statements/ratio analysis. Long term objectives and grand strategies Long term objectives. Grand strategies, Integration and diversification, Mergers and acquisition, Turnaround strategies, Analysis of strategies, Portfolio and matrix analysis, SWOT analysis.

BSL303 International Business 3 Credits (2-0-2)

Import management, Export management International capital management,

International trade finance, Foreign trade policy, Communication skills, Foreign-exchange, Trade agreements, International labor laws, Legal aspects, Economic aspects Accounting practices.

BSL304 Investment Management 3 Credits (2-0-2)

This course broadly covers financial instruments, such as equity, fixed income, and derivative securities, as well as key concepts in international finance. It makes use of spreadsheet modeling to implement financial models. It starts with discussing investment theories that concern dealing with risk in general, although equity securities will be our primary focus during this unit. Then proceed to discussing concerning fixed-income concepts securities, such as pricing of these securities, yields, as well as theories about risk concerning the term structure of interest rates. Third unit discusses derivative securities, and here, besides the basics of markets and instruments available, we will spend a great deal of time discussing the pricing of such securities. An application of many of these topics to investing across borders (international finance), as well as a discussion of the different types of risk involved in such investments and how these can be dealt with wraps up the course.

BSL331 Customer Relationship Management 3 credits(2-0-2)

Fundamentals of CRM, CRM strategy, CRM vision, CRM Process, marketing metrics, customer profiling, assessing customer value(e.g., RFM, LTV and other analyses), assessing customer profitability. Customer acquisition tools, Measuring and improving lovalty, media allocation, customer channels marketing distribution and campaign management. Several advanced statistical techniques will be introduced including: linear regression, logit, decision trees, lift charts, hazard models and linear programming. CRM Technology: In keeping with the hands-on nature of the course,

students will be instructed on how to implement the CRM techniques using industry-standard software. Individual customer approach and the role of technology in CRM.

BSL332 Management of Sales and Distribution

3 credits (2-0-2)

Manage sales and channel teams for different types of selling, with the purpose of enhancing value-based output and productivity; concept and effect of sales organization and sales effort, sales process, the relationship between sales and marketing, sales force structure, customer relationship management (CRM), use of technology to

improve sales force effectiveness, and issues in recruiting, selecting, training, motivating, compensating and retaining salespeople.

BSL333 Marketing & Consumer Analytics 3 credits (2-0-2)

This course introduces the students to the tools to measure brand and customer assets, perform regression analysis, and design experiments as a way to evaluate and optimize marketing campaigns. This course is ideal for learners who want to grow their knowledge, develop their career portfolio, and improve the effectiveness of their marketing campaigns. The broad areas covered are resource allocation, product segmentation. conjoint management: analysis, marketing mix allocation, customer management: customer profits and retention using logistic regression, cross selling and optimization, digital marketing.

BSL334 Fundamentals of Retail Management 3 credits (2-0-2)

The course is designed to provide an indepth understanding of the retail marketing, building sustainable relationships, decision making skills related to retailing, buyer's behavior, pricing strategies and delivery channels to the end users. Its contents

include. Basic Concepts: Definition. Importance and scope of Retailing; The Retail Scenario in India: Retail Formats. Information Gathering in Retailing: Retail Strategic Planning and Operation Management; Retail Financial Strategy; Target Market Selection and Location; Store Design and Layout; Visual Merchandising and Displays. Merchandise Planning, Buying and Handling, Customer Relationship Management. Retail Management Information Systems: Online Retailing; Global Retailing; Legal and Ethical Issues

BSL335 Marketing of Services 3 credits (2-0-2)

Students examine the important issues facing service providers and the successful implementation of a customer focus in service-based businesses. Topics include an overview of services marketing; understanding the customer in services marketing; standardizing and aligning the delivery of services; the people who deliver and perform services; managing demand and capacity; and promotion and pricing strategies in services marketing.

BSL336 Advertising and Promotion 3 credits (2-0-2)

Advertising and Promotions have assumed one of the central roles in marketing communications. This course examines the role of advertising in how brands are built and managed. Particular emphasis is placed on students' understanding of the link between effective advertising and promotions for brand success that will improve managerial decision-making with respect to brands. Among other issues, this course will capture advertising promotion methods and techniques, brand equity, managing brands over time and across geographic boundaries, and the application of the marketing mix to support brand strategies.

BSL337 Fundamentals of Strategic Marketing

3 credits (2-0-2)

The course examines the development and implementation of marketing strategy by providing a framework from which to identify and evaluate strategic options and Topics: forecasting programs. contextual possibilities, product-market definition, relationships with channels of distribution, relationships with customers, competitive analysis, financial models for marketing strategists, portfolio models, strategic assessment of offerings, marketing strategy implementation systems. This course requires that students have a strong foundation of marketing knowledge gained from Introduction to Marketing (in particular a knowledge of market segmentation).

BSL338 Marketing in Digital Era 3 credits (2-0-2)

This course provides learners the ability to formulate and enact intelligent, data-driven marketing strategies. Core content will focus on identifying and understanding digital marketing metrics to gauge success of both social media and traditional digital marketing efforts.

BSL339 Recruitment and Selection 3 credits (2-0-2)

Recruitment Challenges: How to make recruitment efforts succeed, Workers Expectations – Recruitment Sources. Proactive and Reactive Recruitment. Innovative Recruitment Sources, Electronic Recruitment, Reference Check, Guidelines for Releasing and Obtaining Information. Ability Tests: Mental Ability, Effects of Practice and Coaching, Mechanical Ability Personality Test, Measurement Test. Personality Assessment. International Recruitment & selection Practices.

BSL340 Performance and Competency Management 3 credits (2-0-2)

Performance appraisal system implementation: Defining performance, determinants of performance, performance dimensions, approaches to measuring

performance, Conducting Staff Appraisals: Introduction, need, skills required, the role of the appraiser, job description & job specification, appraisal methods, raters collection, conducting errors, data appraisal interview, Performance Consulting: Concept, need for the performance consulting, role of the performance consulting, Concept and Definition of Role and Competency, Characteristics of Competency, Competency Versus Competence, Performance Versus Competency.

BSL341 Employee Training and Development 3 credits (2-0-2)

Study the concepts and processes of training and development (T&D), principles and process of training and development; develop an understanding of how to assess training needs and design programmes in an organizational setting; to familiarize learners with the levels, tools and techniques involved in evaluation of training Effectiveness and: to develop understanding on various training and nontraining solutions to improve employee performance.

BSL342 Industrial Relations and Labor Laws

3 credits (2-0-2)

Introduction to Industrial Relations and origin of Labor Laws. It covers topics like Collective bargaining, Health and Safety, Social Security measures. Major Laws related to factories like The Factories Act, 1948, Industrial Disputes Act, 1947, Trade Unions Act, 1923, Payment of Wages Act, 1936. Other areas like equal remuneration, provident fund, gratuity, ESI, Standing Orders Act are covered.

BSL343 Compensation and Reward Management 3 credits (2-0-2)

The course starts with a brief introduction to factors affecting compensation, theory of wages, role of different parties contributing to the compensation system. Role of performance appraisal in compensation system, team-based pay, merit pay, legislations affecting compensation systems, salary progressions, designing the salary structure of top middle and lower management. Designing incentives and benefit programs.

BSL344 Organization Change and Development 3 credits (2-0-2)

Organizational Change and Development (OCD) is a field of research, theory, and practice dedicated to expanding the knowledge and effectiveness of people to accomplish more successful organizational change and performance. The course shall enable the students to understand the philosophical, historical, theoretical, political and practical underpinnings of Organization change and development as a core area of practice within HRD; increase awareness of different tools that are used to diagnose organizations as well interventions used through hands-on experience and; enhance skills in facilitation, OD skills, group process, communication, and collaboration. Main topics shall include: introduction to organization development; the nature of planned change; the od practioner; entering and contracting; diagnosing organizations, groups and jobs – collecting and feeding information: designing individual. group organizational level interventions; strategic change interventions; action research; etc. At the end of the course, the students shall have basic theoretical and competency base in OD that they will need to be able to assist with and facilitate positive, planned change efforts within the organizations in which they work.

BSL345 Cross Culture HRM 3 credits (2-0-2)

Recent definitions concern IHRM with activities of how MNCs manage their geographically decentralized employees in order to develop their HR resources for

competitive advantage, both locally and globally. The role and functions of IHRM, the relationship between subsidiaries and headquarters, and the policies and practices are considered in this more strategic approach. IHRM is also defined as a collection of policies and practices that a multinational enterprise uses to manage local and non-local employees it has in countries other than their home countries.

BSL346 Fundamentals of Strategic HRM 3 credits (2-0-2)

Through a sequence of readings, lectures, cases, and experiential exercises, this course will introduce students to strategic human resource management. The course focuses on developing a strategic approach to topics recruitment selection, such as & performance appraisal, measuring employee outsourcing. and strategic behaviors. integration. The students will prepare foremost classes by completing assigned readings, including readings of business cases.

BSL347 Financial Reporting and Analysis 3 credits (2-0-2)

Accounting is the language of business. It attempts to measure and report corporate performance. Managers use accounting in making decisions; while investors use it for valuing stocks. The bankers and lender rely on accounting information to decide to whether to lend money to business. The accounting information is also crucial in evaluating the performance of employees at various levels in an organization. Thus, it is very important for a business executive to have a fair knowledge of accounting.

BSL348 Introduction to Financial Institutions and Market 3 credits (2-0-2)

This course includes the organization, management and regulation of financial service providers. It provides awareness about the regulatory framework in which the financial service industry operates. Financial instruments at the disposal of the industry

and on their specific use at the hand of financial service providers have also been incorporated in this course. It also considers recent developments, including technological advances and economic globalization, have instilled renew editor in activities such as acquisitions and mergers, and contemplates the future of the industry. Topics include Non-Banking Financial Services, Insurance Services, Merchant Banking, Credit Rating Services, Factoring and Forfaiting, Venture Capital, Plastic Money (Credit cards), Lease & Hire Purchasing, Housing Finance

BSL349 Insurance and Risk Management 3 credits (2-0-2)

Concept of Risk, Types of Risk, Risk Appraisal, Transfer and Pooling of Risks, Concept of Insurable Risk. Introduction to Insurance and its Types. Concept of Insurance, Relevance of Insurance to the emerging socio-economic needs of all the sections of society including Industrial sector, Types of Insurance Organizations, Insurance Business. Intermediaries Business · Formation Insurance Contracts. Formation of Insurance Contract, Life, Fire, Marine and Motor Insurance Contracts, Principles of Insurance: Utmost Good Faith, Indemnity, Insurable Interest Classification of Insurance. Classification of Insurance: Life, Non-Life (general), Health, Pension, Social Security and Retirement Benefits, Insurance Products.

BSL350 Fundamentals of Money and Banking

3 credits (2-0-2)

The objective of this course is to enable the student to gain at thorough understanding of the business of modern commercial banking. Topics include: functions of a bank in the economy, financial statements of a bank and measurement of profitability via ratios, bank lending policies and procedures and lending regulations, investment function in banking, asset liquidity management, reserve requirements, estimating a bank's liquidity

needs, bank sources of funds: deposits, nondeposit liabilities, and equity.

BSL351 Introduction to Portfolio Management 3 credits (2-0-2)

Portfolio management presents the best investment plan to the individuals as per their income, budget, age, and ability to undertake risks. **Portfolio** management minimizes the risks involved in investing and increases the chance of making profits. One proven way to spread risk comfortably throughout your portfolio is to make sure you sufficiently diversify your investments. However, it remains a vital strategy for minimizing the risk that often helps investors to achieve their financial goals. The main topics to be addressed in this course are portfolio construction, Markowitz model, the Sharpe Index model, capital asset pricing theory, arbitrage pricing theory, portfolio evaluation, and revision.

BSL352 Microfinance in India 3 credits (2-0-2)

This course will introduce students the concept of Micro credit and Micro finance. Features and Benefits of Micro Finance. Important role of Micro Finance and why it is needed. Micro Finance refers to the provision of affordable financial services such as small loans, small savings, micro insurance and funds transfer facilities extended to socially and economically poor and disadvantaged segments of the society to enable them to increase their income levels and improve standard of living. The main aim of microfinance is to provide small loans to poor people particularly living below poverty line, who are not able to raise loan for productive purposes from other sources and to improve their standard of living by increasing their earning and saving covering associated risks.

BSL353 Cost and Management Accounting 3 credits (2-0-2)

Cost and Management accounting: Meaning, nature, scope and functions of cost and management accounting, role of management accounting in decision making. Financial statements: meaning, limitations of financial statements, objectives and methods of financial statements analysis, ratio analysis, classification of ratios – profitability ratios, turnover ratios and financial ratios, advantages of ratio analysis, limitations of accounting ratios. Fund flow statement, Cash flow statement (As per Indian accounting standard-3).

BSL381 Product and Brand Management 3 credits (2-0-2)

This course facilitates learners to understand product portfolio and strategies for building and managing any product as a sustainable brand in the marketplace. This course includes several concepts, like product planning, design thinking, new product development, the significance of brand management, understanding brand equity and managing the brand over time. The course structure is designed in such a way by which, learners will gain knowledge of various aspects and strategies under product and brand management.

BSL382 Marketing Communication 3 credits (2-0-2)

Marketing communication is an essential concept for promoting any product or service brand. This course is designed to familiarise the learners with essential concepts and models for executing prolific integrated marketing communication programs. The course of marketing communication will help learners to boost their understanding for the development of marketing communication programs to acquire and retain customers by enhancing their loyalty towards the brand. Main topics include the role of integrated marketing communications, organising for advertising and promotion. consumer behaviour perspective, the communication process, promotional objectives and budgets, creative strategy, media planning and strategy, broadcast/print and support media,

direct marketing, sales promotions, PR and publicity, personal selling, international promotion, business-to-business promotions, and regulations and ethics.

BSL390 HR Audit 3 credits (2-0-2)

HR Audit is a valuable risk mitigation tool used in assessing the effectiveness of HR Function within the organization. The course will help students to define the key concepts associated with HR Audit, have a complete understanding of the concept, evolution and the Purposes of HR Audit, and clarity of the desired practices of HR work and roles within the organization (HR Professional, Line Managers). The course will enable students to identify the scope & areas of Human Resource Audit, perform periodic and formal organizational assessments and reviews with knowledge and confidence, evaluate current effectiveness and establish a baseline for future improvement, assess the current knowledge and skills required of HR practitioners, identify steps that HR Professional should follow in managing the Human Resource Audit process elucidate the different approaches and models in carrying out the Human Resource Audit.

BSL391 Systems Thinking 3 Credits (2-0-2)

Systems thinking is a way of helping a person to view systems from a broad perspective that includes seeing overall structures, patterns and cycles in systems, rather than seeing only specific events in the system. This broad view can help one to quickly identify the real causes of issues in organizations and know just where to work to address them. This course on systems thinking introduces students to systems thinking, systems modelling techniques, and how these are used addressing sustainability. **Systems** thinking understanding aids in complexity and interconnectedness that makes many real-life situations difficult to manage. It is about understanding an issue by analysing the whole, rather than the parts. It

acknowledges that, as parts interact, their combined output can be both synergistic and emergent, making analysis of the parts independently insufficient for addressing sustainability. On completion of the course, students will be able to define the systems, thinking perspective and language; explain the systems thinking process; identify and apply several systems thinking approaches; analyse how systems evolve; compare the study of individual components to the analysis of entire systems; and; evaluate how system level thinking informs decisionpublic and/or making, policy, the sustainability of the system itself. Brief content of the course: system philosophy, theory, methodology and systems practice.

BSL392 Workplace Diversity and Inclusion 3 credits (2-0-2)

This course examines the effect diversity has in the modern workplace both domestically and internationally. The focus is on issues related to cultural, racial, ethnic, religious, linguistic, physical, gender, and differences, among others. Students will analyse and gain an appreciation for diverse demographics and the meaning dimensions of diversity in the workplace and examine the implications and impact of ethics and social responsibility of managing a diverse workforce. The course shall enable investigate the diverse students demographics and the meaning of diversity in today's workplace; analyze the implications and impact of social responsibility when managing a diverse workforce; evaluate, and critique the implications of stereotyping, prejudice and workplace discrimination; workplace assess challenges and when creating opportunities inclusive corporate cultures and; apply course learning to student's organization and personal work environment. Brief multiculturalism, basics and concepts in diversity and inclusion; diversity dimensions viz., gender, age, religion, socio-economic LGBTO, etc.; multigeneration factors. diversity at the workplace; diversity in

VUCA world; diversity in different organizations; diversity programme management; issues of justice around workplace diversity; leadership and diversity; organizational biases; workplace equity; future issues in workplace diversity and inclusion; and; strategic management of diversity.

BSL501 Management Principles & Practices 3 credits (2-0-2)

Nature & Purpose, Evolution, Patterns of Mgmt Analysis and system Approach to management, Roles, Skills, and Functions of managers. Review of Various Schools of Management Thought. Planning - Concepts & importance, Strategic, Tactical & Operational Types, Steps in Planning, Limitations of Planning and Planning Premises. Management by Objectives (MBO), SWOT analysis; System Dynamics Models for policy planning; Vision, Mission, and Core values. Decision Making. Organizing - Nature and Types of Organizations; Departmentalization; Span of Management; Centralization and decentralization; line & Staff Authority, Authority & Responsibility; Matrix form of organization structure. Motivation - Concepts various theories Motivation: of McGregor's theory X and Theory Y, Maslow's Hierarchy of Needs, Alderfer's Theory, Herzberg's Motivation-Hygiene theory, Vroom's Theory and Porter Lawler's Model of Motivation Leadership - Concepts and various theories of leadership; The Michigan Studies, The Ohio Leadership Studies, Fiedler's Contingency theory, path-Goal theory, The managerial Grid, Charismatic leadership, Transactional & Transformational Leadership; Johari Window, Transaction Analysis and Communication. Controlling -Controlling Process and Control Techniques; types of control; proactive vs. reactive controls: Selective: Feedback and Feed forward control; design of cost-effective controls; management by exception and selective control policies.

BSL503 Organizational Behavior 3 credits (2-0-2)

Introduction to Organizational Behaviour: Emergence & OB as a Discipline; Reasons for Studying OB; Challenges in OB. Individual behavior and Processes: Values in the Workplace and across work cultures; Ethical Behaviour. Personality in Organizations - Determinants, Personality Theories, Traits. Perception, Workplace Attitudes & Ethics, Learning, Emotions and Moods, Job Satisfaction. Motivation and Applied Performance Practices. Stress Management. Group Processes and Team Effectiveness: Decision making and Creativity; Model of Team Effectiveness; Organizational & Team Environment; Team Design Features; Team Diversity Challenges; Team Processes & Problems (Process Losses & Brook's Law and Social Loafing); Self-directed Work-Teams; Virtual Teams; Team Trust; Team Decision Making and Team Building. Communication, Power& Influence and Conflict management: Communication Channels, Barriers, and Process; Cross-cultural and Cross-Gender Communication; **Improving** Interpersonal Communication through Transactional Analysis; Communicating in Organizational Hierarchies; etc. Thomas Kilmann's Conflict Management's styles. Leadership in Organizational Settings - Different Perspectives. Organizational Structure and Design, Organizational Culture, Climate and Change.

BSL505 Marketing Management 3 credits (2-0-2)

Defining Marketing for the 21st Century: Marketing Concept and Process; changing marketing Landscape and Developing Marketing Strategies and Plans: Role of marketing in company's strategic planning; Customer drives marketing strategy and integrated marketing mix; managing the marketing effort. Scanning the Marketing Environment, Forecasting Demand, Conducting Marketing and Research; Creating Customer Value and Customer Relationships; Analyzing Consumer Markets and Analyzing Business Markets. Identifying Market Segments and Targets; Competitive Dynamics; Crafting the Brand Positioning; and Creating Brand Equity.Designing Value: Setting Product Strategy: Designing and Managing Services and Developing Pricing Strategies and Programs. Delivering Value: Designing and Managing Integrated Marketing Channels and Managing Retailing, Wholesaling, and Logistics. Communicating Value: Designing

and Managing Integrated Marketing Communications; Managing Mass Communications: Managing Personal Communications.Creating competitive advantages; marketing in the global environment; managing the holistic marketing effort; introducing new marketing offerings; social responsibility of marketing.

BSL506 Decision Science 3 credits (2-0-2)

Role of effective decision making in management; Process of decision making; types of decisions; qualitative quantitative approaches to decision making; Bowman's management coefficient model; Counter-intuitive behaviour of social systems and role of system dynamics models in complex non-linear dynamical systems modeling. Operations Research / Decision Science / Management Science - Concepts and processes; types of OR models deterministic stochastic, multi-criteria decision making; Decision Theory – DMUC, DMUR, DMUU, sequential decision making - decision tree; competitive decision making - theory of games. Models of decision making - Deterministic models - linear Programming, Simplex method; duality theory; special cases of linear programming – transportation, transshipment; assignment models; sensitivity analysis; shortest route; t salesman problem; raveling dynamic programming. Probabilistic models decision making - waiting line models -M/M/I, M/G/I, M/M/S queues; Monte Carlo application simulation to various manufacturing and service systems; Markov Decision Process. Multi-criteria Decision making-Paired comparison; Decision Matrix; AHP; Goal programming; Group Decision Making. Case Studies employing various models from manufacturing & service systems.

BSL512 Business Research Methods 3 credits (2-0-2)

Foundations of Research: Meaning, Objectives, Motivation, Utility. Concept of theory, empiricism, deductive and inductive theory. Characteristics of scientific method – Understanding the language of research – Concept, Construct, Definition, Variable. Research Process. Problem Identification & Formulation – Research Question – Investigation Question – Measurement Issues

- Hypothesis - Qualities of a good Hypothesis –Null Hypothesis & Alternative Hypothesis. Hypothesis Testing – Logic & Importance. Research Design: Concept and Importance in Research – Features of a good research design - Exploratory Research Design – concept, types and uses, Descriptive Research Designs - concept, types and uses. Experimental Design: Concept of Independent & Dependent variables. Qualitative and Quantitative Research: **Oualitative** research Ouantitative research Concept of causality, generalization, measurement. replication. Merging the two approaches. Measurement: Concept of measurementwhat is measured? Problems in measurement in research – Validity and Reliability. Levels of measurement - Nominal, Ordinal, Interval, Ratio. Sampling: Concepts of Statistical Population, Sample, Sampling Frame, Sampling Error, Sample Size, Non-Response. Characteristics of a good sample. Probability Sample - Simple Random Sample, Systematic Sample, Stratified Random Sample & Multi-stage sampling. Determining size of the sample – Practical considerations in sampling and sample size. Analysis: Data Preparation Univariate analysis (frequency tables, bar charts, pie charts, percentages), Bivariate analysis – Cross tabulations and Chi-square test including testing hypothesis association. Ouestionnaire Construction. Measurement, Basic Scales, Validity Analysis, Reliability Analysis, Attitude Measurement Scales. Multivariate Analysis. Factor Analysis, Regression Analysis, Cluster Analysis, etc.

BSL518 Legal & Ethical Aspects of Business

3 credits (2-0-2)

The Indian Contract Act, 1872; The Companies Act, 1956; The Partnership Act, 1932, The Negotiable Instruments Act, 1881 - As Amended by The Negotiable (Amendment Instruments and Miscellaneous Provisions) Act, 2002. Indian Companies Act, 2013 with Amendments up to date. Consumer Protection Act, 1986 and Competition Act, 2002, IPR. Ethics and Business Ethics, Concepts, Values and Theories of Business Ethics: Shareholder Theory, Normative Theories, Utilitarianism, Kantianism, The Stockholder Theory, The Social Contract Theory. Teachings of the Church, Gandhian Principles, Business and Gita, Business, and Islam. Ethical models that guide decision making, Applying Moral Philosophy to Ethical Decision Making, Ethical Dilemma, The Process of making good ethical decisions. Globalization and Business Ethics. Corporate Ethics: Good Governance, Investors Protection. Corporate Social Responsibility - Definitions of CSR, CSR models, CSR as a business strategy for sustainable development, External standards on CSR, Future of Indian CSR, Consumer Protection Act. 1986. Environmental Ethics & Ethics in Indian Business- History of Environment Environmentalism. Preservation: Role of Stakeholders, Media; Industrial Pollution, Waste Management and Pollution Control, Carbon Emissions, Environment Protection Act, 1986; Major Indian Scams, Corruption, Black Money, Coercion, Insider Trading, Tax Evasion, Pollution, etc.

BSV301 Creative Thinking and Negotiation Skills 3 Credits (2-0-2)

Through this course student identify the difference between creativity and innovation Recognize their own creativity, build their own creative environment, Explain the importance of creativity and innovation in business, apply problem-solving steps and

tools, Use individual and group techniques to help generate creative ideas, Implement creative ideas.

CHL100 Environmental Studies 3 credits (3-0-0)

Through this subject, students will be studying issues like pollution, global climate change, and the depletion of natural resources, students in Environmental Studies & Earth Sciences programmes focus on the most pressing environmental and ecological issues of today.

CLL120 Human Values and professional ethics

2 credits (2-0-0)

The object of this program is to develop ethical thinking abilities for decision making, self- control, and holistic approach towards life and professions. This program would also help them to understand the importance of harmony in self, family and society, along with learning to be more responsible towards environment and society.

This program touches the topics like morals and values, integrity and honesty, and courage as a stepping stone towards a peaceful society. Topics like mindfulness, which has elements like framework of happiness quotient and Fuelling success, is included to bringing one's attention to the internal and external experiences happening in the present moment. It will also help them develop a state of mind where they pay attention to their thoughts and feelings without judging them. This entire program focuses on developing self-control and confidence through education. As the students are soon going to become professionals, to make them future ready topics like Business Ethics, Corporate Social Responsibility and corporate Governance is also included, so that being into corporate they can be effective decision makers and handle their responsibilities towards the society and organization.

CLL130 Effective Communication -1

2 credits (1-0-2)

Introduction to Communication, Types of Communication, Listening Skills, Language Communication: Language Communication; General Principles of Writing: Improving Writing Skills. Essentials of good style, Expressions and words to be avoided; Grammar and Usage, Communication Network: Scope and Types of Communication Network; Formal and Informal Communication Network; Upward Downward Communication: Communication: Horizontal Communication; Diagonal Communication, Writing Business Letter: Importance of Business Letters.

CLL140 Effective Communication II 2 credits (1-0-2)

Writing Memos, Circulars and Notices, Report Writing, Writing E-mail: Principles of E-mail; E-mail Etiquette; Overcoming Problems in E-mail Communication, Oral Communication Skills, Meetings: Types of **Employment** Meetings, Reading. Communication - Resume: Contents of Good Resume; Guidelines for Writing Resume; Different Types of Resumes; Reason for a Cover Letter to Apply for a Job-Format of Cover Letter; Different Types of Public Speaking and Cover Letters, Academic Writing.

CML101 Professional Accounting 3 Credits (2-0-2)

Introductory Framework: Accounting as an information system, Bases of accounting, Basic concepts and conventions, Branches of Accounting, International Financial Reporting Standards (IFRS). Business Income: Measurement of business income -Net income; the accounting period, the matching concept, Revenue recognition, Salient features of Accounting Standard (AS 9) Recognition of expenses. Depreciation: Nature/Methods of depreciation. Inventories; meaning, Significance of inventory valuation. Final Accounts: Capital and revenue expenditures and receipts: general introduction only. Preparation of

financial statements: a) of non-corporate business entities from a trial balance; b) Of not-for-profit organizations. Lease Financing and Accounting for Dissolution of the Partnership Firm: Concepts of operating and financial lease (theory only). Creation of recording transactions. vouchers and preparing reports - cash book and bank book, ledger accounts, trial balance, Profit and Loss Account (Income Statement) and Balance Sheets. Introduction to Tally Software (latest version).

CML107 Introduction to Banking 3 Credits (2-0-2)

Fundamentals of Banking provides students with an overview of the history, purpose, and functions of banking. The course focuses on how banks serve the financial needs of individuals, businesses, and government in today's competitive environment. Students will compare financial services offered through traditional banking institutions with other financial intermediaries. Students will be able to understand fundamental banking concept and principles, the fundamentals of how banks operate as a business, their obligation to operate in a safe and sound manner and manage risk, and the responsibilities of bank employees in a consumer-focused financial services environment.

Students will be able to identify the financial statements that banks use and explain banks' business operations, from managing assets and liabilities to maximizing returns on loans and investments, as well as minimizing expenses and risks, monitoring financial performance, and planning for the future. Students will be able to explain how banks build relationships with customers by exceeding their expectations, what factors influence their purchasing decisions, and how both banks and their customers benefit from effective sales and marketing practices.

CML108 Financial Management-I 3 Credits (2-0-2)

This course aims to equip the students with the fundamental principles & techniques of management concern financial acquisition & use of funds by a business firm. This course will examine various theories including the issues between short- & longterm financial management, risk and return, capital asset pricing model, corporate capital structure and financing decisions, dividend policy, investment and financial decisions in the international context, including exchange rate/interest rate risk analysis, and issues of corporate governance and control. essence, we will explore the very patterns of corporate finance that has shaped the familiar vet complex terrain of today's global economy.

CML109 Business Laws 3 Credits (2-0-2)

Business law is the most demanding field in today's business scenario, as every business whether it is SME or MNC has to follow rules and regulations formed by the government. Cognitive approach toward legal aspect is must for every commercial concern. Objective of this course is to expose the student with legal business environment in India and an introduction to corporate law and to legal and non-legal governance mechanisms which encourage directions to act in their company's interests rather than their own. The business law course establishes a foundation to incorporate the more complex legal perspectives of the professional. Α legal background necessary in order to develop the business person's awareness of the interrelationship between government and business, to integrate legal considerations into managerial decisions, and to evaluate the costs and benefits of particular business alternatives. Business law course provides insight on law of contract and Companies Act 2013.

At the end of the course the student will have an understanding of Contract Act, Partnership Act, Negotiable Instruments, Environment Protection, IT Act and Companies Act. Legal aspects of business provide a better insight for taking business decisions. The course's outcome is to understand the different ways in which law can respond to these economic demands and problems.

CML110 Communication and Documentation in Business 3 Credits (2-0-2)

The course is designed to provide an in-depth understanding of communication documentation in business to understand and create the way we communicate with others, develop and manage relationships and work effectively with others. Also, A business without cannot survive written communication. Accurate written records are essential for all employees in a business to communication clear make communication about the skills knowledge, objective vocabulary in words while communicating with interviewers, confident physical expressions help students to get a job after the completion of the degree. This course will help to improve the workplace writing competence of students.

CML208 Financial Management-II 3 Credits (2-0-2)

The goal of this course is to develop the analytical skills for making corporate investment with regards to financial decisions and risk analysis. An equally important component of this course is its emphasis on developing your critical auditory and erudite writing skills to a level that is commensurate with university standards. The course teaching methodologies will be composed of lectures, homework assignments and a group project. This course will examine the concept of present value, the opportunity cost of capital, discounted cash flow analysis, a consortium of valuation techniques of capital budgeting and risk analysis. The course will also be developing knowledge on the allocation, management and funding of financial resources. Enhancing student's ability in dealing short-term dealing with day-to-day working capital decision; and also, longer-term dealing, which involves

major capital investment decisions and raising long-term finance.

CSV 100 Basic Computer Skills for Professionals 2 credits (0-0-4)

Introduction to MS Word- Creation of Simple document, editing text working with table and graphic, Formatting document use of tools like spell-check, hyphenation, mailmerge printing of document, envelopes and labels. Introduction of MS Excel, meaning of workbook opening of excel sheet and work books. Formulating and printing Workbooks/sheets. Formulas and functions, graphs and chart and Introduction to Power Point, Introduction to Python.

ENL101 Statistics and Research Methodology-I 3 Credits (2-0-2)

The present course has been designed to familiarize the students with the nature and importance of statistical tools for data analysis in social science research. It starts with an introduction to the different types of statistics, levels of measurement, and concepts of population sampling. It covers various types of statistical techniques like measures of central tendency, dispersion and correlation. The course also introduces the students to methods of analyzing the differences between groups.

ENL102 Principles of Economics 3 Credits (2-0-2)

The Economic Way of Thinking: Defining Economics and Microeconomics, Scarcity and choice Basic problems of an Economy Choice and opportunity cost, Production possibility curve, Capital formation and economic growth. Market Forces of Demand and Supply: What is market competitive v/s. non-competitive market. Demand curve. Supply curve, Changes in equilibrium, How prices allocate resources. Effects of government intervention – price controls, Demand forecasting – an overview. Elasticity and its Application: The Elasticity of demand, The Elasticity of supply, Short run vs. long-run elasticity, Applications of elasticity of demand and supply. Consumer Choice, Individual and Market Demand, Cost of Production, the Analysis of Competitive Markets, National Income, Money, Inflation.

ENL204 Statistics and Research Methodology-II 3 Credits (2-0-2)

This course covers the understanding and application of appropriate research designs, research statistics, the use of computer for data analysis and report writing. In this course, students will learn how to identify problems to study, develop hypotheses and research questions, specify independent and dependent variables, check for the validity and reliability of studies and design research projects. The main topics covered in this course are background to research, literature review, nature and types of research, research applications in social sciences and business. questionnaire design, data collection methods, types of data analysis methods, writing qualitative research, nature of quantitative research, data and variables, descriptive statistics, sampling, hypothesis testing, association: correlation coefficients, bivariate regression, ANOVA, writing a quantitative study.

ENL210 Fundamentals of Spreadsheet Modeling 3 Credits (2-0-2)

The basic spreadsheet is one of the most powerful and indispensable tools for data analysis that exists. The spreadsheet approach to problem solving is more accessible to managers, as they usually find spreadsheets a natural medium for organizing information and performing "what if" analyses. The emphasis of the course will be on systematic, logical thinking, and problem solving on spreadsheets, illustrated by building and analyzing models of a variety of problems in operations, finance, and marketing. In this course, student will learn how to structure, analyze, and solve business decision problems on Excel spreadsheets.

The focus will be on problems involving optimal resource allocation and risk analysis for decisions involving uncertainty; some data analysis and forecasting methods. While the underlying concepts, models, and methods of this course are mathematical in nature, we will develop them on a more intuitive and user-friendly platform of spreadsheets, analyze them using the available Excel commands, tools, and addins, perform sensitivity analyses of the solutions, and study their economic interpretations.

FOREIGN LANGUAGE ELECTIVES

CLL200 FRENCH I 3 Credits (1-2-0)

Understand and use familiar everyday expressions and simple sentences.

For ex: Greet people; Talk about themselves; Talk about where they live; Talk about their family members.

Talk about their likes and dislikes; Engage in a simple buy-and-sell situation

Ask about the day, the time and the date; Accept and refuse an invitation; Read simple notices, posters and catalogues; Fill in a simple form; Write a simple postcard.

CLL210 FRENCH II 3 Credits (1-2-0)

The present course helps students develop an understanding of familiar everyday expressions and complex sentences. ex give directions about a city / a country, tell time, position of the objects etc.

They will be able to communicate in a simple manner, about their daily routine, order food in a restaurant, Learn to speak about their past & present habits, describe a situation in the past, develop the ability to compare past and present situations in conversations, invite someone and will be able to write a simple postcard, a mail to accept and refuse in recent past and near future.

CLL220 GERMAN I 3 Credits (1-2-0)

To greet someone, introduce yourself and others, ask someone his name and country, the alphabet and learn to spell, to get to know someone, start a conversation, numbers from 0 to 1000 and beyond, order in a restaurant and pay the bill, to understand telephone numbers, make questions with how, where from, where, what, verbs in present tense, articles in nominative, language in a foreign language class, use of dictionary, negation, nouns: singular and plural, listen to umlauts and speak, speak about cities and tourist features, about countries and languages spoken there, time data- clock time/ week days, To fix up appointments, to excuse oneself on being late, questions starting from when, from...till, prepositions related to time, separable verbs, eg, to call up, to wake up etc.

CLL230 GERMAN II 3 Credits (1-2-0)

Understand information given in a letter or text, write letters, understand and give simple instructions. understand advertisements, describe an apartment, reply to an invitation, express likes and dislikes, write a text about an apartment, describe one's daily routine, talk about past. understand iob advertisements, voice opinion on jobs, converse on telephone and talk about work, talk about clothes, understand a chat about shopping, talk about past, making one's way in a shopping mall, understand information about Berlin, name body parts, understand and explain sports exercises, visit to a doctor, Grammar includes Dative case, Personal pronouns, prepositions, Adjectives etc.

CLL270 SPANISH I 3 Credits (1-2-0)

This is an introductory course for learning and understanding of Spanish language. In this course, learners will focus on various grammatical forms through these roots, they will explore the cultural, fictional and autofictional world of Spanish speaking countries with all components of the language at beginner level such as identify, distinguish and apply grammar rules, describe oneself

and others, recognize and interpret Spanish cultural trends in short texts, construct and compose sentences in order to produce oral and written texts about their immediate environment.

CLL280 SPANISH II 3 Credits (1-2-0)

This is an intermediate course for learning and understanding of Spanish language. It includes learning to develop advanced reading and writing skills of technical & nontechnical texts and formulate projects. On the other side also build up social, professional conversation skills and understanding of the main points of clearly written, standard Spanish, as long as the text is related to things recreational activities. Learners will know how to interact in the majority of situations that may surface during the course trip throughout the regions where the language is spoken and will be able to produce simple and coherent texts on familiar subjects or on those in which he/she has a particular interest such as describing experience, events, desires and hopes, as well as briefly explain opinions or plans.

COURSE DESCRIPTION- BBA-DIGITAL MARKETING

BSL216 Digital Business 3 credits (2-0-2)

The course will Introduce students to various kinds of digital businesses, equip students with a framework to understand underlying digital business models and routes to market success, provide an understanding of different digital business strategies available and acquaint students with digital success and failure factors. It will also help them understand the gestalt of digital business.

BSL306 Fundamentals of Big Data Analytics

3 credits (2-0-2)

This course provides a basic introduction to big data and corresponding quantitative research methods. The objective of the course is to familiarize students with big data analysis as a tool for addressing substantive research questions. The course begins with a basic introduction to big data and discusses what the analysis of these data entails, as well as associated technical, conceptual and ethical challenges. This includes practical exercises to familiarize students with the format of big data. It also provides a first hands-on experience in handling and analyzing large, complex data structures.

BSL308 Data Visualization 3 credits (2-0-2)

This course is all about data visualization, the art and science of turning data into readable graphics. Data visualization is an essential skill required in today's data driven world. We'll explore how to design and create data visualizations based on data available and tasks to be achieved. The goal of this course is to introduce students to data visualization including both the principles and techniques. Students will learn the value of visualization, specific techniques, and understand how to best leverage visualization methods. This process includes data modeling. processing (such as aggregation and filtering), mapping data attributes to graphical attributes, and strategic visual encoding based on known properties of visual perception as well as the task(s) at hand. Students will also learn to evaluate the effectiveness of visualization designs, and think critically about each design decision, such as choice of color and choice of visual encoding.

BSL309 Digital Media Ethics and Laws 3 credits (2-0-2)

This course will help students "think digitally" about communications law in a constantly changing online environment. It will help them to create new knowledge in the field. The course also leads students through a systematic ethical exploration of major issues in online mass communication in the following areas: investigation, including privacy; data collection, including copyright and copyleft; presentation, including identity, accuracy, and sponsorship. Philosophical topics covered include application of ethical theory, systematic moral analysis. blameworthy praiseworthiness. and deception, and role-related responsibilities. Students will also articulate standards and conventions to use in the development of Codes of Ethic

BSL311 Web Design and Development 3 credits (2-0-2)

Curriculum is an introduction to the design, creation, and maintenance of web pages and websites. Students learn how to critically evaluate website quality, learn how to create and maintain quality web pages, learn about web design standards and why they are important, and learn to create and manipulate images. The course progresses from introductory work on web design to a culminating project in which students design and develop real websites.

BSL362 Social Media and Web Analytics 3 credits (2-0-2)

Social media not only provides marketers with a means of communicating with their customers, but also a way to better understand their customers. Viewing

consumers' social media activity as the "voice of the consumer," this session exposes learners to the analytic methods that can be used to convert social media data to marketing insights. In Introduction to Social Media Analytics, learners will be exposed to both the benefits and limitations of relying on social media data compared to traditional methods of marketing research. This course will examine topics in social data analysis, including influence and centrality in social media, information diffusion on networks, topic modeling and sentiment analysis, identifying social bots, and predicting behavior

BSL365 Content Development and Marketing 3 credits (2-0-2)

Content marketing is a strategic tactic that focuses on the creation of content to help further an organization's brand. It focuses on the designing of content that is useful for a clearly defined target audience, which attracts and retains customers loyal to an organization's brand, and ultimately driving the organization's profitability. This course presents you to the concepts of content marketing and helps you develop the skills needed to develop and executive a successful content marketing plan.

BSL366 Design Thinking and Innovation 3 credits (2-0-2)

Today innovation is ev0eryone's business. Whether you are a manager in a global corporation, an entrepreneur starting up, in a government role, or a teacher in an elementary school, everyone is expected to get lean – to do better with less. And that is why we all need design thinking. At every level in every kind of organization, design thinking provides the tools you need to become an innovative thinker and uncover creative opportunities that are there – you're just not seeing them yet. In this course, we provide an overview of design thinking and work with a model containing four key questions and several tools to help you understand design thinking as a problemsolving approach. We also look at several stories from different organizations that used design thinking to uncover compelling solutions.

BSL367 Digital Analytics and Campaign Planning

3 credits (2-0-2)

Students will learn various digital analytics tools and apply them to realistically create and manage an integrated digital marketing campaign for a client. It will help students learn to set digital campaign goals, choose apt digital media, target audiences, create campaigns, run it, monitor it, make changes and make post campaign reports. Students will participate in various online marketing events and run a live digital campaign for a client across search, display and social platforms.

BSL368 Digital Futures 3 credits (2-0-2)

The course will introduce the students on the multidimensional impact of digital technology as a catalyst for change and how it is changing the human experience. The course will also explore the different theoretical frameworks which can be utilized to examine the impact of digital and the multiple possible pathways of socio-cultural change. Thus, this course consolidates students' understanding of how technologies with interact existing technologically and socially structured environments through exploring how a workbased context might respond to the transformative shifts brought about by the emergence of a new disruptive technology.

BSL369 Digital Media Planning and Management 3 credits (2-0-2)

The course delves into the domain of digital media planning and management in the light of social media. The course introduces students to topics such as media management, marketing, planning, brand design and its strategies and practical techniques. Theoretical and field researches

realized in the form of the lectures help students to establish their digital media planning and management background. They also develop skills of designing digital media projects and learn how to plan and manage in current social media environment.

BSL370 E-CRM 3 credits (2-0-2)

The course enables students to understand theorganizational needs, benefits and process ofcreating long-term value for individual customers. It includes topics to disseminate knowledge regarding the concept of e-CRM and e-CRM technologies that enables the students understand the technological and human issues relating to implementation of Customer Relationship Management in the organizations. Course will empower them to apply the CRM concepts practically and encourage them to explore for themselves the role of a marketing manager and the boundaries of marketing.

BSL371 Internet and Related Technologies 3 credits (2-0-2)

The course introduces students with past and evolving Internet technologies. It covers topics including Internet fundamentals, Internet applications, Internet delivery systems, and Internet client/server computing. The course provides insights about working in an Internet enabled environment

BSL372 Lead Generation & E-Mail Marketing 3 credits (2-0-2)

Through this course students will get insightsabout email marketing. E-mail marketing remains one of the most effective channels a company has for reaching its target audience. Students will acquire knowledge about the tools on how to design, build, deliver & measure email marketing campaigns to ensure you get the best possible return. Students will also learn about building a quality database and

generating good leads as well as gaining insights into data protection considerations.

BSL373 Mobile Marketing 3 credits (2-0-2)

Consumers are using their mobile device 24/7 and marketers are attempting to capitalize on this technology. Mobile marketing gives consumers with just-in-time, personalized information about goods and services and related promotions. While going through the course, students will delve into the rapidly evolving mobile market and how companies are using mobile marketing to develop their marketing strategies and engage with consumers anywhere and anytime.

BSL374 Search Engine Optimization 3 credits (2-0-2)

The course equips students with the tools and techniques to apply theories used in search engine optimization. On completion of this course, students will be able to design, keyword search and competitive analysis, create website building strategies, techniques and tools to enhance search results, and optimize mobile content to enhance website visibility.

BSL375 Strategic Digital Marketing 3 credits (2-0-2)

The course investigates digital marketing strategy, implementation and executional matters for B2B and B2C brands and provides knowledge of all digital channels and platforms. Students will complete the course with a comprehensive knowledge of and experience with how to develop an integrated digital marketing strategy, from formulation to implementation.

COURSE DESCRIPTION- BBA-BUSINESS ANALYTICS

BSL355 Consumer Behaviour and Analysis 3 Credits (2-0-2) This course is an introduction to the world of consumer behavior. The discipline borrows from several social sciences including psychology, sociology, and anthropology to explain behavior in the marketplace. In this course, the student will explore how perceptions, learning, memory, personality, and attitudes influence consumer behavior, how consumption changes during one's life cycle, and how powerful cultural and subcultural influences are on consumers.

BSL356 Applications in Digital Marketing 3 Credits (2-0-2)

The aim of the Digital Marketing Course is to provide students with the knowledge about business advantages of the digital marketing and its importance for marketing success; to develop a digital marketing plan; to make SWOT analysis; to define a target group; to get introduced to various digital channels, their advantages and ways of integration; how to integrate different digital media and create marketing content; how to optimize a Web site and SEO optimization; how to create Google AdWords campaigns; social media planning; to get the basic knowledge of Google Analytics for measuring effects of digital marketing and getting the insight of future trends that will affect the future development of the digital marketing. The application of the gained knowledge, skills, and competences will help future managers in forming a digital marketing plan to manage a digital marketing performance efficiently

BSL357 Fundamentals of Econometrics 3 Credits (2-0-2)

The objective of this course is to provide the basic knowledge of econometrics that is essential equipment for any serious economist or social scientist, to a level where the participant would be competent to continue with the study of the subject in a graduate program. While the course is ambitious in terms of its coverage of technical topics, equal importance is attached to the development of an intuitive understanding of the material that will allow these skills to be utilized effectively and

creatively, and to give participants the foundation for understanding specialized applications through self-study with confidence when needed.

BSL358 Multi-criteria decision making 3 Credits (2-0-2)

The course focuses on teaching the foundation to provide insight into the decision-making processes in design by using the potentials of multi-criteria decision-making methods. It is designed specifically to provide an overview of multi-criteria decision-making methods in design processes. The course aims to analyze the potentials of usage of MCDM methods for various stages of design implemented with case studies.

BSL359 Fundamentals of Predictive Modelling

3 Credits (2-0-2)

In this course, students are introduced to predictive modeling methods, approaches, and tools. Students develop skills in predictive analytics that will allow them to: (1) develop and use advanced predictive analytics methods; (2) develop expertise in the use of popular tools and software for predictive analytics; (3) learn how to develop predictive analytics questions, identify and select the most appropriate predictive analytics methods and tools, apply these methods to answer the respective questions and presenting data-driven solutions.

BSL360 Supply Chain Analytics 3 Credits (2-0-2)

In the present time of intense global competition, customers are demanding more and more variety, with better quality and service at the lowest cost. This means that to be successful, firms need to develop supply chain strategies and logistical capabilities that serve the needs of their customers whilst maximizing overall profitability. All supply chains, to function properly, must focus on the huge opportunity that exists in their analytics. On completing this course, the students will be able to: Understand the

importance of the basics of Business Analytics, Supply Chain Analytics, and optimization, analyze the level of uncertainty associated with the supply of products and services to targeted customer segments and justify the choice of a supply chain strategy and its fit with competitive strategy, explain the role and applications of descriptive and predictive analytics in a Supply Chain and the basics of Modelling through R Language.

BSL361 Fundamentals of Time Series Analysis

3 Credits (2-0-2)

This course will cover models for analyzing time series data from both time and frequency domain perspectives. The emphases will be a balance of theory and applications. The course is intended to prepare the student for methodological research in this area and to train the students on cutting-edge data analytic methods for time series. The course will provide a basic introduction to modern time series analysis and will cover time series regression and exploratory data analysis, ARMA/ARIMA models. model operators. identification/estimation/linear Fourier analysis, spectral estimation, and state-space models. The Analyses will be performed using the freely available package 'astsa', which accompanies the book. Both R and RStudio will be required for this class.

BSL362 Social Media and Web Analytics 3 Credits (2-0-2)

The phenomenal growth of social media has transformed the social, political, and technological landscapes. Social media sparked a revolution by putting knowledge production and communication tools in the hands of the masses. This course will examine topics in social data analysis, including influence and centrality in social media, information diffusion on networks, topic modelling and sentiment analysis, identifying social bots, and predicting behavior. This course focused on how AI, network analysis, and statistical methods can be used to study these topics.

BSL 216 Digital Businesses 3 credits (2-0-2)

The course will Introduce students to various kinds of digital businesses, equip students with a framework to understand underlying digital business models and routes to market success, provide an understanding of different digital business strategies available and acquaint students with digital success and failure factors. It will also help them understand the gestalt of digital business.

BSL306 Fundamentals of Big Data Analytics

3 Credits (2-0-2)

This course provides a basic introduction to big data and corresponding quantitative research methods. The objective of the course is to familiarize students with big data analysis as a tool for addressing substantive research questions. The course begins with a basic introduction to big data and discusses what the analysis of these data entails, as well as associated technical, conceptual and ethical challenges. This includes practical exercises to familiarize students with the format of big data. It also provides a first hands-on experience in handling and analyzing large, complex data structures.

BSL307 Fundamentals of Data Mining 3 Credits (2-0-2)

This course provides students with a foundation in basic data mining, data analysis, and predictive modelling concepts and algorithms. Using practical exercises, students will learn data analysis and machine learning techniques for model and knowledge creation through a process of inference, model fitting, or learning from examples. The Data Mining Specialization attempts to teach data mining techniques for both structured data which conform to a clearly defined schema, and unstructured data which exist in the form of natural language text. Specific course topics include: Thinking with Data, Data Mining Process, Business Context of

Data Mining, Data Cleaning & Preparation, Data Mining Models: Advance Regression Models, Association Analysis, Classification and Clustering, Decision Trees, Neural Networks, Text Mining, Model Deployment.

BSL308 Data Visualization 3 Credits (2-0-2)

This course will help students understand about data visualization techniques which allow people to use their perception to better understand this data. The goal of this course is to introduce students to data visualization including both the principles and techniques. Students will learn the value of visualization, specific techniques in information visualization and scientific visualization, and how understand how to best leverage visualization methods. Students will also learn to evaluate the effectiveness of visualization designs, and think critically about each design decision, such as choice of color and choice of visual encoding.

COURSE DESCRIPTION- BBA ENTREPRENEURSHIP & FAMILY BUSINESS

BSL376 Fundamentals of Family Business 3 Credits (2-0-2)

This Course provides an overview on how to organize a family business by setting expectations and defining roles as well as differentiating between business and family life. The course provides the detailed focus on governance and ownership issues including how to set business controls and how to manage shareholder arrangements for new as well as for the existing business. The course covers the details on how family businesses are different, what makes them different and how to effectively manage these differences. Challenges arising from the tension between family and business pressures from governance, management and succession planning perspectives.

BSL377 Social Entrepreneurship 3 Credits (2-0-2)

Social Entrepreneurship describes the discovery and sustainable exploitation of opportunities to create social change. Social entrepreneurs are gaining international attention motivated by the desire for change and to see the world as it can be, not as it is. Students in the course will learn how social entrepreneurs have developed creative solutions to address social problems. They will understand the role of measuring impact and how to quantify the social impact for investors, donors, and beneficiaries to help ensure that scarce resources are utilized appropriately. The intention of the course is to develop knowledge, appreciate the role of social entrepreneurs that create social change, deepen students' understanding of the world around them, and to inspire them to use their skills and knowledge to be a change.

BSL378 Entrepreneurial Marketing 3 Credits (2-0-2)

Entrepreneurial marketing is a crucial concept for identifying and exploiting of opportunities to acquire and retain the profitable customers in the competitive era This course will take learners on an excursion where they will gain knowledge of different marketing concepts and strategies needed for being a successful entrepreneur in the market. This course provides productive information related to entrepreneurs, like competitor analysis, marketing opportunity analysis & pricing, branding, strategies. social marketing and scaling of venture for a sustainable entrepreneurship.

BSL379 SME Financing 3 Credits (2-0-2)

The SME Financing course prepares students to be competent in entrepreneurship and corporate finance management skills. The course focuses on specific financial planning and financial decision-making needs of entrepreneurial ventures, including stat up and development phase financial and management problems.

BSL386 Corporate Governance and Ethics

3 Credits (2-0-2)

Corporate governance deals with a system of rules, policies, and practices that dictate how a company's board of directors manages and oversees the operations of a company. This concept in combination with ethics is meant to examine ethical principles and moral or ethical problems that can arise in a business environment. It applies to all aspects of business conduct and is relevant to the conduct of individuals and the entire organization. Budding entrepreneurs will learn and investigate current scenarios related to corporate governance and ethics. This course will also equip the maiden business enthusiasts to handle ethical dilemmas or controversial issues faced within and outside a company.

BSL384 Human Resource Management in Family Business

3 Credits (2-0-2)

businesses Family universal are phenomenon and so too are their challenges. While human resources (HR) and talent management are of utmost importance to all firms, the unique interplay of 'family' and 'business' systems means family businesses experience multiple, complex, and interrelated issues. However, any family business, of any significant size, is reliant on the quality and effectiveness of family and non-family talent to ensure continued success and growth. HR is even more important in a family business than in a non-family business. HRM in the area of family business focused topics of successor on development, estate planning, family relationships, wealth transfer. and, succession.

BSL385 Formulating Business Plan 3 Credits (2-0-2)

Every business needs a business plan--a plan to meet the expected and unexpected opportunities and obstacles the future holds. The course of business plan will help students in discovering entrepreneurial opportunities

and provides an overview of macro and micro factors that stimulates business decisions. It will also entails competitive advantage of small businesses and Paths to Small Business Ownership. This will further help students in preparing te New Venture Business Plan and developing the details of the business plan. It provides understanding in finding sources of financing and thereby Preparing a targeted presentation and Preparing a targeted pitch for a business to present in front of investors. Entrepreneurial skills are not only necessary for self start ups but they also develop an independent thinking among students which will certainly help them in achieving higher positions.

BSL383 B2B Marketing 3 Credits (2-0-2)

This course explores the challenges in the marketplace by delving into unique problems confronting Business-to-Business Markets today across а broad spectrum organizations ranging from the traditional industries to high-tech enterprises. It has been specially customized to meet the specific requirements of entrepreneurs by raising intriguing questions, debating options and possible alternatives based on the challenges faced on a daily basis. While the basic tenets of consumer marketing are equally applicable to B2B, there are some unique characteristics in Business Markets that demand special attention: Forces that affect Business Demand, Composition of Business Markets, Nature of Business Buyers, Buying Decision Making Process, Pricing Strategies, Role of Promotion, Advertising and Branding. The marketplace is also undergoing constant change – markets are commoditizing, customer firms are consolidating, companies are becoming global, and technology is transforming the business environment.

Course Descriptions of B.COM(H)

CHL 100 Environmental Studies 3 credits (3-0-0)

Course Outcomes

Through this subject, students will be studying issues like pollution, global climate change, and the depletion of natural resources, students in Environmental Studies & Earth Sciences programmes focus on the most pressing environmental and ecological issues of today.

Application of knowledge gained to generate awareness for environmental protection to sensitize the student community towards environmental management and becoming Green Citizens and to apply the knowledge gained in sustaining various resources by using green technologies. To apply the concepts learnt maintaining balance in ecosystems and it covers all aspects of life and contributes in constructive decisionmaking keeping environment in view. Development of understanding of pollution and to develop an understanding of Environmental management to enable them in becoming green engineers and green managers. To become green citizens and contribute in the sustainable development of the society, country and the world. To apply the concepts learnt in earning resources for their organizations by using green technologies. It encapsulates sound theoretical base of all the environmental aspects coupled with practical and projects.

BSL102 Principles of Management

3 Credits (2-0-2) Course Outcomes

This course includes - Management and analysis of basic organizing, leading, directing, and controlling for establishing and accomplishing business objectives, the scope of this study will also include aspects of the principles of management on individuals and organizations. The design of the course includes the basic mechanics business operations; manufacturing,

marketing and maintaining financial focus in a rapidly changing and competitive market.

ENL101 Statistics & Research Methodology-I 3 Credits (2-0-2)

The present course has been designed to familiarize the students with the nature and importance of statistical tools for data analysis in social science research. It starts with an introduction to the different types of statistics, levels of measurement, and concepts of population sampling. It covers various types of statistical techniques like measures of central tendency, dispersion and correlation. The course also introduces the students to methods of analyzing the differences between groups.

CML 107 Introduction to Banking 3 Credits(2-0-2)

The main objective of this course is to introduce the students to the basic concept of banking as a financial intermediation service and bank as a financial institution. After this course the students would have the fundamental knowledge of banking as service and bank as an institution which would from the basis for courses related to more areas of banking and its functions. Banker & Customer Relationship, Deposits accounts, Advances, Statutory Reserves, Negotiable Instruments, Clearing and Remittances Payments Systems, Foreign Exchange. Introduction to Banking Regulation Act, 1949, Reserve Bank of India and Foreign Exchanges will enhance the student's knowledge about it birth.

CML101 Professional Accounting 3 Credits (2-0-2)

Introductory Framework: Accounting as an information system, Bases of accounting, Basic concepts and conventions, Branches of Accounting, International Financial Reporting Standards (IFRS). Business Income: Measurement of business income

Net income; the accounting period, the matching concept, Revenue recognition, Salient features of Accounting Standard (AS Recognition of expenses. Depreciation: Nature/Methods depreciation, Inventories: meaning, Significance of inventory valuation. Final Accounts: Capital and revenue expenditures and receipts: general introduction only. Preparation of financial statements: a) of non-corporate business entities from a trial balance; b) Of not-forprofit organizations. Lease Financing and for Dissolution of Accounting Partnership Firm: Concepts of operating and financial lease (theory only). Creation of vouchers and recording transactions. preparing reports - cash book and bank book, ledger accounts, trial balance, Profit and Loss Account (Income Statement) and Balance Sheets. Introduction to Tally Software (latest version).

CML 110 Communication & Documentation in Business 3 Credits(2-0-2)

The course is designed to provide an indepth understanding of communication and documentation in business to understand and create the way we communicate with others, develop and manage relationships and work effectively with others. Also, A business cannot survive without written communication. Accurate written records are essential for all employees in a business to make communication clear. Clear communication about the skills and knowledge, objective vocabulary in words while communicating with interviewers, physical expressions confident students to get a job after the completion of the degree. This course will help to improve the workplace writing competence of students.

CSV100 Basic Computer Skills for Professionals 2 credits (0-0-4)

Introduction to MS Word- Creation of Simple document, editing text working and graphic, Formatting table document use of tools like spell-check, hyphenation, mail-merge printing document. envelopes and labels. Introduction of MS Excel, meaning of workbook opening of excel sheet and work books. Formulating and printing Workbooks/sheets. Formulas and graphs functions. and chart and Introduction to Power Point, Introduction to Pvthon

CLL130 Effective Communication -1 2 Credits (1-0-2)

The broad topics include-Introduction to Communication, Types of Communication, Listening Skills, Language Communication: Language and Communication; General Principles of Writing: **Improving** Writing Essentials of good style, Expressions and words to be avoided; Grammar and Usage, Scope and Communication Network: Types of Communication Network; Formal and Informal Communication Network; Upward Communication; Downward Communication: Horizontal Communication; Diagonal Communication, Writing Business Letter: Importance of Business Letters.

BSL101 Entrepreneurship 3 Credits (2-0-2)

Introduction to Entrepreneurship, Benefits of Entrepreneurship, As a Career option, Entrepreneurial spirit, Entrepreneurial competencies, Entrepreneurship development programs, Entrepreneurial support, **Policy** initiatives entrepreneurial growth, Ease of doing business; Social Entrepreneurship; Family MSME's. Opportunity Business. identification, Idea Generation; Conducting Feasibility analysis, Intellectual Property, Business Plan Preparation, **Business** Porter's forces. Models. Resource

Mobilization: Entrepreneurial finance, Managing operations, Marketing strategies, Talent acquisition for new ventures; Project Management, Project appraisal, E-Business, Growth, Exit strategies, Social Responsibility

ENL102 Principles of Economics 3 Credits (2-0-2)

Meaning, Objectives and Instruments; Inflation The Economic Way of Thinking: Defining Economics and Microeconomics, Scarcity and choice Basic problems of an Economy. Choice and opportunity cost, Production possibility curve, Capital formation and economic growth. Market Forces of Demand and Supply: What is market competitive v/s. non-competitive market, Demand curve, Supply curve, Changes in market equilibrium, How prices allocate resources. Effects of government intervention - price controls, Demand forecasting – an overview. Elasticity and its Application: The Elasticity of demand, The Elasticity of supply, Short run vs. long-run elasticity, Applications of elasticity of demand and supply. Consumer Choice, Individual and Market Demand, Cost of Production, the Analysis of Competitive Markets, National Income, Money, Inflation.

CLL120 Human Values and Professional Ethics 2 credits (2-0-0)

The object of this program is to develop ethical thinking abilities for decision making, self- control, and holistic approach towards life and professions. This program would also help them to understand the importance of harmony in self, family and society, along with learning to be more responsible towards environment and society.

This program touches the topics like morals and values, integrity and honesty, and courage as a stepping-stone towards a peaceful society. Topics like mindfulness, which has elements like framework of happiness quotient and Fuelling success, is included to bringing one's attention to the

internal and external experiences happening in the present moment. It will also help them develop a state of mind where they pay attention to their thoughts and feelings without judging them. This entire program focuses on developing selfcontrol and confidence through education. As the students are soon going to become professionals, to make them future ready topics like Business Ethics, Corporate Responsibility and corporate Governance is also included, so that being into corporate they can be effective makers handle decision and responsibilities towards the society and organization.

CML108 Financial Management-I 3 Credits (2-0-2)

This course aims to equip the students with the fundamental principles & techniques of financial management concern acquisition & use of funds by a business firm. Financial Management: Goals & objectives, **Functions** of financial managers, Concepts of risk and return, Environment of finance in organization of finance function, Introduction to time value of money. Capital Budgeting techniques: Nature and Features, Cash Flow Methods. Cost of Capital: Introduction Cost of Capital Cost of Debt, Cost of Preference Capital, Cost of Equity Capital, Weighted Average of Cost and Weighted Marginal Cost of Equity. Financial and Operating Introduction, Leverage: Meaning Financial Leverage/Operating Leverages and its Calculation. Cost of Capital: Introduction; Cost of Capital; Cost of Debt, Cost of Preference Capital, Cost of Equity Capital, Approaches to Derive Cost of Equity, Weighted Average Cost of Capital and Weighted Marginal Cost of Capital. Capital Structure: Theory & Practice, EBIT, EPS Analysis and its theories. Working Capital Management: Cash, Receivables and Inventory Management and Financing. Dividend decisions & policy, Sources of Finance: Long/Short

term financing. Ratio Analysis: Calculation of different ratios.

ENL204 Statistics And Research Methodology-II 3 Credits (2-0-2)

This course covers the understanding and application of appropriate research designs, research statistics, the use of computer for data analysis and report writing. In this course, students will learn how to identify problems to study, develop hypotheses and research questions, specify independent and dependent variables, check for the validity and reliability of studies and design research projects. The main topics covered in this course are background to research, literature review, nature and types of research, research applications in social sciences and business, questionnaire design, data collection methods, types of data analysis methods, writing qualitative research, nature of quantitative research, data and variables, descriptive statistics, sampling, hypothesis testing, association: correlation coefficients, bivariate regression, ANOVA, writing a quantitative study.

CLL140 Effective Communication II 2 credits (1-0-2)

Writing Memos, Circulars and Notices, Report Writing, Writing E-mail: Principles of E-mail; E-mail Etiquette; Overcoming Problems in E-mail Communication, Oral Communication Skills, Meetings: Types of Meetings, Reading, Employment Communication – Resume: Contents of Good Resume; Guidelines for Writing Resume; Different Types of Resumes; Reason for a Cover Letter to Apply for a Job-Format of Cover Letter; Different Types of Cover Letters, Public Speaking and Academic Writing.

ENL104 Business Mathematics 3 Credits (2-0-2)

Surds and indices, logarithm, common log and natural log, antilog, use of log in calculations, linear and quadratic equations and their solution, functions and graphs exponential linear, quadratic, trigonometric functions. Series and sequences and their applications in the solutions of business problems, simple interest and compound interest, present value and annuities. Idea of limits and continuity, differentiation and application of differentiation in the solution of business and economic problems, maximization and minimization problems, Integration, Determinants and matrices and solution of simultaneous equations.

CML203 Fundamentals of Auditing 3 Credits (2-0-2)

Auditing: Basic Principles and Techniques; Classification of Audit, Audit Planning, Internal Control - Internal Check and Internal Audit: Audit Procedure Vouching and verification of Assets & Liabilities: Company Auditor: **Oualifications** and disqualifications, Appointment, Rotation, Removal, Remuneration, Rights **Duties:** and Auditor's Report- Contents and Types, Liabilities of Statutory Auditors under the Companies Act 2013. Special Areas of Audit: Cost audit, Tax audit Management audit; Recent Trends in Auditing: Basic considerations of audit in EDP Environment; Relevant Auditing and Assurance Standards (AASs).

BSL203 Human Resource Management 3 Credits (2-0-2)

Nature and scope of Human Resource Management; Human Resource Planning; Job Analysis – Job description – Job specification; Recruitment and Selection – Types – Interview types and selection process. Employee testing – Importance of Selection – Psychological tests – Other

information; Development of Human Resources - Types of training and Executive Development – Performance appraisal Methods and uses: Maintenance of Human Resource -Motivation and Reward System.- Job evaluation - Compensation - Wage and salary, Incentive patterns - Collective Bargaining Types and process; Employee problems Disciplining, Promotion, Transfer and Separations -Employee welfare safety health benefits and services - Industrial Counselling and Intervention Programmes; Participative management - Quality circles - Total quality management - Industrial relations - Employee communication - Human Engineering - Working conditions -Improvement in work environment -International Human Resource Management.

BSL209 Ecommerce 3 Credits (2-0-2)

Presents concepts and skills for the strategic use of e-commerce and related from information technology three perspectives: business to consumers, business-to-business. and intraorganizational. Examination of commerce in altering the structure of entire industries, and how it affects business processes including electronic transactions. supply chains, decision making and organizational performance. Evaluate the opportunities and risk factors involved in conducting e-Business; and the potential of electronic payment systems for use as a customer payment method Customer relationship management Launch successful e-business projects

CML202 Income Tax and Practice 3 Credits (2-0-2)

The course includes the broad topics like Income, agricultural income, person, assesses assessment year, previous year, gross total income, total income, maximum marginal rate of tax, Residential status. Various Income from Sources: Computation of Income under Salaries. Income from house property, Profits and gains of business or Profession. Capital Gain tax: Capital gains, Income from other sources, Total income and tax computation, Income of other persons included in assesse's total income. Deductions & Rebates: Deductions from gross total income, Rebates and reliefs, Computation of total income of individuals and firms, Tax liability of an individual and firm- Five leading cases of Supreme Court. Practice Sessions: Preparation of return of income, On-line filing of Returns of Income & TDS, Provision & Procedures of compulsory on – line filing of returns for specified assesses.

CML204 Corporate Accounting 3 Credits (2-0-2)

This course will introduce students with the different types of relationships amongst business entities and identify relationships for financial reporting determining purposes. Helps in 'reporting entities' for each inter-entity relationship, and explain the appropriate policy choices accounting demonstrating a thorough knowledge of relevant accounting standards and the ability to apply them to solve practical problems that arise from inter-entity relationships. Select the appropriate accounting techniques, as prescribed by the relevant accounting standards, and perform the accounting treatment for each type of inter-entity relationship (including financial preparing consolidated statements). They could discuss strategic, legal, and assurance issues associated with establishing inter-entity relationships, and generate recommendations and communicate accounting policy choices and strategic recommendations and justify conclusions with reference to relevant laws and accounting standards.

CML208 Financial Management-II 3 Credits (2-0-2)

The goal of this course is to develop the analytical skills for making corporate investment with regards to financial decisions and risk analysis. An equally important component of this course is its emphasis on developing your critical auditory and erudite writing skills to a level that is commensurate with university standards. The course teaching methodologies will be composed of lectures, homework assignments and a group project. This course will examine the concept of present value, the opportunity cost of capital, discounted cash flow analysis, a consortium of valuation techniques of capital budgeting and risk analysis. The course will also be developing knowledge on allocation. management and funding of financial resources. Enhancing student's ability in dealing short-term dealing with day-to-day working capital decision; and also, longer-term dealing, which involves major capital investment decisions and raising long-term finance.

BSL207 Introduction to Marketing Management 3 Credits (2-0-2)

Defining Marketing for the 21st Century: Marketing Concept and Process: changing marketing Landscape Developing Marketing Strategies Plans: Role of marketing in company's planning: Customer drives strategic marketing strategy and integrated marketing mix; managing the marketing Scanning the effort. Marketing Environment, Forecasting Demand, and Conducting Marketing Research; Creating Value Customer and Customer Relationships: Analyzing Consumer Markets and Analyzing Business Markets. Identifying Market Segments and Targets;

Competitive Dynamics; Crafting the Brand Positioning; and Creating Brand Equity. Designing Value: Setting Product Strategy: Designing and Managing Services and Developing Pricing Strategies Programs. Delivering Value: Designing and Managing Integrated Marketing and Managing Retailing, Channels Wholesaling, and Logistics. Communicating Value: Designing and Integrated Marketing Managing Communications: Managing Mass Communications: Managing Personal Communications. Creating competitive advantages; marketing in the global environment; managing the holistic marketing effort; introducing new marketing offerings; social responsibility of marketing.

ENL 212 Corporate Governance and Sustainability 3 Credits (3-0-0)

This course will teach the fundamental and practice of corporate governance. This course covers the history of the corporation, boards of directors, the division of profit sharing and various forms of employee ownership and ownership among insiders, regulation, shareholder activism, the impact of takeovers and mergers and acquisitions on governance, ethical issues such as conflicts of interest and insider trading, international corporate governance, and policy developments likely to impact corporation. CSR component is about how business takes account of its economic. social and environmental impacts in the way it operates – maximizing the benefits and minimizing the downsides. The course discussion will be based on these issues.

CML301 Cost Accounting 3 Credits (2-0-2)

Cost Accounting Methods and Systems: Meaning, objectives and advantages of cost Difference between cost accounting. accounting and financial accounting. Cost concepts and classifications, Elements of cost. Installation of a costing system. Role of a cost accountant in organization. Cost Sheet: Preparation of Cost Sheet (Simple Problems)Process Costing: Meaning and Computation of normal profits, abnormal effectives and abnormal loss. Contract Costing: Contract meaning, types, Job and Batch Costing, preparation of contract accounts, escalation clause, calculation of Work-in-progress, accounting for material: accounting for plant used in a contract; contract profit and loss account, balance sheet.Labour Cost: Attendance and Payroll procedures, Over time, idle time and incentives, direct and indirect labour, remuneration systems and incentive schemes. Overheads: Functional analysis-Factory, administration, selling. distribution, research and development, fixed, variable, semi variable and step cost; Factory overheads, Administration overheads and Selling and Distribution overheads in brief. Cost Accounting Records and Cost Audit: Cost Accounting Records and Cost Audit under Companies Act, 2013, Nature and scope of Cost Audit Companies (Cost Records & Audit) Rules, 2014.

CML303 Indirect Taxation (GST) 3 Credits (2-0-2)

Central Excise, Services and VAT: Central Excise Act, 1944 and the related Rules, Central Excise Tariff Act, 1985 and the related Rules. Law relating to service tax as contained in the Finance Act, 1994 as amended from time to time and the related, Service tax — concepts and general principles, Charge of service tax and taxable services, Valuation of taxable services, Payment of service tax and filing of returns, Issues related to Value Added Tax. Customs: Customs Act, 1962 and the related Rules, Circulars and Notifications;

Customs Tariff Act, 1975 and the related Rules. Introduction of GST: Overview of GST, Levy of and Exemption from Tax, registration, Scope and Meaning of Supply, Time of Supply. Valuation of GST: Valuation in GST, Payment of GST, Electronic Commerce, Job Work, Input Tax Credit, Input Service Distribution, Matching of Input Tax Credit, Overview of the IGST ACT, Place of supply of Goods and Services.

BSV301 Creative Thinking and Negotiation Skills 3 Credits (2-0-2)

Course Outcomes:

Through this course student identify the difference between creativity and innovation Recognize their own creativity, build their own creative environment, Explain the importance of creativity and innovation in business, apply problemsolving steps and tools, Use individual and group techniques to help generate creative ideas, Implement creative ideas. Make better decisions through critical thinking and creative problem solving. Learning the of negotiation Transform creativity into practical business solutions.

CML302 Management Accounting 3 Credits (2-0-2)

Management accounting: Meaning, nature, scope and functions of management accounting, role of management accounting in decision making. Financial statements: meaning. limitations offinancial statements, objectives and methods of financial statements analysis, ratio analysis, classification of ratios - profitability ratios, turnover ratios and financial ratios. advantages of ratio analysis, limitations of accounting ratios. Fund flow statement, Cash flow statement (As per Indian accounting standard-3). Absorption and marginal costing: Marginal and different

costing as a tool for decision making, make or buy, change of product mix, pricing, break even analysis exploring new markets, shutdown decisions. Standard costing: Meaning, Concepts and Objectives, Merits and Demerits of Standard costing, Prerequisite for establishment of standard costing, Efficiency and Activity Ratios, Variance Analysis and Control.

Project: Students are expected to select a company and Perform cost analysis of that company, prepare a report and make presentation in the class. Live cases cost accounting reports attached to annual reports should be analyzed.

CML304 Micro Finance 3 Credits (2-0-2)

This course will introduce students the concept of Micro credit and Micro finance. Features and Benefits of Micro Finance. Important role of Micro Finance and why it is needed. Micro Finance refers to the provision of affordable financial services such as small loans, small savings, micro insurance and funds transfer facilities extended to socially and economically poor and disadvantaged segments of the society to enable them to increase their income levels and improve standard of living. The main aim of microfinance is to provide small loans to poor people particularly living below poverty line, who are not able to raise loan for productive purposes from other sources and to improve their standard of living by increasing their earning and saving covering associated risks.

BSL301 Business Policy and Strategy 3 Credits (2-0-2)

The nature of business planning and strategic management: Key terms of SM. Levels of strategies, Decision making criteria and approaches. Strategic management processes: The SM Model and its limitations. Business vision and mission, Importance and characteristics. Issues in setting the objectives.

Environment scanning and **SWOT** analysis: Environment components, Industry analysis Competitive forces. Competitive analysis: Porters 5- forces. Formulation of strategies: Business forecasting- Need and steps. Forecasting techniques; Internal analysis, Nature of internal environment, Value analysis, Evaluation of key internal factors, financial statements/ratio analysis. Long term objectives and grand strategies Long objectives. Grand strategies. term Integration and diversification, Mergers and acquisition, Turnaround strategies, Analysis of strategies, Portfolio and matrix analysis, SWOT analysis.

FOREIGN LANGUAGE ELECTIVES

CLL200 FRENCH I 3 Credits (1-2-0)

Understand and use familiar everyday expressions and simple sentences.

For ex: Greet people; Talk about themselves; Talk about where they live; Talk about their family members.

Talk about their likes and dislikes; Engage in a simple buy-and-sell situation

Ask about the day, the time and the date; Accept and refuse an invitation; Read simple notices, posters and catalogues; Fill in a simple form; Write a simple postcard.

CLL210 FRENCH II 3 Credits (1-2-0)

The present course helps students develop an understanding of familiar everyday expressions and complex sentences. ex give directions about a city / a country, tell time, position of the objects etc.

They will be able to communicate in a simple manner, about their daily routine, order food in a restaurant, Learn to speak about their past & present habits, describe a situation in the past, develop the ability to compare past and present situations in conversations, invite someone and will be able to write a simple postcard, a mail to

accept and refuse in recent past and near future.

CLL220 GERMAN I 3 Credits (1-2-0)

To greet someone, introduce yourself and others, ask someone his name and country, the alphabet and learn to spell, to get to know someone, start a conversation, numbers from 0 to 1000 and beyond, order in a restaurant and pay the bill, to understand telephone numbers, make questions with how, where from, where, what, verbs in present tense, articles in nominative, language in a foreign language class, use of dictionary, negation, nouns: singular and plural, listen to umlauts and speak, speak about cities and tourist features, about countries and languages spoken there, time data- clock time/ week days, To fix up appointments, to excuse oneself on being late, questions starting from when, from...till, prepositions related to time, separable verbs, eg, to call up, to wake up etc.

CLL230 GERMAN II 3 Credits (1-2-0)

Understand information given in a letter or text, write letters, understand and give simple instructions. understand advertisements, describe an apartment, reply to an invitation, express likes and dislikes, write a text about an apartment, describe one's daily routine, talk about past, understand job advertisements, opinion on jobs, converse on telephone and talk about work, talk about clothes, understand a chat about shopping, talk about past, making one's way in a shopping mall, understand information about Berlin. name body parts, understand and explain sports exercises, visit to a doctor, Grammar includes Dative case, Personal pronouns, prepositions, Adjectives etc.

CLL270 SPANISH I 3 Credits (1-2-0)

This is an introductory course for learning and understanding of Spanish language. In

this course, learners will focus on various grammatical forms through these roots, they will explore the cultural, fictional and auto-fictional world of Spanish speaking countries with all components of the language at beginner level such as identify, distinguish and apply grammar rules, describe oneself and others, recognize and interpret Spanish cultural trends in short texts, construct and compose sentences in order to produce oral and written texts about their immediate environment.

CLL280 SPANISH II 3 Credits (1-2-0)

This is an intermediate course for learning and understanding of Spanish language. It includes learning to develop advanced reading and writing skills of technical & non-technical texts and formulate projects. On the other side also build up social, professional conversation skills understanding of the main points of clearly written, standard Spanish, as long as the text is related to things recreational activities. Learners will know how to interact in the majority of situations that may surface during the course trip throughout the regions where the language is spoken and will be able to produce simple and coherent texts on familiar subjects or on those in which he/she has a particular interest such as describing experience, events, desires and hopes, as well as briefly explain opinions or plans.

BSL303 International Business 3 Credits (2-0-2)

Import management, Export management International capital management, International trade finance, Foreign trade policy, Communication skills, Foreign-exchange, Trade agreements, International labor laws, Legal aspects, Economic aspects Accounting practices.

BSL331 Customer Relationship Management 3 credits(2-0-2)

Fundamentals of CRM, CRM strategy, CRM vision, CRM Process, marketing

metrics, customer profiling, assessing customer value(e.g., RFM, LTV and other analyses), assessing customer profitability. Customer acquisition tools, Measuring and customer lovalty, improving media allocation, distribution channels marketing campaign management. Several advanced statistical techniques will be introduced including: linear regression, logit, decision trees, lift charts, hazard models and linear programming. CRM Technology: In keeping with the hands-on nature of the course, students will be instructed on how to implement the CRM using techniques industry-standard software. Individual customer approach and the role of technology in CRM.

BSL332 Management of Sales and **Distribution**

3 credits (2-0-2)

Manage sales and channel teams for different types of selling, with the purpose of enhancing value-based output and productivity; concept and effect of sales organization and sales effort, sales process, the relationship between sales marketing, sales force structure, customer relationship management (CRM), use of technology to

improve sales force effectiveness, and issues in recruiting, selecting, training, motivating, compensating and retaining salespeople.

Consumer **BSL333** Marketing & **Analytics**

3 credits (2-0-2)

This course introduces the students to the tools to measure brand and customer assets, perform regression analysis, and design experiments as a way to evaluate and optimize marketing campaigns. This course is ideal for learners who want to grow their knowledge, develop their career portfolio, and improve the effectiveness of their marketing campaigns. The broad areas covered are resource allocation, product management: segmentation. conjoint analysis, marketing

allocation. customer management: customer profits and retention using logistic regression, cross selling and optimization, digital marketing.

Fundamentals BSL334 of Retail Management 3 credits (2-0-2)

The course is designed to provide an indepth understanding of the retail marketing. building sustainable relationships, decision making related to retailing, buyer's behavior, pricing strategies and delivery channels to the end users. Its contents include. Basic Concepts: Definition, Importance and scope of Retailing; The Retail Scenario in India: Retail Formats. Information Gathering in Retailing: Retail Strategic Planning and Operation Management; Retail Financial Strategy; Target Market Selection and Retail Location; Store Design and Layout; Visual Merchandising and Displays. Merchandise Planning, Buying and Handling, Customer Relationship Management. Management Information Systems: Online Retailing; Global Retailing; Legal and Ethical Issues.

BSL335 Marketing of Services 3 credits (2-0-2)

Students examine the important issues facing service providers and the successful implementation of a customer focus in service-based businesses. Topics include an overview of services marketing: understanding the customer in services marketing; standardizing and aligning the delivery of services; the people who deliver and perform services; managing demand and capacity; and promotion and pricing strategies in services marketing.

BSL336 Advertising and Promotion 3 credits (2-0-2)

Advertising and Promotions have assumed one of the central roles in marketing communications This course examines the role of advertising in how brands are built and managed. Particular emphasis is placed on students' understanding of the link between effective advertising and promotions for brand success that will improve managerial decision-making with respect to brands. Among other issues, this course will capture advertising and promotion methods and techniques, brand equity, managing brands over time and across geographic boundaries, and the application of the marketing mix to support brand strategies.

BSL337 Fundamentals of Strategic Marketing 3 credits (2-0-2)

The course examines the development and implementation of marketing strategy by providing a framework from which to identify and evaluate strategic options and programs. Topics: forecasting contextual possibilities, product-market definition, relationships with channels of distribution, relationships with customers, competitive analysis, financial models for marketing strategists, portfolio models, strategic assessment offerings, of marketing implementation strategy systems. This course requires that students have a strong foundation of marketing knowledge gained from Introduction to Marketing (in particular a knowledge of market segmentation).

BSL338 Marketing in Digital Era 3 credits (2-0-2)

This course provides learners the ability to formulate and enact intelligent, data-driven marketing strategies. Core content will focus on identifying and understanding digital marketing metrics to gauge success of both social media and traditional digital marketing efforts.

BSL339 Recruitment and Selection 3 credits (2-0-2)

Recruitment Challenges: How to make recruitment efforts succeed, Workers Expectations – Recruitment Sources, Proactive and Reactive Recruitment,

Innovative Recruitment Sources. Electronic Recruitment, Reference Check, Guidelines for Releasing and Obtaining Information. Ability Tests: Mental Ability, of Practice Coaching, Effects and Personality Mechanical Ability Test, Test, Measurement Personality Assessment. International Recruitment & selection Practices.

BSL340 Performance and Competency Management 3 credits (2-0-2)

Performance appraisal system implementation: Defining performance, determinants of performance, performance dimensions, approaches to measuring performance, Conducting Staff Appraisals: Introduction, need, skills required, the role of the appraiser, job description & job specification, appraisal methods, raters errors, data collection, conducting an appraisal interview, Performance Consulting: Concept, the need for performance consulting, role of the performance consulting, Concept and Definition of Role and Competency, Characteristics of Competency, Competency Versus Competence, Performance Versus Competency.

BSL341 Employee Training and Development 3 credits (2-0-2)

Study the concepts and processes of training and development (T&D). principles and process of training and development; develop an understanding of how to assess training needs and design training programmes in an organizational setting; to familiarize learners with the levels, tools and techniques involved in evaluation of training Effectiveness and; to develop an understanding on various training and non-training solutions to improve employee performance.

BSL342 Industrial Relations and Labor Laws 3 credits (2-0-2)

Introduction to Industrial Relations and origin of Labor Laws. It covers topics like Collective bargaining, Health and Safety, Social Security measures. Major Laws related to factories like The Factories Act, 1948, Industrial Disputes Act, 1947, Trade Unions Act, 1923, Payment of Wages Act, 1936. Other areas like equal remuneration, provident fund, gratuity, ESI, Standing Orders Act are covered.

BSL343 Compensation and Reward Management 3 credits (2-0-2)

The course starts with a brief introduction to factors affecting compensation, theory of wages, role of different parties contributing to the compensation system. of performance appraisal compensation system, team-based pay, legislations affecting merit pay, compensation systems, salary progressions, designing the salary structure of top middle and lower management. Designing incentives and benefit programs.

BSL344 Organization Change and Development 3 credits (2-0-2)

Organizational Change and Development (OCD) is a field of research, theory, and practice dedicated to expanding the knowledge and effectiveness of people to accomplish more successful organizational change and performance. The course shall enable the students to understand the philosophical, historical. theoretical. political and practical underpinnings of Organization change and development as a core area of practice within HRD: increase awareness of different tools that are used to diagnose organizations well as interventions used through hands-on experience and: enhance skills facilitation, OD skills, group process, communication, and collaboration. Main topics shall include: introduction to organization development; the nature of planned change; the od practioner; entering

and contracting; diagnosing organizations, groups and jobs – collecting and feeding information; designing individual, group and organizational level interventions; strategic change interventions; action research; etc. At the end of the course, the students shall have basic theoretical and competency base in OD that they will need to be able to assist with and facilitate positive, planned change efforts within the organizations in which they work.

BSL345 Cross Culture HRM 3 credits (2-0-2)

Recent definitions concern IHRM with activities of how MNCs manage their geographically decentralized employees in order to develop their HR resources for competitive advantage, both locally and globally. The role and functions of IHRM, the relationship between subsidiaries and headquarters, and the policies and practices are considered in this more strategic approach. IHRM is also defined as a collection of policies and practices that a multinational enterprise uses to manage local and non-local employees it has in countries other than their home countries.

BSL346 Fundamentals of Strategic HRM

3 credits (2-0-2)

Through a sequence of readings, lectures, cases, and experiential exercises, this course will introduce students to strategic human resource management. The course focuses on developing a strategic approach to topics such as recruitment & selection, performance appraisal, measuring employee behaviors, outsourcing, and strategic integration. The students will prepare foremost classes by completing assigned readings, including readings of business cases.

BSL347 Financial Reporting and Analysis

3 credits (2-0-2)

Accounting is the language of business. It attempts to measure and report corporate

performance. Managers use accounting in making decisions; while investors use it for valuing stocks. The bankers and lender rely on accounting information to decide to whether to lend money to business. The accounting information is also crucial in evaluating the performance of employees at various levels in an organization. Thus, it is very important for a business executive to have a fair knowledge of accounting.

BSL348 Introduction to Financial Institutions and Market 3 credits (2-0-2)

This course includes the organization, management and regulation of financial service providers. It provides awareness about the regulatory framework in which the financial service industry operates. Financial instruments at the disposal of the industry and on their specific use at the hand of financial service providers have also been incorporated in this course. It also considers how recent developments, including technological advances and economic globalization, have instilled renew editor in activities such as acquisitions and mergers, contemplates the future of the industry. Topics include Non-Banking Financial Services, Insurance Services, Merchant Banking, Credit Rating Services, Factoring and Forfaiting, Venture Capital, Plastic Money (Credit cards), Lease & Hire Purchasing, Housing Finance

BSL349 Insurance and Risk Management 3 credits (2-0-2)

Concept of Risk, Types of Risk, Risk Appraisal, Transfer and Pooling of Risks, Concept of Insurable Risk. Introduction to Insurance and its Types. Concept of Insurance, Relevance of Insurance to the emerging socio-economic needs of all the sections of society including Industrial sector, Types of Insurance Organizations, Insurance Business, Intermediaries in Insurance Business. : Formation of Contracts. Formation of Insurance

Contract, Life, Fire, Marine and Motor Insurance Contracts, Principles of Insurance: Utmost Good Faith, Indemnity, Insurable Interest Classification of Insurance. Classification of Insurance: Life, Non-Life (general), Health, Pension, Social Security and Retirement Benefits, Insurance Products.

BSL350 Fundamentals of Money and Banking

3 credits (2-0-2)

The objective of this course is to enable the student to gain at thorough understanding of the business of modern commercial banking. Topics include: functions of a bank in the economy, financial statements of a bank and measurement of profitability via ratios, bank lending policies and procedures and lending regulations, investment function in banking, asset liauidity management, requirements, estimating a bank's liquidity needs, bank sources of funds: deposits, non-deposit liabilities, and equity.

BSL351 Introduction to Portfolio Management

3 credits (2-0-2)

Portfolio management presents the best investment plan to the individuals as per their income, budget, age, and ability to undertake risks. Portfolio management minimizes the risks involved in investing and increases the chance of making profits. One proven way to spread risk comfortably throughout your portfolio is to make sure you sufficiently diversify your investments. However, it remains a vital strategy for minimizing the risk that often helps investors to achieve their financial goals. The main topics to be addressed in this course are portfolio construction, Markowitz model, the Sharpe Index model, capital asset pricing theory, arbitrage pricing theory, portfolio evaluation, and revision.

BSL381 Product and Brand Management

3 credits (2-0-2)

facilitates course learners to understand product portfolio and strategies for building and managing any product as a sustainable brand in the marketplace. This course includes several concepts, like product planning, design thinking, new product development, the significance of brand management, understanding brand equity and managing the brand over time. The course structure is designed in such a way by which, learners will knowledge of various aspects strategies under product and brand management.

BSL382 Marketing Communication 3 credits (2-0-2)

Marketing communication is an essential concept for promoting any product or service brand. This course is designed to familiarise the learners with essential concepts and models for executing prolific integrated marketing communication programs. The course of marketing communication will help learners to boost their understanding for the development of marketing communication programs to acquire and retain customers by enhancing their loyalty towards the brand. Main topics include the role of integrated marketing communications, organising for advertising promotion, consumer behaviour and perspective, the communication process, promotional objectives and budgets. creative strategy, media planning and strategy, broadcast/print and support media, direct marketing, sales promotions, PR and publicity, personal selling, international promotion, business-to-business promotions, and regulations and ethics.

BSL390 HR Audit 3 credits (2-0-2)

HR Audit is a valuable risk mitigation tool used in assessing the effectiveness of HR Function within the organization. The course will help students to define the key concepts associated with HR Audit, have a complete understanding of the concept,

evolution and the Purposes of HR Audit, and clarity of the desired practices of HR work and roles within the organization (HR Professional, Line Managers). The course will enable students to identify the scope & areas of Human Resource Audit. perform periodic and formal organizational assessments and reviews with knowledge and confidence, evaluate current effectiveness and establish a baseline for future improvement, assess the current knowledge and skills required of HR practitioners, identify steps that HR Professional should follow in managing the Human Resource Audit process and elucidate the different approaches and models in carrying out the Human Resource Audit.

BSL391 Systems Thinking 3 Credits (2-0-2)

Systems thinking is a way of helping a person to view systems from a broad perspective that includes seeing overall structures, patterns and cycles in systems, rather than seeing only specific events in the system. This broad view can help one to quickly identify the real causes of issues in organizations and know just where to work to address them. This course on systems thinking introduces students to systems thinking, systems modelling techniques, and how these are used in addressing sustainability. Systems thinking aids in understanding complexity the interconnectedness that makes many reallife situations difficult to manage. It is about understanding an issue by analysing the whole, rather than the parts. It acknowledges that, as parts interact, their combined output can be both synergistic and emergent, making analysis of the parts independently insufficient for addressing sustainability. On completion of the course, students will be able to define the systems, thinking perspective and language; explain the systems thinking process; identify and apply several systems thinking approaches; analyse how systems evolve; compare the study of individual components to the

analysis of entire systems; and; evaluate how system level thinking informs decision-making, public policy, and/or the sustainability of the system itself. Brief content of the course: system philosophy, theory, methodology and systems practice.

BSL392 Workplace Diversity and Inclusion 3 credits (2-0-2)

This course examines the effect diversity has in the modern workplace both domestically and internationally. The focus is on issues related to cultural, racial. ethnic. religious, linguistic, physical, gender, and age differences, among others. Students will analyse and gain an appreciation for diverse demographics and the meaning and dimensions of diversity in the workplace and examine the implications impact of ethics and social responsibility of managing a diverse workforce. The course shall enable students to investigate the diverse demographics and the meaning of diversity in today's workplace; analyze the implications and impact of social responsibility when managing a diverse workforce; evaluate, critique the implications stereotyping, prejudice and workplace discrimination: workplace assess challenges and opportunities when creating inclusive corporate cultures and; apply course learning to student's organization and personal work environment. Brief content: multiculturalism. basics and concepts in diversity and inclusion; diversity dimensions viz., gender, age, religion, socio-economic factors, LGBTQ, etc.; multigeneration diversity at the workplace; diversity in VUCA world; different diversity in organizations; diversity programme management; issues of justice around workplace diversity; leadership and diversity; organizational biases; workplace equity; future issues in workplace diversity and inclusion; and; strategic management of diversity.

CML206 Security and Investment management 3 credits (3-0-0)

This course is intended to provide a general overview of capital markets, financial instruments, and investment process. The course would emphasize the role of modern financial theory in portfolio management. The broad topics includes Overview of Indian financial system and financial intermediaries Investment process, Intermediaries in financial market, Sources financial information. Different investment alternatives, Approaches of Introduction bond valuation, fundamental analysis. Technical analysis efficient market hypothesis. and Introduction to mutual funds and their risk evaluation and Role of SEBL

CML352 Financial Econometrics 3 credits (3-0-0)

This course provides a comprehensive introduction to basic econometric concepts and techniques. This course will help student to understand issues in connecting data, statistics and theory. The approach would be hands-on practice to help students get comfortable with working with dataset. The main contents of this course are introduction to econometrics, simple linear regression model (concepts, estimation, properties and testing of hypothesis), multiple regression models, functional forms and testing for model specification, identifying and correcting for violation of CLRM assumptions, dummy variables.

CML353 Corporate Restructuring, Mergers and acquisitions (3-0-0)

This course examines the process by which business takeovers and other corporate control transactions take place and the role of restructuring and shifts in resource allocation by corporations. A major focus of the course will be on valuation of, and accounting for, Mergers & Acquisitions. Also, of particular interest will be the examination of economic and capital market reactions to control transactions and to defensive measures by management against takeover bids. A limited range of cases on mergers and acquisitions will be presented and discussed.

CML354 International Finance (3-0-0)

This course intends to provide an overview of the international finance including forex markets risks and various avenues on investment. Discuss about foreign exchange markets and international financial markets. The student will be able to understand the various instruments traded in forex markets. analyze international investment avenues, analyze exchange risks and foreign management strategies and evaluate and manage foreign exchange risk exposure

CML355 Project Appraisal and Finance (3-0-0)

This course provides comprehensive knowledge to students about concepts like identification of a project, feasibility analysis including market, technical and financial appraisal of a project. It also enables to understand the relevance of alternative project appraisal techniques, financial structuring, and financing alternatives. The student will be able to understand the basics of management and Project development cycle. In addition, he will be able to examine the various financial Projections and methods of financial appraisal and understand the role of Project Managers and formulate an overall view of modern project management. Evaluate the various Techniques in Project Control and Performance Analysis.

Course Descriptions of B.COM(H) Financial Markets

Finance Electives

CML206 Security and Investment management 3 credits (3-0-0)

This course is intended to provide a general overview of capital markets, financial instruments, and investment process. The course would emphasize the role of modern financial theory in portfolio management. The broad topics includes Overview of Indian financial system and financial intermediaries Investment process, Intermediaries in financial market, Sources offinancial information. investment alternatives, Approaches of valuation, Introduction fundamental analysis. Technical analysis efficient market hypothesis. Introduction to mutual funds and their risk evaluation and Role of SEBI.

BSL351 Introduction to Portfolio Management 3 credits (2-0-2)

It aims at providing an in-depth knowledge of the theory and practice of portfolio management. Important theories, techniques, regulations, and certain advancements in theory of investment will be covered with an aim of helping the students make sound investment decisions in the context of portfolio investment.

CML 305 Securities Operations and Risk Management 3 credits(2-0-2)

The course seeks to create a common minimum knowledge benchmark as the requisite standard for associated persons of a registered stockbroker / trading member / clearing member in recognized stock exchanges, involved in (a) assets or funds of investor or clients (b) redressal of investor grievances, (c) internal control or risk management and (d) activities having a bearing on operational risk.

CML 306 Mutual Fund Distributors 3 credits(2-0-2)

The course seeks to create a common minimum knowledge benchmark for all persons involved in selling and distributing mutual funds including Individual Mutual Fund Distributors, Employees of organizations engaged in sales and distribution of Mutual Funds, Employees of Asset Management Companies specially persons engaged in sales and distribution of Mutual Funds. It aims to enhance the quality of sales, distribution, and related support services in the mutual fund industry.

CML 307 Fundamental and Technical Analysis 3 credits(2-0-2)

The course will deal with basic approach and steps in fundamental analysis, methods of valuation and technical analysis of stocks to determine the right investment strategy. Other included topics are -Industry analysis, technical analysis, and usage of technical indicators to determine appropriate buying and selling signals.

CML 308 Equity Derivatives 3 credits(2-0-2)

The course aims to enable a better understanding of various derivatives products available in equity derivatives markets, regulations and risks associated with the products and the exchange mechanisms of clearing and settlement. The course also covers knowledge competencies related to the understanding of the financial structure in India and the importance of the different rules and regulations governing the Indian securities market, especially those related to the equity derivatives segment.

Proposed Programme Elective Behavioural Finance

3 Credits(2-0-2)

The objective of this course is to introduce the students to the role of human behavior in financial decision-making. It discusses the various biases, Equity Premium Puzzles, and arbitrage opportunities.

DETAILED COURSE DESCRIPTIONS FOR BA (H) Economics

CLL100 Environmental Studies 3 credits (3-0-0)

Through this subject, students will be studying issues like pollution, global climate change, and the depletion of natural resources, students in Environmental Studies & Earth Sciences programmes focus on the most pressing environmental and ecological issues of today.

BSL101 Entrepreneurship 3 Credits (2-0-2)

Introduction to Entrepreneurship, Benefits of Entrepreneurship, As a Career option, Entrepreneurial spirit, Entrepreneurial competencies, Entrepreneurship development programs, Entrepreneurial support, Policy initiatives for entrepreneurial growth, Ease of doing business; Social Entrepreneurship; Family Business, MSME's, Opportunity identification, Generation; Conducting Feasibility analysis, Intellectual Property, Business Plan Preparation, Business Models, Porter's forces, Resource Mobilization: Entrepreneurial finance, Managing operations, Marketing strategies, Talent acquisition for new ventures; Project Management, Project appraisal, E-Business, Growth, Exit strategies, Social Responsibility.

BSL102 Principles of Management 3 Credits (2-0-2)

Management and analysis of basic organizing, leading, directing, and controlling for establishing and accomplishing business objectives, the scope of this study will also include aspects of the principles of management on individuals and organizations. The design of the course includes the basic mechanics business operations; manufacturing, marketing and maintaining financial focus in a rapidly changing and competitive market

CLL130 Effective Communication - I 2 credits (1-0-2)

Introduction to Communication, Types of Communication, Listening Skills, Language for Communication: Language and Communication; General Principles of Writing; Improving Writing Skills, Essentials of good style, Expressions and words to be avoided; Grammar and Usage, Communication Network: Scope and Types of Communication Network; Formal and Informal Communication Network; Upward Communication; Downward Communication; Horizontal Communication; Diagonal Writing Business Letter: Communication, Importance of Business Letters.

CLL140 Effective Communication II 2 credits (1-0-2)

Writing Memos, Circulars and Notices, Report Writing, Writing E-mail: Principles of E-mail; E-mail Etiquette; Overcoming Problems in E-mail Communication, Oral Communication Skills, Meetings: Types of Meetings, Reading, Employment Communication – Resume: Contents of Good Resume; Guidelines for Writing Resume; Different Types of Resumes; Reason for a Cover Letter to Apply for a Job-Format of Cover Letter; Different Types of Cover Letters, Public Speaking and Academic Writing.

CLL120 Human Values and professional ethics 2 credits (2-0-0)

The object of this program is to develop ethical thinking abilities for decision making, self-control, and holistic approach towards life and professions. This program would also help them to understand the importance of harmony in self, family and society, along with learning to be more responsible towards environment and society.

This program touches the topics like morals and values, integrity and honesty, and courage as a stepping stone towards a peaceful society. Topics like mindfulness, which has elements like framework of happiness quotient and Fuelling success, is included to bringing one's attention to the internal and external experiences happening in the present moment. It will also help them develop a state of mind where they pay attention to their thoughts and feelings

without judging them. This entire program focuses on developing self-control and confidence through education. As the students are soon going to become professionals, to make them future ready topics like Business Ethics, Corporate Social Responsibility and corporate Governance is also included, so that being into corporate they can be effective decision makers and handle their responsibilities towards the society and organization.

END302 Major Project 4 Credits (0-0-8)

Every student will be assigned a project topic at the end of the fifth semester and it will be pursued by him/her under the supervision of an internal supervisor. The dissertation along with soft copy will be submitted by the students in their respective institutions. The format of the report will be followed by: Executive Summary, Introduction to Company, Review of Literature, Research Methodology, Analysis of Data and Conclusions and Implications and Bibliography. The student shall be required to submit the progress reports as per schedule announced by project guide. Then the report shall be evaluated by external and internal examiners separately. The assessment shall be done on the basis of Viva-Voce and the report.

CML101 Professional Accounting 3 Credits (2-0-2)

Introductory Framework: Accounting as an information system, Bases of accounting, Basic concepts and conventions, Branches of Accounting, International Financial Reporting Standards (IFRS). **Business** Income: Measurement of business income -Net income; the accounting period, the matching concept, Revenue recognition, Salient features of Accounting Standard (AS 9) Recognition of expenses. Depreciation: Nature/Methods of depreciation, Inventories; meaning, Significance of inventory valuation. Final Accounts: Capital and revenue expenditures and receipts: general introduction only. Preparation of financial statements: a) of non-corporate business

entities from a trial balance; b) Of not-for-profit organizations. Lease Financing and Accounting for Dissolution of the Partnership Firm: Concepts of operating and financial lease (theory only). Creation of vouchers and recording transactions, preparing reports – cash book and bank book, ledger accounts, trial balance, Profit and Loss Account (Income Statement) and Balance Sheets. Introduction to Tally Software (latest version).

CSV 100 Basic Computer Skills for Professionals 2 credits (0-0-4)

Introduction to MS Word- Creation of Simple document, editing text working with table and graphic, Formatting document use of tools like spell-check, hyphenation, mail-merge printing of document, envelopes and labels. Introduction of MS Excel, meaning of workbook opening of excel sheet and work books. Formulating and printing Workbooks/sheets. Formulas and functions, graphs and chart and Introduction to Power Point, Introduction to Python.

ENL101 Statistics & Research Methodology-I 3 Credits (2-0-2)

The present course has been designed to familiarize the students with the nature and importance of statistical tools for data analysis in social science research. It starts with an introduction to the different types of statistics, levels of measurement, and concepts of population sampling. It covers various types of statistical techniques like measures of central tendency, dispersion and correlation. The course also introduces the students to methods of analyzing the differences between groups.

ENL102 Principles of Economics 3 Credits (2-0-2)

The Economic Way of Thinking: Defining Economics and Microeconomics, Scarcity and choice Basic problems of an Economy Choice and opportunity cost, Production possibility curve, Capital formation and economic growth. Market Forces of Demand

and Supply: What is market competitive v/s.

non-competitive market, Demand curve, Supply curve, Changes in market equilibrium, How prices allocate resources. Effects of government intervention — price controls, Demand forecasting — an overview. Elasticity and its Application: The Elasticity of demand, The Elasticity of supply, Short run vs. long-run elasticity, Applications of elasticity of demand and supply. Consumer Choice, Individual and Market Demand, Cost of Production, the Analysis of Competitive Markets, National Income, Money, Inflation.

ENL103 History of Economic Thoughts 3 Credits (3-0-0)

The content of this course is spread over various schools of thought existing in the arena of Economics. The main topics covered in the course include nature and importance of economic thought, relativist and absolute approaches to economic thought, Mercantilism: views on trade, money and prices, wages and employment, Physiocracy: natural order; net product and circulation of wealth, classical political economy, Adam Smith: theories of value, distribution and growth, Ricardian Economics: value analysis theories of trade and distribution, J S Mill: theory of value, views on production and distribution. Classical Stationary State with special reference to Mill's views, Marxian Economics: Historical Materialism, Theory of Value, Theory of Capital Accumulation, Theories of Crisis, Simple Reproduction Scheme, Veblen's theory of Leisure Class, Essential features of Marginalism, Walras's Theory of General Equilibrium, A General Overview of Marshall's Contribution, Features of Neoclassical economics. Neoclassical Ideology and the myth of self-adjusting market: The writings of John Maynard Keynes.

ENL202 International Trade 4 Credits (4-0-0)

This course will emphasize both theoretical (mathematical/analytical) models as well as empirical studies of how well those models fit "real world" data. Moreover, the course will

frequently compare and contrast alternative theories/conceptions of the nature international trade and the gains or losses thereof. Understanding the economic intuition behind the technically demanding models as well as thinking critically about the assumptions behind the theories and how well they fit actual trading economies will be a major focus. The rather unique nature of what this course attempts to achieve is underlined by the fact that there is no single textbook that would serve our purpose. This will provide us with the perfect segue then to chip away at the (artificial) barriers dividing trade theory from international finance, economic history, growth, and development theory, and even aspects of political sociology. Moreover, apart from providing us with a chance to re-evaluate the case for "free" trade from different perspectives, our approach will also help us come to terms with the ever-widening breach between varying perceptions somewhat amorphous (and misleading) terms "trade such as liberalization" "globalization." This course is being offered at a very interesting time. Debates surrounding the process of "globalization" have aroused much interest both in academic circles and amongst global citizenry.

This course will provide an excellent opportunity to discuss some of these issues and to use theoretical tools to make sense of the fundamental arguments involved. Since it is not possible to cover all aspects of international trade in class, the lectures will focus on a "core" of major theoretical models, policy analyses, and empirical studies. Student participation will be sought and encouraged.

ENL203 Business Mathematics 3 Credits (2-0-2)

Surds and indices, logarithm, common log and natural log, antilog, use of log in calculations, linear and quadratic equations and their solution, functions and graphs — linear, quadratic, exponential and trigonometric functions. Series and sequences and their applications in the solutions of business problems, simple interest and compound

interest, present value and annuities. Idea of limits and continuity, differentiation and application of differentiation in the solution of business and economic problems, maximization and minimization problems, Integration, Determinants and matrices and solution of simultaneous equations.

ENL204 Statistics and Research Methodology-II 3 Credits (2-0-2)

This course covers the understanding and application of appropriate research designs, research statistics, the use of computers for data analysis and report writing. In this course, students will learn how to identify problems to study, develop hypotheses and research questions, specify independent and dependent variables, check for the validity and reliability of studies and design research projects. The main topics covered in this course are background to research, literature review, nature and types of research, research applications in social sciences and business, questionnaire design, data collection methods, types of data analysis methods, writing qualitative research, nature of quantitative research, data and variables, descriptive statistics, sampling, hypothesis testing, association: correlation coefficients, bivariate regression, ANOVA, writing quantitative study.

ENL106 Intermediate Microeconomics 3 Credits (2-0-2)

This course is a sequel to Microeconomics I. The course is designed to provide sound training in microeconomic theory. The main topics covered are consumer theory, production and costs, concepts of economies and scale, market structure and game theory: monopoly market structures, monopolistic competition, interdependence and collusion between firms in oligopoly, formulate a payoff matrix and analyse the choices for firms in game theory, general equilibrium, efficiency and welfare and market failure and asymmetric information.

ENL206 Introduction to Econometrics 3 Credits (2-0-2)

This course aims at providing students with a thorough understanding of core techniques of econometrics with a focus on the application of techniques to economic theories for quantifying relevant factors for economic policy and other decision making. This course will help students to rigorously understand issues in connecting data, statistics and economic theory. The approach would be hands-on practice to help students get comfortable with working with dataset, using economic software package. The main contents of this course are introduction to econometrics, simple linear regression model (concepts, estimation, properties and testing of multiple regression hypothesis), identifying and correcting for violation of CLRM assumptions and Specification Analysis.

ENL216 Intermediate Macroeconomics 3 Credits (2-0-2)

This course introduces the students to formal modeling of a macro-economy in terms of analytical tools. It discusses various alternative theories of output and employment determination in a closed economy in the short run as well as medium run, and the role of policy in this context. The main topics covered in this course include Aggregate Demand and Aggregate Supply Curves, Inflation, Unemployment and Expectations - Phillips curve; Okun's law; adaptive and rational expectations; policy ineffectiveness debate and Open Economy Models - Short-run open economy models; Mundell-Fleming model; exchange rate determination; purchasing power parity; asset market approach; monetary approach to balance of payments.

ENL208 Environmental Economics 3 Credits (2-0-2)

In Environmental economics, students are taught about the area of economics which studies the financial impact of environmental policies. Environmental economists perform studies to determine the theoretical or empirical effects of environmental policies on the economy. Topics covered are related to designing appropriate environmental policies

and analyzingx` the effects and merits of existing or proposed policies.

ENL209 Behavioral Economics 4 Credits (4-0-0)

This course will help to understand why people make the decisions and predict how others behave in situations in which they interact strategically. The broad topics Assumptions of Economics and evaluations Game theory and Experimental Game theory Neuroeconomics; Evolutionary Psychology and Economic Psychology Conceptual Framework: automatically; Thinking socially; Thinking Thinking with mental models Methods of Behaviour Economics. Poverty Behavioural Finance; Household finance Auctions Economic Behaviour and Public Policy; Behaviour in macroeconomy. Lessons from Behaviour **Economics**

ENL215 Public Finance 4 Credits (4-0-0)

The focus of the course, which draws on microeconomic theory, is on the development of analytical tools and their application to key policy issues relating to the spending, taxing and financing activities of government. Particular emphasis is given to recent developments in public economics, including findings from current research, in areas such as behavioural public economics, new empirical methods and policy innovations. The course aims to give students an appreciation of the analytical methods in economics for the study of the public sector and the role of the state in principle and in practice; to provide a thorough grounding in the principles underlying the role of the state, the design of social insurance and the welfare state and the design of the tax system and to enable students to understand the practical problems involved in implementing these principles.

ENL212 Corporate Governance and Sustainability 3 Credits (3-0-0)

This course will teach the fundamental theories and practice of corporate governance. This course covers the history of the corporation, boards of directors, the division of profit sharing and various forms of employee ownership and equity ownership among insiders, regulation, shareholder activism, the impact of takeovers and mergers and acquisitions on governance, ethical issues such as conflicts of interest and trading. insider international corporate governance, and policy developments likely to impact the corporation. CSR component is about how business takes account of its economic, social and environmental impacts in the way it operates - maximizing the benefits and minimizing the downsides. The course discussion will be based on these issues.

ENL211 Fundamentals of Money and Banking 4 Credits (4-0-0)

The course discusses various aspects of money and finance including interest rates, monetary management and instruments of monetary control. The main topics covered include introduction to money: functions and types of money, post-war controversy on the definition of money, theoretical and empirical methods to distinguish money from near money assets, types of monetary system and qualities of good monetary system, Demand for Money: The Classical Quantity Theory, The Keynesian Approach, The Post-Keynesian Approaches -Tobin – 'Liquidity Preference as behaviour towards risk', Boumol and Tobin - 'The Transactions demand for Cash: An Inventory – Theoretic Approach', Friedman's Theory Supply of Money: Money Creation by the banking system, high powered money and money multiplier, Measures of money supply in India, monetary policy: Targets, goals and the tradeoffs among alternate goals, Policy Tools, Lags in Operation, transmission mechanism – classical model, Keynesian model and monetarist model, monetary policy in the open economy, RBI's monetary policy.

ENL304 Indian Economy 4 Credits (4-0-0)

This course sets the base for the Indian Economy as a whole and precisely it will help students to learn the nature and characteristics and the development of the Indian economy. The broad topics covered include economic development since independence, population and human development, theoretical basis of Indian economy, policies and performance in agriculture, policies and performance in industry, problems in Indian economy.

ENL306 Economic Growth and Development 4 Credits (4-0-0)

This course sets the base for the Indian Economy and the difference between the economic growth and economic development as a whole and it also focus on the various theories of Economic Growth. The broad areas covered in the course include Understanding Development: development and underdevelopment economic growth, economic development, Conception of Development; Income/Output based measures and their inadequacies; PQLI and HDI as indicators of development), Theories of Economic Development: Classical theory of development; Karl Marx theory of development, theory of social change, crisis in capitalism, Schumpeter and capitalistic development, Rostow's Theory of Stages of Economic Growth, Balanced and Unbalanced Growth, Mahalanobis model and Solow model, Approaches to Economic Development: Partial theories of growth and development - vicious circle of poverty, circular causation, Unlimited supply of labour, Big Push, Balanced Growth, Unbalanced Growth, Critical Minimum Effort Thesis, David Ricardo; Low Level Equilibrium Trap, Harrod Domar, Golden Age rule, Sectoral Importance to Development: Role of agriculture, industry and service in economic development.

ENL330 Agricultural Economics 4 Credits 3 Credits (2-0-2)

The objective of this course is to equip students to analyze and critically assess issues, policies and programmes in the areas of Indian agriculture. The main topics covered include definition, scope and nature of agricultural

economics, need for a separate study of agricultural economics, agricultural linkages with other sectors, role of agriculture in economic development (historical evidence from Europe, USA and Japan) and declining importance of agriculture in Economic development, production function analysis, types of farm organisations and their comparative production efficiency, transformation of agriculture, Schultz thesis of transformation of traditional agriculture and Green Revolution in Indian agriculture. Agricultural markets, Agricultural Credit: Importance of credit, Need for Government intervention, agricultural credit system in India. Agricultural Price Policy: Need, Objectives, and instruments of agricultural price policy.

ENL331 Industrial Economics 3 Credits (2-0-2)

This course is designed to familiarize students with the theoretical and practical application of various theories related to Firm and Industry. The broad topics covered in the course include concepts of firm, industry and market, organizational forms, separation of ownership from management and control, alternative goals of firm: contributions of R Marris and Williamson, elements of market structure: Sellers' and buyers' concentration, product of differentiation, conditions entry, sellers's measurement of concentration, determinants: economies of scale and barriers to entry, growth of firms: vertical integration, diversification, concepts of mergers and acquisitions, Oligopolistic Conduct: evolution of market structure, economics of advertisement. economics of R & D: Concepts, measurement and market structure and innovation, allocative efficiency: market structure and profitability, productive efficiency: degree of sub optimal capacity.

ENL332 Comparative Economic Development 3 Credits (2-0-2)

The syllabus covers the state of the Indian economy prior and post to Independence and the economic impact of various sectors of the

Indian economy. The course focuses on a set of countries, which followed clearly diverse trajectories and patterns of growth to achieve their industrial transition and compares the outcomes of these diverse trajectories on sectoral change, inter-sectoral relations, labour processes and industrial relations and also compares the role of the state in facilitating the respective trajectories. The main topics covered include Introduction and Perspectives on Comparative Economic Development, Overview of Economic Development of the countries selected for case studies: JAPAN, RUSSIA, UK, Agrarian surplus, the industrial revolution in Britain, the role of state in Industrial and Developmental Transition, the factory system, structure of industrial authority, organisation of work and industrial production, relationship between workers and managers.

ENL333 Labour Economics 3 Credits (2-0-2)

The main contents of this course include nature and characteristics of labour markets focus on India, paradigm of labour market analysis, demand for labour in relation to size and pattern of investment, supply of labour in relation of growth of labour force, labour market policies, mobility and productivity of labour, methods of recruitment and placement, employment service organization in India, employment and development relationship-poverty unemployment in developing countries; impact of rationalization, unemployment, technological change and modernization on employment in organised private industry, public sector and employment in agricultural sector, employment policy under Five Year Plans and its evaluation.

ENL334 Economics of Health and Education 3 Credits (2-0-2)

This course provides a microeconomic framework to analyse, among other things, individual choice in the demand for health and education, government intervention and aspects of inequity and discrimination in both sectors. It also gives an overview of health and education in

India. The broad areas covered include Role of Health and Education in Human Development, Microeconomic Foundations of Health Economics, Evaluation of Health Programs, Health Sector in India, Education: Investment in Human Capital, Education Sector in India.

ENL335 Population Studies 3 Credits (2-0-2)

The course aims at providing students with the in depth knowledge of nature and characteristics of Indian demography, population studies and population economics. The main contents of this course include theories of Population: Malthus, Optimum, Marxian, Leibenstein, Demographic transition theory and Optimum population theory, Population and Economic Development, Population Structure Characteristics: Impact of Population growth on the age and gender structure, Aging of population, Fertility: Concepts of fertility transition, Measurement of fertility and fertility differentials in India. Mortality: Components and Measurement, Migration: Concepts, Types, measurement, migration selectivity, causes and consequences (economic and demographic) of migration, Migration Differentials in India: Rural-Urban, Male-Female, Urbanization, Growth and Structure of Indian Population, Literacy: Literacy transition in India, pattern of literacy and literacy differentials in India. Economic Composition of Indian Population: Work force participation and occupational structure, Estimation of Population in India: Census, sampling and vital registration methods, Population Policy in India since Independence.

ENL213 Mathematical Economics 3 Credits (2-0-2)

This course aims at inculcate in students the various concepts of mathematics and its applications in economic theory. The broad topics covered in this course include Differential equations, General formula for first order linear differential equations, homogenous equations, exact differential equations, linear differential equation of second order with constant coefficients, application in economic theories,

Multivariable functions, optimization with or without constraints, partial differentiation up to second order, homogeneity of functions and Euler's theorem, total differentials I.e. differential of implicit functions, Matrices and Determinants, Algebra of matrices, inverse of a matrix, solution of system of linear equations (having unique solutions and involving not more than 3 variables), Types of Maxima, the Weierstrass theorem, and local Global theorem, No inequality constraint, Kuhn - Tucker condition, Khun Tucker sufficiency theorem, Solution algorithm, the control problem, calculus of variation, Dynamic programming, Maximum Principles.

ENL337 Financial Economics 3 Credits (2-0-2)

This course aims at introducing the students to the economics of finance. The broad areas covered in the course include investment theory and portfolio analysis: deterministic cash flow streams, single period random cash flows, CAPM, introduction to derivatives and options; forward and futures contracts; options; other derivatives; forward and future prices; stock index futures; interest rate futures; the use of futures for hedging; duration-based hedging strategies; option markets; call and put options; factors affecting option prices; put-call parity; option trading strategies: spreads; straddles; strips and straps; strangles; the principle of arbitrage; discrete processes and the binomial tree model; risk neutral valuation, Patterns of corporate financing: common stock; debt; preferences; convertibles; capital structure and the cost of capital; corporate debt and dividend policy; the Modigliani-Miller theorem.

ENL338 Introduction to Statistical Programming with R

3 Credits (2-0-2)

The purpose of this course is to set a foundation for full exploitation and creative use of the statistical language for computing and graphics in R. In this course, student will learn to program in R and how to effectively use R for statistical computing. The course emphasis is on data

manipulation and basic statistical analysis. Students will identify appropriate statistical methods for the data or problems and conduct their own analysis using R environment. The main topics covered are introduction to R and R-Studio, general introduction to computing, data types, basic operations, control structures and looping in R, data manipulation, probability distributions and simulations, plotting, exploratory data analysis, basic statistical analysis, linear regression.

ENL339 Forecasting Methods 4 Credits (2-0-2)

The objective of this course is to familiarize the students with advanced techniques Econometrics. The broad areas covered in the course include Introduction to forecasting: Nature, Importance and Evaluation of forecast; Short-and Long-Term Forecast; Uni-variate Methods: Smoothing Methods, Measurement of Seasonal Variations (method of Simple Average, Ratio-to-Trend Method, Ratio-to-Moving Average Method and Link Relatives Method), **Box-Jenkins** approach; and Multivariate Methods: Regression Models, Time Series Analysis; Co integration Analysis: Testing for Unit Roots and Co integration; Error correction model; vector error correction model. Students would work on Statistical Software Packages-EVIEWS, SPSS, R.

ENL210 Fundamentals of Spreadsheet Modeling 3 Credits (2-0-2)

The basic spreadsheet is one of the most powerful and indispensable tools for data analysis that exists. The spreadsheet approach to problem solving is more accessible to managers, as they usually find spreadsheets a natural medium for organizing information and performing "what if' analyses. The emphasis of the course will be on systematic, logical thinking, and problem solving on spreadsheets, illustrated by building and analyzing models of a variety of problems in operations, finance, and marketing. In this course, student will learn how to structure, analyze, and solve business decision

problems on Excel spreadsheets. The focus will be on problems involving optimal resource allocation and risk analysis for decisions involving uncertainty; some data analysis and forecasting methods. While the underlying concepts, models, and methods of this course are mathematical in nature, we will develop them on a more intuitive and user-friendly platform of spreadsheets, analyze them using the available Excel commands, tools, and addins, perform sensitivity analyses of the solutions, and study their economic interpretations.

ENL342 Advanced Econometrics 3 Credits (2-0-2)

This course aims at training students for understanding of advanced techniques of econometrics with focus on applications of econometric tools and techniques to test economic theories, real life observable phenomena and quantify relevant factors determining economic behaviour to assist in policy formulation. This course will help student to rigorously understand issues in connecting data, statistics and economic theory. The approach would be hands-on practice to help students get comfortable with working with dataset using economic software package. The main contents of this course are introduction to econometrics, review of simple linear regression model and multiple regression models, review of CLRM assumptions, Regression with dummy variables, functional forms in multiple regression models, and Simultaneous Equation Models.

Course Description BA Psychology (Honours) (2023-2026)

PROGRAMME CORE

PCL130 Introduction to Psychology 4 Credits (4-0-0)

This course introduces students to the basic concepts of the field of psychology with an emphasis on applications of psychology in everyday life. To give an overview of the development of this academic discipline. Introducing to the basic principles and methodologies and its study.

PCL105 Evolution of Psychological Thought 4 Credits (3-1-0)

Adopting a critical lens, the course aims to explore the various viewpoints on consciousness from both Western and Eastern perspectives. The course provides an overview of the historical debates in the originating systems of thought that have contributed to the current Western approaches to psychology. Furthermore, the courses critically examine the crucial thinkers and the issues raised by Post-Modern thinkers with regard to feminism and cultural paradigms.

PCL111 Understanding Individual Differences 4 Credits (3-1-0)

The course examines psychological features that contribute to differences and similarities in individuals. The course will review major theories, debates, and research findings in the fields of intelligence, personality traits, motivations, and emotions.

PCL107 Academic Reading and Writing 3 Credits (2-0-2)

The goal of the course is to introduce the students to the world of academic literature. The course aims to expand the skills of the students and build their self-confidence as academic readers, researchers, and writers. The course will also provide a series of exercises that cover the fundamentals: how to read scholarly texts; how to read for and write with a focus on logical validity and coherence as an academic writer; how to plan and organize a well-structured argument or explanation; how to find, synthesize, and cite sources; and how to edit, polish, and proofread your final draft to ensure readability. Additionally, the students will be familiarized regarding the latest APA guidelines and plagiarism requirement.

PCL104 Introduction to Social Psychology 4 Credits (2-2-0)

Social psychology is the scientific study of the way people think about, feel, and behave in social situations. It involves understanding how people influence, and are influenced by, the others around them. A primary goal of this course is to introduce students to the perspectives, research methods, and empirical findings of social psychology. Topics to be covered include: social influence, social cognition, Interpersonal attraction, pro-social behaviour, aggression. Finally, throughout the course, emphasis will be placed on developing critical and integrative ways of thinking about theory and research in social psychology.

PCL106 Positive Psychology 4 Credits (3-1-0)

The main objective of this course is to provide an orientation to the students to the various aspects of positive psychology as opposed to traditional psychology and to move beyond the disease model. The course provide opportunity to the students to explore the concepts of positive psychology constructs such as happiness, character strengths, self-efficacy, creativity and introduce the ways positive psychology can be applied in real-world settings.

PCL108 Introduction to Physiological Psychology 4 Credits (3-1-0)

The present course is designed to introduce students to the nature and methods of Physiological Psychology. It will help the students to understand the cellular and neural basis of behaviour along with structure and functions of endocrine glands, brain and nervous system.

PCL112 Statistical Methods and Psychological Research – I 4 Credits (2-2-0)

The course will expose students to qualitative and quantitative research methodology. The course will emphasise on research design and sampling techniques. It will also cover Descriptive Statistics. All these concepts will pay the foundation for the course Statistical Methods and Psychological Research - II.

PCL204 Applied Social Psychology 4 Credits (2-2-0)

This paper provides an in-depth overview of the dominant theoretical and empirical trends in social psychology, and also the key issues and related to social inequalities, especially in the Indian context. The course introduces studies and applications of research findings to social issues, problems-Interpersonal relationships, diversity issues, inter-group relations, conflict resolution, the justice system, and community concerns.

PCL211 Introduction to Developmental Psychology 4 Credits (3-1-0)

The present course aims to help the students understand the major theoretical perspectives and methodological approaches used in Developmental Psychology. It allows the students to identify various milestones in diverse domains of human development across life stages. Moreover, it helps them to understand the contributions of socio-cultural factors involved in shaping human development, especially in the Indian context.

PCL201 Cultural Psychology 4 Credits (3-1-0)

To understand the role of culture in understanding behaviour and exploring psychological insights in the Indian thought traditions. It includes Cultures; Psychic Unity and Cultural Relativity; Beyond Descriptions of Cultural Differences, Who am I and Who are They? Culture and architecture; Representation: Person, Other People, Self and of Groups, The Making and Remaking of Cultures: A Developmental Perspective: Family and children, models of the family, self-construal and developmental pathways, Intercultural Contacts and Indigenous Psychology.

PCL213 Statistical Methods and Psychological Research – II 4 Credits (2-2-0)

The course will expose students to inferential statistics. It will cover the concepts of Hypothesis testing, power and effect size. The students will learn parametric (t-test, ANOVA, Product Moment Method) and non-parametric statistical analysis for differences, correlation and regression.

PCL212 Introduction to Cognitive Psychology 4 Credits (3-1-0)

The course aspires to provide an in-depth understanding of some of the cognitive processes in terms of current theories, models and applications to the students. Additionally, to help learners understand the importance of these cognitive processes in everyday life like reasoning, problem-solving, language, judgement, decision-making, risk-taking.

PCL214 Psychopathology and Well-Being 4 Credits (2-2-0)

Students will critically engage with the concept of normalcy and abnormality and its understanding in various cultures. The students will be exposed to theoretical and clinical perspectives relevant to the study of psychopathology such as the Diathesis-Stress-Model. Emphasis is placed on terminology, classification, etiology of the major disorders: anxiety based disorder, OCD, and phobia, dissociative disorder, clinical picture of personality disorders (Oppositional defiant disorder, and conduct disorders), Childhood developmental disorder (Mental Retardation, Pervasive developmental disorder, Autism, ADHD), Gender identity disorder and Paraphilia, and substance abuse and addictive disorders.

PCL202 Industrial and Organizational Psychology 4 Credits (3-1-0)

The present course is designed to study the workplace environment, organization, and their employees. This course will introduce students to history of industrial Psychology and Organizational behaviour, its current status in India. Studying this would enhance the student's concern for Increasing productivity and at the same time maximizing the performance of an organization as a whole. It has been designed to provide the student a detailed knowledge about the role psychology plays in managing organizational resources, at the same time focusing on the employee behavioural part.

PCL206 Counselling Psychology 4 Credits (3-1-0)

The students will be taught the various phases and stages of the counselling process and learn the relevance of assessment in assisting the counselling process. This paper provides an in-depth overview of the dominant theoretical, empirical trends, and perspectives in the field of counselling psychology. The students will be exposed to the definition, scope, and goals of Counselling. The students will also be able to differentiate between Counselling, guidance, and psychotherapy and understand its implication according to the etiology of the client. The course will help students appreciate and develop the essentials of counselling skills and relationship building. The students will be exposed to different types of counselling setups, particularly behavioural and academic issues and Family counselling.

PCL302 Applied Clinical Psychology 4 Credits (3-1-0)

The purpose of this paper is to develop knowledge and understanding of clinical psychology. The course will provide an exposure to different techniques, skills, and treatment modalities: Cognitive Behavioural, Humanistic and Existential, and Psychodynamic. The students will be encouraged to

develop skills to differentiate application of techniques based on the etiology of the patient and treatment settings.

PCP201 Psy Practical (Experiment) 3 Credits (2-0-2)

The present course is designed to introduce students to experiments and develop skill for conducting psychological experiments that are useful in research and clinical practice.

PCP202 Psy Practical (Testing) 3 Credits (2-0-2)

The present course is designed to introduce students to psychological testing and develop skills for conducting psychological assessment that is useful across multiple contexts such as clinical, counseling, recruitment and selection, and carrying out any research. The students will gain hands on experience in conducting psychological tests. They will also learn to interpret test scores to formulate reports.

PCP301 Psy Practical (Survey) 3 Credits (2-0-2)

The present practical course will equip the students to conduct surveys for the purpose of psychological enquiry and research methods.

PCP302 Psy Practical (Qualitative Analysis) 3 Credits (2-0-2)

This course aims at developing skill of qualitative analysis as research methods used in psychology.

PROGRAMME ELECTIVES

Clinical Psychology PCL331 Health Psychology 3 Credits (2-0-2)

The present course has been designed to familiarize the students with the importance of Psychological processes and its interaction with the medical treatment in the practice of health and illness. It introduces the students to the Nature of Health Psychology and various components of health. It acquaints the students with health enhancing behaviours as well as the management of pain and chronic illness. Through this course, the students will be encouraged to develop an understanding of research in health psychology domains and interventions developed.

PCL332 Stress Management 3 Credits (2-0-2)

The present course aims to acquaint the students with the nature, symptoms and sources of stress to help them develop adequate knowledge about how to recognize signs of stress and its causes in themselves and others. It also aims to help the students learn about various techniques of stress management, like yoga/exercise/games, meditation, and relaxation techniques, so that they can develop skills for dealing with stress effectively.

Consumer Psychology

BSL204 Consumer Behaviour 3 Credits (2-0-2)

Consumer Demographics, Life Styles, Retailing Implications of Consumer Demographics and Lifestyle, Consumer Profiles, Lifestyle Marketing, Environmental Factors and Individual Factors affecting Consumers. Consumer as an Individual, Motivation, Needs, Goals, Personality, Self and Self Images, Perception, Imagery, Learning, Cues, Response, Reinforcement, Behavioral Learning and Cognitive Learning Theory, Brand Loyalty, Attitude Formation and Change, Shopping Attitudes and Behavior, Consumer Buying Decision Process, Types of Consumer Decision Making, Impulse Purchases and Customer Loyalty, Group Dynamics and Reference Groups, Family Decision Making, Social Class, Culture, Subculture, Opinion Leadership Process, Diffusions of Innovations, Adoption Process.

PCL338 Psychology of Advertising 3 Credits (2-0-2)

This is an introductory course about the psychology of persuasion and consumer behaviour as they relate to marketing and advertising. Psychological concepts will be covered such as: perception, learning, memory, motivation, values, personality, attitudes, etc. Consumer behaviour-related concepts will also be discussed such as: lifestyle, decision making, opinion leadership, income, social class, etc. The goal is to provide students with a sound understanding of how advertising may impact consumers on a psychological level.

PCL336 Media Psychology 3 Credits (2-0-2)

The present course in psychology is oriented towards developing knowledge of the basic concepts in media psychology to students and aid in developing skills for applying psychological knowledge to real life situations. The course will allow students to study advertisement, consumer behaviour, addiction and psychological impact, and the representation of social identities in news and media.

Environmental Psychology PCL334 Sustainability and Conservation Behaviour 3 Credits (2-0-2)

Conservation behaviour is becoming an increasingly important concept as natural resource managers, development officers, educators, politicians, regulators, and business leaders consider what it takes to push people toward sustainable behaviours. The present course is designed to introduce to students the concept of conservation behaviour and the environmental problems faced. Students will understand how habit formation and change affects management decisions and provide insight to environmental values.

PCL335 Foundation of Environmental Stress 3 Credits (2-0-2)

The course will explore the psychological dimensions of humankind's relationship with the nature and the ecological dimensions of human psychology. Psychologists often emphasize that our relations with others may bring forth health or suffering, for both oneself and others. This is also true in our relations within the shared earth community. While we often forget it, we all know that contact with nature enhances our health. Mass extinction of species,

climate disruption, water shortages, poisoned air and water: These devastating phenomena are evident in our home towns and around the world. Clearly, our ecological crisis is not only a biological crisis, but more deeply an ethical crisis of consciousness, culture, and relationship – all key area of psychology's expertise The non-human natural world is one of the most egregiously exploited "others" in contemporary life, to the mutual impoverishment of both humankind and the rest of nature.

Organizational Psychology BSL344 Organization Change and Development 3 Credits (2-0-2)

The course would comprise of concept and significance of change; analyzing the environment; perspectives on change; Managing change; types of change. Further understanding of models of change and how to implement change would be provided. Thereafter human process interventions – coaching, training and development, process consultation, third party intervention, team building, inter-group relations intervention, socio-technical systems approach will be discussed.

BSL340 Performance Management and Competency Management 3 Credits (2-0-2)

The course is designed to provide students an understanding how organizations have changed the way they look at employee performance. Organizations have gradually moved from performance appraisal to a holistic performance management cycle. It is important for students to understand the different methods used to appraise performance and which method to use, keeping in mind the business objectives. While being conversant with the cycle it becomes important to understand the relevance of competencies in the context of employee performance – relevance of competence and competency, competency models, competency mapping.

BSL203 Human Resource Management 3 Credits (2-0-2)

The course starts with a brief introduction to HRM and its importance for all managers. It is the human resources of an organization who are instrumental in getting a competitive edge for an organization. It is the contribution of these human resources that ultimately leads to the organizational effectiveness and performance. The objective of the course is to impart knowledge, understanding and key skills that enable individuals to deal with the people component of organizations and employ effective strategies and methods for acquisition, development, maintenance and separation of human resources in an organization. For learners of this course, it could serve as a foundation while taking up courses in specialized HR areas and fields and also for building a career in HR.

BSL302 Leadership 3 Credits (2-0-2)

Leadership is not a solo activity. Leaders must be able to motivate others to take action. Leading teams involves managing different personalities, cultures, conflicting political

agendas, and varying skill levels while simultaneously securing resources and managing expectations of stakeholders internal or external to the organization. The purpose of this course is to expand students' understanding of group and intergroup dynamics and develop their abilities to identify group processes and their implications. It will also make them better at leading, developing and sustaining resonant, high performing teams. This course explores self-awareness, managing visibility, team building, navigating power, and strategic networking. At the completion of the course the students will: demonstrate understanding of principles of group dynamics, understand the key concepts of leading high performing teams; understand how they see themselves and may be perceived by others; realize the importance of understanding and owning power dynamics; understand the importance of networking and map and analyse their networks.

Forensic Psychology PCL341 Foundations of Forensic Psychology 3 Credits (2-0-2)

Forensic Psychology is the application of psychology in the aid of legal investigation, which looks into the vast psychological perspective and applies them to legal investigations including issues such as public policies, new laws, competency and also the mental state of a defendant.

PCL342 Forensic Psychology in practice 3 Credits (2-0-2)

Forensic Psychology is the application of psychology in the aid of legal investigation, which looks into the vast psychological perspective and applies them to legal investigations including issues such as public policies, new laws, competency and also the mental state of a defendant

SKILL ENHANCEMENT COURSES

BSV301 Creative thinking and Negotiation Skills 3 Credits (2-0-2)

Through this course student identify the difference between creativity and innovation Recognize their own creativity, build their own creative environment, Explain the importance of creativity and innovation in business, apply problem-solving steps and tools, Use individual and group techniques to help generate creative ideas, Implement creative ideas.

CSV100 Basic Computer Skills for Professionals 2 Credits (0-0-4)

Introduction to MS Word- Creation of Simple document, editing text working with table and graphic, Formatting document use of tools like spell-check, hyphenation, mail-merge printing of document, envelopes and labels. Introduction of MS Excel, meaning of workbook opening of excel sheet and work books. Formulating and printing Workbooks/sheets. Formulas and functions, graphs and chart and Introduction to Power Point, Introduction to Python.

ABILITY ENHANCEMENT CHL100 Environmental Studies 3 Credits (3-0-0)

Through this subject, students will be studying issues like pollution, global climate change, and the depletion of natural resources, students in Environmental Studies & Earth Sciences programmes focus on the most pressing environmental and ecological issues of today.

CLL120 Human Values & Professional Ethics 2 Credits (2-0-0)

The object of this program is to develop ethical thinking abilities for decision making, self-control, and holistic approach towards life and professions. This program would also help them to understand the importance of harmony in self, family and society, along with learning to be more responsible towards environment and society.

This program touches the topics like morals and values, integrity and honesty, and courage as a stepping stone towards a peaceful society. Topics like mindfulness, which has elements like framework of happiness quotient and Fuelling success, is included to bringing one's attention to the internal and external experiences happening in the present moment. It will also help them develop a state of mind where they pay attention to their thoughts and feelings without judging them. This entire program focuses on developing self-control and confidence through education. As the students are soon going to become professionals, to make them future ready topics like Business Ethics, Corporate Social Responsibility and corporate Governance is also included, so that being into corporate they can be effective decision makers and handle their responsibilities towards the society and organization.

CLL130 Effective Communication I 2 Credits (1-0-2)

Introduction to Communication, Types of Communication, Listening Skills, Language for Communication: Language and Communication; General Principles of Writing; Improving Writing Skills, Essentials of good style, Expressions and words to be avoided; Grammar and Usage, Communication Network: Scope and Types of Communication Network; Formal and Informal Communication Network; Upward Communication; Downward Communication; Horizontal Communication; Diagonal Communication, Writing Business Letter: Importance of Business Letters.

CLL140 Effective Communication II 2 Credits (1-0-2)

Writing Memos, Circulars and Notices, Report Writing, Writing E-mail: Principles of E-mail; E-mail Etiquette; Overcoming Problems in E-mail Communication, Oral Communication Skills, Meetings: Types of Meetings, Reading, Employment Communication – Resume: Contents of Good Resume; Guidelines for Writing Resume; Different Types of Resumes; Reason for a Cover Letter to Apply for a Job-Format of Cover Letter; Different Types of Cover Letters, Public Speaking and Academic Writing.

FOREIGN LANGUAGE ELECTIVE

CLL200 FRENCH I

3 Credits (1-2-0)

Understand and use familiar everyday expressions and simple sentences.

For ex: Greet people; Talk about themselves; Talk about where they live; Talk about their family members. Talk about their likes and dislikes; Engage in a simple buy-and-sell situation Ask about the day, the time and the date; Accept and refuse an invitation; Read simple notices, posters and catalogues; Fill in a simple form; Write a simple postcard.

CLL220 GERMAN I

3 Credits (1-2-0)

To greet someone, introduce yourself and others, ask someone his name and country, the alphabet and learn to spell, to get to know someone, start a conversation, numbers from 0 to 1000 and beyond, order in a restaurant and pay the bill, to understand telephone numbers, make questions with how, where from, where, what, verbs in present tense, articles in nominative, language in a foreign language class, use of dictionary, negation, nouns: singular and plural, listen to umlauts and speak, speak about cities and tourist features, about countries and languages spoken there, time data- clock time/ week days, To fix up appointments, to excuse oneself on being late, questions starting from when, from...till, prepositions related to time, separable verbs, e.g., to call up, to wake up etc.

CLL270 SPANISH I

3 Credits (1-2-0)

This is an introductory course for learning and understanding of Spanish language. In this course, learners will focus on various grammatical forms through these roots, they will explore the cultural, fictional and auto-fictional world of Spanish speaking countries with all components of the language at beginner level such as identify, distinguish and apply grammar rules, describe oneself and others, recognize and interpret Spanish cultural trends in short texts, construct and compose sentences in order to produce oral and written texts about their immediate environment.



| Review Date: |
|--------------|
| |
| Page 1 of 1 |
| |
| |

MINUTES OF BOARD OF STUDIES

A meeting of Board of Studies for School of Law, The NorthCap University, Gurugram was held on 9.05.2023 at 2:30 PM. The meeting was attended by the following:

| S.No. | Name | Designation | Signatures |
|-------|----------------------------------|---|----------------------------|
| 1. | Dr. Archana Sarma | Chairperson & Head, School of Law, NCU | Acerra |
| 2. | Prof. (Dr.) Vageshwari Deswal | External Expert Member, Professor of Law, Faculty of Law, University of Delh, New Delhi | Attended orline forms |
| 3. | Dr.Tavleen Kaur Khurana | Member & Assistant Professor, School of Law, NCU | Shave |
| 4. | Dr. Pallavi Bajpai | Member & Assistant Professor, School of Law, NCU | Alternated only Pallam Roy |
| 5. | Dr. Unanza Gulzar | Member & Assistant Professor, School of Law, NCU | Attended |
| 6. | Ms. Deborisha Dutta | Member & Assistant Professor, School of Law, NCU | Auta. |
| 7. | Mr. Himangshu Rathee | Member Secretary & Assistant Professor, School of Law, NCU | Helalu |

Following were the agendas of the Meeting:

- Consideration and development of new course initiatives including specific course revisions.
- To make the courses more relevant, review and modification of existing courses as proposed by the Course Coordinators.
- Presentation of Curriculum Structure and Courses of BBA-LL.B. (Hons.), LL.B. (Three Years) and LL.M.
- Approval of LLM course on "White Collar Crime" in corporate law specialization
- Approval of Fundamentals of Minor specialization courses

Following are the Minutes of the Meeting:

- Prof. (Dr.) Archana Sarma, Head, School of Law, NCU welcomed the external expert, Prof.
 (Dr.) Vageshwari Deswal.
- Prof. (Dr.) Archana Sarma briefed the BoS about the minor specialization courses which
 are to be offered to SoM&LS and SoET students. Following suggestions were made with
 respect to the minor specialization courses:
 - Privacy Law- Metaverse and its legal implications should be added in Unit 4. The course was approved.
 - 2. IPR and Technology, and Digital Forensics were approved.
 - Law of Contracts- It was suggested that Units 1 and 2 could be merged as essential of a contract. The course was approved.
 - 4. Consumer Protection Law- It was suggested that Consumer Protection Law should be replaced with company law since it is important for students taking up minor specialization in Business Law. It was further suggested that a small unit on consumer protection issues can be included in law of contracts. The template on corporate law was presented and approved.
 - Competition Law and Practice- It was suggested that elements of non-price competition should also be included. The course was approved.
 - Course template on White Collar Crime was presented- It was suggested that Units 3 and 4 should be interchanged with each other in sequence. Only after studying the general legislation, issues in enforcement could be identified.

 Revised course templates on International Trade Law, Law of Evidence, Law of Insolvency and Bankruptcy, Judicial Process & Independence of Judiciary, Interpretation of Statutes, and Criminal Justice Administration were presented and approved.



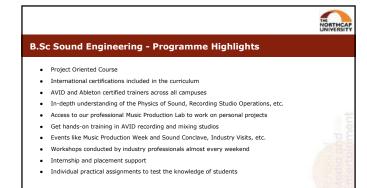




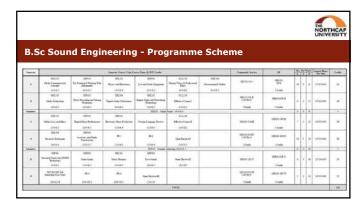
32nd Academic Council Meeting

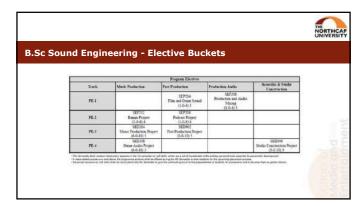
ITEM NO. 6: Introduction of New Programmes

Programme Overview



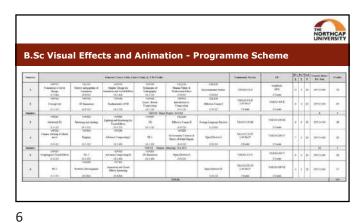
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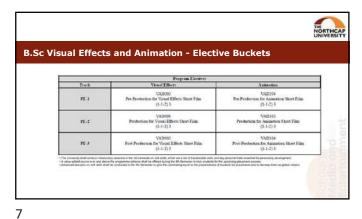


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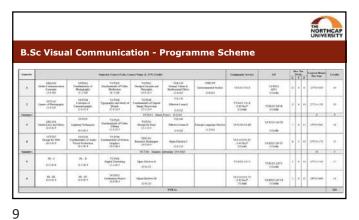


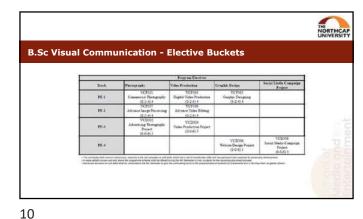
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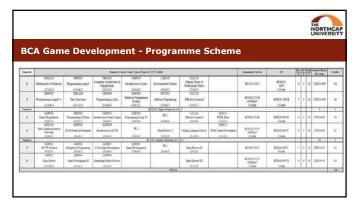
B.Sc Visual Communication - Programme Highlights Industry-relevant practical exposure to Photography, Video Production, Graphic Designing, and hands-on experience with various gears and software. Empowering students to understand the various parts of the technical media . Exposing students to the industry through various workshops conducted by industry professionals and experts Software taught: Adobe Creative Suite (Lightroom, Photoshop, InDesign, Premiere Pro, After Effects), Audacity, CorelDraw. · Focus on Soft skills like language and communication Faculty of experienced professors and certified trainers

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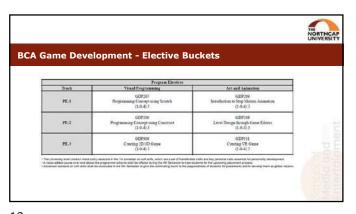






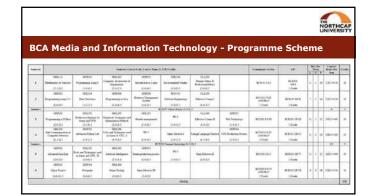
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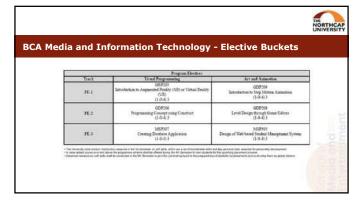
> 3 Page 282 of 349



BCA Media and Information Technology - Programme Highlights Project and output-oriented course structure Industry-relevant practical exposure to the Game, VFX, and IT industry and handson experience with various tools Empowering students with the ability to understand the insight into the various parts of the Technical discipline in Game and VFX Providing students with the competencies and skillset needed to work in the media and Information industry $\,$ Students are taken to influential Media, Games, $\,$ and animation events to further their knowledge and exposure Practical assignments and projects are assigned to give the students a hands-on experience

13 14





15 16

GENERAL ACADEMIC CALENDAR FOR SESSION 2023-24 THE NORTHCAP UNIVERSITY

ALL SCHOOLS (ODD SEMESTER, JULY-DEC 2023)

*Subject to change as per UGC/Govt. of Haryana Guidelines

| Sr. No | *Subject to change as per UGC/Govt. of F DETAILS | FROM | то | No. of Days |
|-----------|---|---|---------------------------------|-------------------|
| 1. | NPET and interview (PhD) | 17 June 2023 (Saturday) | | |
| 2. | Display of NPET result of admission list of new applicants for PhD Programme | 20 June 2023 (Tuesday) | | |
| 3. | Last date of Fees submission of new Ph.D. admissions | 27 June 2023 | (Tuesday) | |
| 4. | Registration on ERP for UG & PG programmes of SOET, SOM and SoL and all Ph.D. Scholars | 26 July 2023 (Wednesday) | 29 July 2023 (Saturday) | 04 |
| 5. | Semester Starts (Non-first year students)/ Orientation (First year students) | 31 July 2023 | (Monday) | 36+36 |
| 6. | Induction Programme for first year students (Batch 2023) | 31 July 2023 (Monday) | 19 August 2023 (Saturday) | 3 weeks |
| 7. | BDR for PhD Programme | 25 August 202 | 23 (Friday) | |
| 8. | Summer Internship evaluation | 19 August 2023 | 3 (Saturday) | |
| 9. | Submission of Final Result (Jan-June 2023) to CoE | 28 August 202 | 3 (Monday) | |
| 10. | Club/Society Activities | 2 September 202 | 23 (Saturday) | |
| 11. | Aptitude Test | 16 September 20 | 23 (Saturday) | |
| 12. | Submission of attendance by Course Coordinators to COR upto 22 September 2023 | 25 September 2023 (Monday) by 04:00 PM | | |
| 13. | Minor Test (Continuous Evaluations) | 25 September 2023 (Monday) | 30 September 2023 (Saturday) | 06 |
| 14. | Issue of Mid-Term Warning to students for Shortage of attendance upto 22 September 2023 | 29 September 2023 (Friday) | | |
| 15. | Class Committee meetings | 3 October 2023 (Tuesday) | 6 October 2023 (Friday) | |
| 16. | Mid-term project/GP/Community Service evaluation | 7 October 2023 (Saturday) | 13 October 2023 (Friday) | |
| 17. | Submission of checked answer scripts of minor test to COE & uploading of marks on ERP | 13 October 2023 (Friday) | | |
| 18. | SRC conduction window for all PhD Students | 7 October 2023 (Saturday) | 24 November 2023 (Friday) | |
| 19. | Momentum & Cerebration | 3 November 2023 (Friday) | 4 November 2023 (Saturday) | 02 |
| 20. | Open Elective/Programme Elective offered by Departments for Jan-June 2024 semester | 3 November 2023 (Friday) | | |
| 21. | Submission of online feedback by students | 9 November 2023 (Thursday) | 24 November 2023 (Friday) | |
| 22. | Convocation | Last week of Novembe Decembe | | |
| 23. | Open Elective/ Programme Elective to be opted by students for next semester | 16 November 2023 (Thursday) | 24 November 2023 (Friday) | |
| 24. | Display of pre-major evaluation on ERP | 30 November 2023 (Thursday) | | |
| 25. | Semester ends | 1 December 20 |)23 (Friday) | 73 |
| 26. | Submission of final attendance by Course Coordinators to COR | 2 Decembe (Saturday) by | | |
| 27. | List of detained students to be displayed on board/website | 2 Decembe (Saturday) b | | |

| 28. | Display of Open Elective/Programme Elective | 1 December 2023 (Friday) | | |
|-----|--|-------------------------------|--------------------------------|-------------------|
| 29. | Preparation for exam (for students) | 2 December 2023 (Saturday) | 4 December 2023 (Monday) | 03 |
| 30. | Meeting of Time-table in-charges with Dean-Academic Affairs | 8 December 2023 (Friday) | | |
| 31. | Major Tests (Regular Exam) | 5 December 2023 (Tuesday) | 18 December 2023 (Monday) | 11 |
| 32. | Major Tests (Buffer Exam days for the clashing of Re-appear course(s)) | 19 December 2023 (Tuesday) | 21 December 2023 (Thursday) | 03 |
| 33. | Evaluation Activities | 5 December 2023 (Tuesday) | 8 January 2024 (Monday) | |
| 34. | Last date of any modification in Open/Programme Elective by students | 8 December 2023 (Friday) | | |
| 35. | Final list of Open/Programme Elective | 13 December 2023 (Wednesday) | | |
| 36. | NPET and interview for PhD Programme | 2 December 2023 (Saturday) | | |
| 37. | Display of NPET result of admission list | 5 December 2023 (Tuesday) | | |
| 38. | Last date of Fees submission of new Ph.D. admissions | 12 December 2023 (Tuesday) | | |
| 39. | DRC (Departmental Research Committee meeting) of each Dept. | 15 December 2023 (Friday) | 22 December 2023 (Friday) | |
| 40. | Winter Internship (Only for Law) | 18 December 2023 (Monday) | 13 January 2024 (Saturday) | Approx. 20 |
| 41. | Display of Semester Results | 8 January 2024 (Monday) | | |
| 42. | Registration of courses for all programme for Jan-June 2024 | 11 January 2024 (Thursday) | 14 January 2024 (Sunday) | 04 |
| 43. | Commencement of classes for even semester (23-24) for all programmes | 15 January 2024 (Monday) | | |

| SUMMARY OF ACADEMIC CALENDAR | | TOTAL NO. | OF DAYS |
|--|---|-----------|-------------|
| Registration Days | 04 | 4 | |
| Effective Teaching, | Learning Days | 8: | L |
| Minor Test (continu | Minor Test (continuous evaluation) | 0(| 5 |
| Preparation for exa | m | 3 | |
| Total semester Teaching | / Continuous Evaluation | 9(|) |
| Major Test | | 11- | +3 |
| | LIST OF HOLIDAYS | | |
| Events | Date | | No. of Days |
| Independence Day | 12- 15 August 2023 (Saturday to Tuesday) | | 04 |
| Raksha Bandhan | 30 August 2023 (Wednesday) 01 | | 01 |
| Janmashtami | 7 September 2023 (Thursday) 01 | | |
| Mahatma Gandhi Jayanti | Gandhi Jayanti 02 October 2023 (Monday) 01 | | |
| Dussehra + Navami | Navami 21-24 October 2023 (Saturday to Tuesday) 04 | | |
| Diwali / Govardhan Pooja/Bhai Dooj | Pooja/Bhai Dooj 11–15 November 2023 (Saturday-Wednesday) 05 | | 05 |
| Guru Nanak Birthday | 27 November 2023 (Monday) 01 | | 01 |
| Christmas 25 December 2023 (Monday) | | | 01 |
| Note: - 1. 17 August 2023 (Thurse 2. 6 October 2023 (Friday | | | |

Monday-14; Tuesday- 14; Wednesday- 15; Thursday- 15; Friday- 14





YEARLY STATUS REPORT - 2021-2022

| Part A | | | |
|--|---------------------------|--|--|
| Data of the Institution | | | |
| 1.Name of the Institution | The NorthCap University | | |
| Name of the Head of the institution | Prof. Nupur Prakash | | |
| Designation | Vice Chancellor | | |
| Does the institution function from its own campus? | Yes | | |
| Phone no./Alternate phone no. | 01244195200 | | |
| Mobile no | 9910000918 | | |
| Registered e-mail | vcoffice@ncuindia.edu | | |
| Alternate e-mail address | nupurprakash@ncuindia.edu | | |
| • City/Town | Gurugram | | |
| • State/UT | Haryana | | |
| Pin Code | 122017 | | |
| 2.Institutional status | | | |
| University | Private | | |
| Type of Institution | Co-education | | |
| • Location | Urban | | |

| https://assessmentonline.naac.gov.in/public/index.php/hei/generateAqar_HTML_hei/MjU3NDQ= | | | |
|---|--|--------------------------------|-------------|
| Name of the IQAC Co- ordinator/Director | Dr. Re | kha Vig | |
| Phone no./Alternate phone no | 012441 | 95200 | |
| • Mobile | 987307 | 5854 | |
| IQAC e-mail address | rekhav | ig@ncuindia.e | du |
| Alternate Email address | satnam | singh@ncuindi | a.edu |
| 3.Website address (Web link of the AQAR (Previous Academic Year) | https://www.ncuindia.edu/wp- content/uploads/2022/06/AQAR- 2020-21.pdf | | |
| 4. Whether Academic Calendar prepared during the year? | Yes | | |
| if yes, whether it is uploaded in the Institutional website Web link: | | //www.ncuindi emic+calendar | |
| 5.Accreditation Details | | | |
| Cycle Grade CGPA Year of Accre | ditation | Validity from | Validity to |
| Cycle 2 A 3.02 2022 | | 02/08/2022 | 01/08/2027 |

6.Date of Establishment of IQAC

08/08/2011

7.Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

| Institution/ Department/Faculty | Scheme | Funding agency | Year of award with duration | Amount |
|------------------------------------|--------|----------------|-----------------------------|--------|
| Nil | Nil | Nil | Nil | Nil |

| 8. Whether composition of IQAC as per latest NAAC guidelines | Yes |
|---|------------------|
| Upload latest notification of formation of IQAC | <u>View File</u> |
| 9.No. of IQAC meetings held during the year | 2 |
| The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website. (Please upload, minutes of meetings and action taken report) | Yes |

| (Please upload, minutes of meetings and action taken report) | <u>View File</u> |
|---|------------------|
| 10. Whether IQAC received funding from any of the funding agency to support its activities during the year? | No |
| If yes, mention the amount | |

11. Significant contributions made by IQAC during the current year (maximum five bullets)

- 1. Introduction of Community Services in the curriculum of all programs: To impart the values based education and commitment towards society, NCU has taken an initiative which focuses on holistic development of students by introducing compulsory Community Service component in all UG/ PG Programmes. This is in line with the NEP-2020 and also UGC guidelines on fostering social responsibility issued in Jan 2020. Each student is required to fulfill 140 Hours of community service per year.
- 2. Development of Institutional facility for e-content development by faculty members: To enhance the digital learning experience of students, NCU has established new smart classrooms with world class infrastructure and recording studio for faculty members. Development of new state-of-the-art labs like i-MAC lab, high performance computing lab, cyber security labs, CAD Lab, etc to support digital learning across all the departments.
- 3. Actions taken for improving international admissions and exchange programmes: To promote the international admissions, NCU registered itself with EDCIL and focus is on to enhance the exchange programmes. NCU supports faculty members for co-teaching and co-research work with ASU partnership. NCU took part in an education fair in Nepal organized by Study in India and has signed MOU with the education consultants in Nepal
- 4. Formalization of IPR Policy and its implementation: Well-defined IPR policy is in place and available on NCU website. There has been an increase in number of patents filed & published during 2021-22. NCU has formulated the National Innovation and Startup Policy (NISP) which is implemented and is an integral part of The NorthCap Incubation centre. NCU has well-defined & fully functional Research, Development & Industry Liaison (RDIL) cell in place (https://www.ncuindia.edu/rdil/). Policy for promotion of research is available on NCU website.
- 5. Efforts in all domains to enhance the ratings and rankings of the University: NCU has been making continuous efforts towards various quality enhancement measures. Some of the outcomes are: 1. NIRF ranking 2022 has placed the University at 96th position in Engineering category and in the band of 151- 200, in University Category. 2. University has achieved 3.5-Stars in Institution's Innovation Council (IIC) rating for the year 2021-22. 3. Overall

QS 4 stars rating and a perfect 5-star rating in Teaching, Employability, Online learning, Academic development, and Inclusiveness from Quacquarelli Symonds (QS), the global rating agency in 2021. 4. Atal Ranking of Institutions on Innovation Achievements (ARIIA): NCU features among Top 30 Best Performer universities in the category of University & Deemed to be University of our country. 5. The university has won 'One Green One District Champion Award' for clean and green surroundings by Ministry of Higher Education in 2021.

12.Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year

| Plan of Action | Achievements/Outcomes |
|--|---|
| Internationalization of education | Access to content repository of Arizona State University and enhancement of teaching content, Global signature courses and co-teaching. Collaborative projects with international universities. |
| Focus on industry- academia collaborations and initiatives | For more process-driven and practical- oriented teaching learning and research projects, NCU has signed MOUs with many premier institutions of the country like Shri Vishwakarma Skill University, ICAT, STP, ACCA, Volkswagen Group Technology Solutions, National Highways Authority of India (NHAI), India Meteorological Department and National Technical Research Organisation (NTRO) and Space Application Centre (SAC) ISRO, Ahmedabad to facilitate faculty, researchers and students to familiarise with the latest trend and techniques and to bridge the industry-academia gap. |
| Initiatives for faculty development and upskilling | FDPs, externships, research seminars, orientations etc are conducted for upskilling of faculty. |
| Improving the positioning of the university with respect to its rankings and accreditation | NAAC — Grade 'A' NIRF Ranking- 96 for SOET QS I-Gauge badges received by three schools for the subject rating audit. School of Engineering and Technology: DIAMOND School of Management: GOLD School of Law: GOLD |

13. Whether the AQAR was placed before statutory body?

Yes

• Name of the statutory body

| Name | Date of meeting(s) | |
|------------------------------|--------------------|--|
| Academic Cuncil | 17/05/2023 | |
| 14.Whether NAAC/or any other | | |

14. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to Assess the functioning?

Yes

15. Whether institutional data submitted to AISHE

| Year | Date of Submission |
|---------|--------------------|
| 2021-22 | 15/02/2023 |

16. Multidisciplinary / interdisciplinary

The NorthCap University (NCU) has encouraged multidisciplinary/interdisciplinary learning through all its programmes across different schools. The credit framework of all programmes is aligned to NEP-2020 and gives necessary emphasis to multidisciplinary / interdisciplinary courses. The scheme of each programme is mandatorily having courses from various disciplines like basic sciences, languages, liberal studies etc. along with major discipline courses. Additionally, many open elective slots are available in each scheme where students are free to choose a course from a list of more than 100 courses offered by various schools /depts of the university. Moreover, through these open elective slots only, minor area specialization certificates can be earned by our students by completing a minimum of 12 credits of courses under any specialization other than the major one.

17. Academic bank of credits (ABC):

The NorthCap University (NCU) has adopted "Academic bank of credits (ABC)" in true spirit from the very initial stage only. A total of 974 IDs out of 1027 of Batch 2022 and 868 IDs out of 915 of Batch 2021 (which is more than 90% of the batch size), have been created by the students and received at the University's exam cell. Additionally, the university's exam cell has also started uploading the academic data on these IDs at Academic Bank of Credits.

Irrespective of ABC facility, which is only a new initiative under NAD, the University already has a well-defined & duly approved policy for accepting students through migration from other universities in its programmes. We are admitting students from UGC recognized universities every year, duly accepting credits earned at other universities through academic mapping done by our internal subject experts.

18. Skill development:

The NorthCap University (NCU) always focuses on the skill development of its students through regular upgradation of the scheme of studies and syllabi of its programmes. The process of

identification of the market needs and the skill gaps in our students at early stages and thereby filling it through regular upgradation of programme schemes and syllabi is a regular practice at NCU. Programme elective buckets are regularly updated with emerging area courses focusing on filling skill gaps as per market needs.

Additionally, the university arranges for relevant skill training through value added courses/summer immersion programs/internships/practical trainings/mini or major projects etc. where industry & domain knowledge experts along with soft & hard skills trainers are roped in on a regular basis.

This has led to huge employment benefits for our students.

19. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)

The NorthCap University (NCU) encourages students to select courses from the IKS course list under the open elective category. This helps in spreading the rich heritage of our country and traditional knowledge in the field of Arts and literature, Basic Sciences, Engineering & Technology, Management, Economics, Yoga etc. in compliance with NEP-2020.

A separate department, namely Dept of Liberal Studies has been set up in the university to provide such courses across all schools in the university. Few examples of these programs include Introduction to the Constitution of India, Human Values and Ethics, Indian classical music etc. Courses in some of these areas are compulsory in many programs and some can be taken as open electives courses as stated above. Many of these courses are offered online (MOOC) mode to students through Swayam/NPTEL and other approved portals through our credit transfer policy.

A Unique initiative in the spread of Indian culture taken by university includes setting up of 'Though Lab' at NCU in collaboration with the Education Wing of Brahma Kumari's to promote Indian way of meditation and stress management amongst our students. In addition, celebration of all important days and Indian Festivals at the University spreads the spirit of integration of Diversity of Indian Culture.

20. Focus on Outcome based education (OBE): Focus on Outcome based education (OBE):

The NorthCap University (NCU) has focused on Outcome based education (OBE) since its inception. All programs have well defined Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (Cos) duly approved by our statutory bodies. Clearly expressed course outcomes (COs), as per Bloom's Taxonomy, are defined for each course in the Scheme of Studies, for all the programmes offered across different schools. All COs are properly mapped to their POs and this mapping is part of all course

templates. This information is disseminated to students through LMS and the website etc. The course outcomes talk about what students are expected to know and be able to do, that is, what skills and knowledge they should have acquired, when they complete that course.

COs are mapped with each head of continuous and end semester evaluations tools including question papers, quizzes, and assignments etc. A regular follow-up is done throughout the semester to timely raise the red-flags and to do the mid-semester course corrections. Identification of slow & advanced learners and arranging teaching-learning activities to address learner-specific concerns are done for each course without exception.

Additionally, during internal academic audits, a review is conducted for each course to gauge the level of success in achieving these outcomes through CO-PO mapping calculations. Focus is also put on remedial actions proposed by the course coordinator when the achievement level of any outcome (s) is found to be below target. These targets are periodically reviewed & decided by the departmental Board of Studies based on the performance of students during the last 3 years or so.

These inputs are used to periodically revise the syllabi and CO-PO mapping based on the feedback of all stakeholders including students, faculty, alumni, employers etc.

21. Distance education/online education:

The NorthCap University (NCU) believes in spreading and increasing the access to quality education and content through online and distance education as per the goals of NEP-2020 and is taking all possible steps in this direction.

NCU has now secured NAAC Grade "A" in its second cycle valid till 2027 and is eligible to offer selected programs in online and distance learning mode as per UGC DEB guidelines. Accordingly, a separate Centre for Distance and Online Education (CDOE) has been established at the University and requisite staff and faculty appointed. Developing content in four quadrant modes including Self-Learning Materials (SLM), Online Videos, LMS, ERP etc. and the evaluation policy for the programmes to be offered through Distance Education/Online Education Modes as per UGC DEB guidelines has been completed. Online submission of application to DEB for approval for ODL and OL programs has also been done.

| Extended Profile | |
|---|----|
| 1.Programme | |
| 1.1 | |
| Number of programmes offered during the year: | 22 |

| File Description | Documents | |
|---|------------------|------|
| Data Template | <u>View File</u> | |
| 1.2 | | |
| Number of departments offering academic program | mes | 7 |
| 2.Student | | |
| 2.1 | | 2956 |
| Number of students during the year | | 2730 |
| File Description | Documents | |
| Data Template | <u>View File</u> | |
| 2.2 | | 701 |
| Number of outgoing / final year students during the | year: | 701 |
| File Description | Documents | |
| Data Template | <u>View File</u> | |
| 2.3 | | |
| Number of students appeared in the University examination during the year | | |
| File Description | Documents | |
| Data Template | <u>View File</u> | |
| 2.4 | | 0 |
| Number of revaluation applications during the year | | 0 |
| 3.Academic | | |
| 3.1 | | 469 |
| Number of courses in all Programmes during the year | | 409 |
| File Description | Documents | |
| Data Template | <u>View File</u> | |
| 3.2 | | 100 |
| Number of full time teachers during the year | | 108 |
| File Description | Documents | |
| Data Template | <u>View File</u> | |
| 3.3 | | 134 |
| Number of sanctioned posts during the year | | 134 |

| 05/2023, 12:28 nttps://assessmentonline.naac.gov.in/public/ir | ndex.pnp/nei/generateAqar_H1ML_nei/MjU3NL | /v- |
|--|---|---------|
| File Description | Documents | |
| Data Template | <u>View File</u> | |
| 4.Institution | | |
| 4.1 | | |
| Number of eligible applications received for admiss during the year | ions to all the Programmes | 3587 |
| File Description | Documents | |
| Data Template <u>View File</u> | | |
| 4.2 | | |
| Number of seats earmarked for reserved category a rule during the year | s per GOI/ State Govt. | 468 |
| File Description | Documents | |
| Data Template | <u>View File</u> | |
| 4.3 | | |
| Total number of classrooms and seminar halls | | 89 |
| 4.4 | | |
| Total number of computers in the campus for academic purpose | | 890 |
| 4.5 | | _ |
| Total expenditure excluding salary during the year (INR in lakhs) | | 4151.25 |

Part B

CURRICULAR ASPECTS

1.1 - Curriculum Design and Development

1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the University

In line with the vision "To be known globally for learning innovations, academic excellence and socially relevant research outcomes" the NorthCap University takes every step to improve its academic standards. This involves aligning and upgrading academic plans as per changing technology and employment scenario. Curriculum development is a regular process at NCU and is done keeping in view the feedback and suggestions received from various stakeholders like students, alumni, faculty, industry experts, AICTE/UGC/BCI/Haryana Govt. guidelines and other stakeholders.

The faculty, Board of Studies (BOS), Academic Advisory Board (AAB) and Academic Council Committee (ACC) are responsible for the curriculum design, improvement and implementation. These bodies include faculties from various departments, HOD's, external experts from academic institutes and industry.

Local, Regional and National Needs

- NCU has strong bonding with local and regional industries which are part of curriculum design (contextual learning, live projects, guest lectures/workshops and field visits).
- Development of trained workforce for regional and national corporate houses by integrating skill based training in curriculum.
- Integration of social work components through various societies and clubs.

Global and International Needs

- MoU's and activities with MNC giants are integrated within the curriculum.
- Courses such as Foreign Languages, Effective Communication, International Law, etc.provides global perspective.

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

1.1.2 - Number of Programmes where syllabus revision was carried out during the year

11

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

1.1.3 - Total number of courses having focus on employability/ entrepreneurship/ skill development offered by the University during the year

1.1.3.1 - Number of courses having focus on employability/ entrepreneurship/ skill development during the year

367

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

1.2 - Academic Flexibility

1.2.1 - Number of new courses introduced of the total number of courses across all programs offered during the year

98

| File Description | Documents |
|-------------------------------------|-------------------|
| Upload the data template | <u> View File</u> |
| Upload relevant supporting document | <u>View File</u> |

1.2.2 - Number of Programmes in which Choice Based Credit System (CBCS)/elective course system has been implemented during the year

22

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

1.3 - Curriculum Enrichment

1.3.1 - Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum

The curriculum at NCU always focuses on the integration of cross cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum. The inputs from various stakeholders (Regulatory Bodies, Alumni, Students, Industrial partners and Academicians) are taken into account for revision of curriculum and to incorporate the appropriate courses.

Professional Ethics and Human Values: University understands the importance of ethics and values, and integrates the course on Human Values and Professional Ethics into the curriculum which is offered to all the undergraduate students. Professional Ethics is a compulsory course for postgraduate graduate and doctoral programmes. Curriculum integrates courses which emphasize human values and societal issues such as Industrial Relations and Labour Law, Theory of Society, Human Rights, Labour Laws, Introduction to Psychology, Introduction to Society and Introduction to Law.

Gender: The NCU promotes and focuses on gender equality and has a healthy number of female faculty ratio. The curriculum integrates courses on Gender Equality and Sensitization to create awareness among students. The courses on Gender Justice and feminist jurisprudence is offered for undergraduate students as a course.

Environment and Sustainability: The curricula integrate the compulsory Environmental Studies course for all the undergraduate students.

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

5

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

- 1.3.3 Total number of students enrolled in the courses under 1.3.2 above
- 1.3.3.1 Number of students enrolled in value-added courses imparting transferable and life skills offered during the year

535

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

1.3.4 - Number of students undertaking field projects / research projects / internships during the year

1472

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

1.4 - Feedback System

1.4.1 - Structured feedback for design and review of syllabus - semester wise / is received from Students Teachers Employers Alumni

• All 4 of the above

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

1.4.2 - Feedback processes of the institution may be classified as follows

• Feedback collected, analysed and action taken and feedback available on website

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Demand Ratio

2.1.1.1 - Number of seats available during the year

945

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

- 2.1.2 Total number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per applicable reservation policy during the year (Excluding Supernumerary Seats)
- 2.1.2.1 Number of actual students admitted from the reserved categories during the year

236

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

2.2 - Catering to Student Diversity

2.2.1 - The institution assesses the learning levels of the studentsand organises special Programmes for advanced learners and slow learners

'Students First' is the motto of The NorthCap University and is the driving force behind all the activities carried out for improving the teaching-learning process.

- All the admitted students mandatorily go through the rigorous orientation and induction programmes, which helps in understanding the learning levels of students.
- University has devised a process to capture the strength of the students and complement the learning process by creating a student e-portfolio system.
- After the minor examinations, students-class committee meetings are called for assessing the learning levels. Based upon the performance (CGPA and attainment of CO levels) students are categorized as advanced (CGPA>8.5) and slow learners (CGPA<6.0).

Students are constantly motivated to meet the rigors of academics and are mentored by a strong and progressive team of teachers, peer tutors and members of various statutory and advisory boards. A lot of steps have been enforced to access and uplift the teaching and learning process for students such as implementation of Choice based credit system (CBCS), Value Added Courses (VAC), e-portfolio management and skill-based modules. University takes care of each and every student and based on the inputs obtained; various strategies are implemented for slow and advanced learners of the University.

| File Description | Documents |
|------------------|-----------|
|------------------|-----------|

| Upload relevant supporting document | <u>View File</u> |
|-------------------------------------|------------------|
| Link For Additional Information | Nil |

2.2.2 - Student - Full time teacher ratio during the year

| Number of Students | Number of Teachers |
|--------------------|--------------------|
| 2956 | 108 |

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

2.3 - Teaching- Learning Process

2.3.1 - Student centric methods, such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences

The steps taken by university for holistic development of the students for enhancing employability and deployability, to develop creative thinking, problem solving and lifelong learning are:

- The university focuses on outcome-based education where learning outcomes are evaluated for continuous improvement.
- Course coordinators adopt various teaching pedagogies which involve student centric methods such as group discussions, case studies, experiential learning through hands on training modules and emphasis on practical work.

Some of the experiential learning methods adopted by the university are:

- 1. Project-based learning and credits for project work and student industry internship increased.
- 2. Industry internships are mandatory

Initiatives for participative learning includes:

- To enhance participative learning, faculty uses various teaching pedagogies in the interest of students such as activity-based learning, group discussions, quizzes, seminars, etc.
- 2. Design thinking modules have been introduced for enhancing participative learning and problem-solving methodologies.
- 3. General Proficiency course is compulsory to provide out of classroom development.

Initiatives for inculcating the problem-solving culture among the students includes:

1. Integration of problem solving, design thinking, creative writing, entrepreneurship courses in the curriculum.

2. MOOCs have been made mandatory in all the programmes to develop self- directed lifelong learning skills.

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

2.3.2 - Teachers use ICT enabled tools including online resources for effective teaching and learning processes during the year

The institutes integrate the utilization of various Information and Communication Tools (ICT) which helps both the faculties and students for making the teaching and learning process more effective and fruitful. Some of the initiatives taken by NCU to make teaching learning more effective with ICT tools are:

- The university mandates all the faculties to use Learning Management System (LMS) for their respective courses, so that students can access the notes, tutorials, PPTs, videos and supplementary study material from anywhere and at any time for self-paced study.
- ICT enabled classroom teaching is carried out by faculty members which involves use of LMS, Audio/Video devices, elearning modules, online quizzes and assignments.
- All the classrooms of the university are well equipped with audio and video devices.
- University motivates faculty and students to use an online digital library tool (LIBSYS 10) for browsing, online booking and issuing of books.
- University offers access to various online MOOC platforms for self-directed learning.
- Enterprise Resource Planning (ERP) is used for the student's registration, online fee deposit, admit card generation, attendance monitoring and result generation.
- An online attendance marking system (biometric/card based) is effectively used.

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

2.3.3 - Ratio of students to mentor for academic and other related issues during the year

2.3.3.1 - Number of mentors

80

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

2.4 - Teacher Profile and Quality

2.4.1 - Total Number of full time teachers against sanctioned posts during the year

108

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

2.4.2 - Total Number of full time teachers with Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit. during the year

80

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

2.4.3 - Total teaching experience of full time teachers in the same institution during the year

2.4.3.1 - Total experience of full-time teachers

641

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

2.4.4 - Total number of full time teachers who received awards, recognition, fellowships at State, National, International level from Government/Govt. recognised bodies during the year

8

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

2.5 - Evaluation Process and Reforms

2.5.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results during the year

13

2.5.1.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the year

13

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

2.5.2 - Total number of student complaints/grievances about evaluation against total number appeared in the examinations during the year

0

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

2.5.3 - IT integration and reforms in the examination procedures and processes (continuous internal assessment and end-semester assessment) have brought in considerable improvement in examination management system of the institution

Examination procedures and processes at The NorthCap University are well IT integrated and are updated on a regular basis. The efficient utilization of ERP is well integrated for the continuous evaluation system.

Various reforms have been undertaken that have made a positive impact on examination management:

- 1. Centralized conduct of Internal and End-Semester Examinations: Seating and invigilation for internal class tests and end-semester examinations are organized centrally at the Institute level. This has led to optimal utilization of physical as well as manpower resources, increased vigilance and smooth conduct of the examinations.
- 2. Automation of Examination System: A Course Management System has been implemented with the following features:
- Enrolment and registration of students
- · Verification of students and approval
- Online admit card downloading facility
- · Marks of different types of evaluation components
- Support for Grading and percentage-based evaluation
- · Compilation and Declaration of Results
- · Printing of detailed grade sheets, degrees, and transcripts
- 3. Online Examinations: University has well established IT tools for conducting the online AI-based proctored examinations.
- 4. ERP integration and reforms in the examination procedures and processes

Examination procedure has been completely automated using third party IT software.

| File Description | Documents |
|------------------|-----------|
|------------------|-----------|

| Upload relevant supporting document | <u>View File</u> |
|-------------------------------------|------------------|
|-------------------------------------|------------------|

2.5.4 - Status of automation of Examination division along with approved Examination Manual

A. 100% automation of entire division & implementation of Examination Management System (EMS)

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

2.6 - Student Performance and Learning Outcomes

2.6.1 - The institution has stated learning outcomes (generic and programme specific)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents

NCU since its inception has focused on the Outcome Based Education (OBE). To ensure the implementation of OBE following measures have been adopted:

- All the programmes of the institute have well defined Programme Specific Outcomes (PSOs), Programme Educational Objectives (PEOs), Programme Outcomes (POs) and Course Outcomes (COs) which are regularly analyzed and are displayed on the website and departmental notice boards.
- All the stakeholders are made aware of PSOs, PEOs, POs and COs through various available modes such as website, noticeboards, students handbook etc.

The process for defining the PSOs, PEOs, POs and CO's is:

- The head of the institute along with HoD's and senior faculty members defines the outcomes; which are shared with all the stakeholders to obtain feedback.
- The defined outcomes are presented in the BOS for further action. The final approval of the revised outcomes is obtained in the AC committee where HoD's present the outcomes.
- The outcomes are finally presented and approved in the BoM meeting.
- The senior faculty/subject expert prepares the CO's for the courses in aligned with the POs.
- The COs are presented in the departmental faculty meetings in front of all the faculty members for feedback and are finally approved by Dean Academics.

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

2.6.2 - Attainment of Programme outcomes, Programme specific outcomes and course outcomes are evaluated by the institution during the year

To ensure the effective OBE, institute regularly monitors and analyze the level of POs, PSOs and COs. All the courses of the university are linked with certain Course Outcomes (COs), which are further in line with the PO's and respond to the PSOs.

The step-wise procedure used for direct measurement of outcomes is:

Step 1

Well defined COs which are mapped with the questions and marks within the examination question papers.

Step 2

For every course outcome, performance indicators are defined with the targets.

Step 3

All semester attainment levels of various COs are measured by the course coordinators through direct assessments. The assessment levels are further coded and linked to the program outcomes.

Step 4

The departmental assessment committee analyzes the results. The attainment levels are checked against the target values and recommendations are given.

Step 5

The POs attainment is again coded and mapped with the PSOs.

Step 6

If COs, POs and PSOs mapping does not meet the required targets then the DFB committee recommends the improvements in curriculum, content delivery methods and course outcomes.

Step 7

If COs, POs and PSOs are met then new targets are set for continuous improvements in the OBE system.

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

2.6.3 - Number of students passed during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

701

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a web link)

https://docs.google.com/forms/d/15JUlJuprERgnGVlXvvpJiF2P9GIh-IECkLhEZTcHAL4/edit#responses

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Promotion of Research and Facilities

3.1.1 - The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented

The RDIL Office at NCU has well defined research policy including PhD rules and regulations available at https://www.ncuindia.edu/rdil and https://www.ncuindia.edu/phd. The NorthCap University strives hard in cutting edge research areas of science and technology. The research initiatives taken by university are

- 1) NCU has research facilities like Centre of Excellence for Data Sciences, Design Centre, The NorthCap Techno-Business Incubation Centre, NavIC Lab (in collaboration with ISRO), iMAC lab, High-Performance Computing lab, Machine Learning Lab, Robotics Lab and Central Research Facility.
- 2. Any violation of ethical standards is dealt as per the 'Zero Tolerance Policy' of NCU. NCU has purchased and provided free access of 'Turnitin' software to its faculty.
- 3. NCU facilitates mentoring and guidance of faculty from experts from reputed academic institutions and leading industries.
- 4. To inculcate research aptitude amongst PG students, courses such as Research Methodology and Research and Publication Ethics are mandatory.
- 5. NCU provides financial support to faculty for organizing and attending conferences, workshops, filing patents, certification courses and in the form of Vice-Chancellor's Innovation Fund for conducting research and innovation activities.
- 6. The outcome of research initiatives is demonstrated through various quality benchmarks in terms of university's rankings, collaborations, and recognitions available at https://www.ncuindia.edu/quality-benchmark/

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

3.1.2 - The institution provides seed money to its teachers for research (amount INR in Lakhs)

6.94

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

3.1.3 - Number of teachers receiving national/ international fellowship/financial support by various agencies for advanced studies/ research during the year

1

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

3.1.4 - Number of JRFs, SRFs, Post-Doctoral Fellows, Research Associates and other research fellows enrolled in the institution during the year

16

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

3.1.5 - Institution has the following facilities to support research Central Instrumentation Centre Animal House/Green House Museum Media laboratory/Studios Business Lab Research/Statistical Databases Moot court Theatre Art Gallery

A. Any 4 or more of the above

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

3.1.6 - Number of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other recognitions by national and international agencies during the year

2

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

3.2 - Resource Mobilization for Research

3.2.1 - Extramural funding for Research (Grants sponsored by the non-government sources such as industry, corporate houses, international bodies for research projects) endowments, Chairs in the University during the year (INR in Lakhs)

0

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

3.2.2 - Grants for research projects sponsored by the government agencies during the year (INR in Lakhs)

25.98

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

3.2.3 - Number of research projects per teacher funded by government and nongovernment agencies during the year

3

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

3.3 - Innovation Ecosystem

3.3.1 - Institution has created an eco-system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge

NCU has taken many steps to inculcate a culture of innovative thinking among its faculty and students. We have established the Institute Innovation Council (IIC) at the university.

Best projects are awarded on financial viability, Originality, Customer, usefulness to society, sustainability, and Structured (FOCUSS) criterion.

Seminars, workshops, and training sessions on startup initiatives, pitching sessions, and patent filing are organized.

The university has also instituted the Vice-Chancellor's Innovation Fund (VCIF) Scheme, which offers an initial grant to nurture ideas and passion and convert products into startups.

The university established an incubation centre in 2017 to help students and faculty incubate innovative ideas by facilitating skills like Creative Thinking, Problem Solving, and Data Generation. It organizes startup idea challenges regularly.

Projects and industry problems floated by City Innovates Pvt. Ltd., a startup company, Gurugram have been taken up. University has identified several student projects to incubate through the NCU Startup Program.

- 1. Coopern4u (Fintech)
- o www.coopern4u.com
- 2. Curesee (Healthtech)
- o www.curesee.com
- 3. Thrifty AI (Deeptech)
- https://www.linkedin.com/in/thrifty-ai-309222190/#

NCU was categorized as a band 'A' institution in the Category of 'University & deemed to be a University (Private-Self-Financed)' in the Atal Ranking of Institutions on Innovation Achievement (ARIIA) 2020.

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

41

3.3.2.1 - Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development year wise during the year

41

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

- 3.3.3 Number of awards / recognitions received for research/innovations by the institution/teachers/research scholars/students during the year
- 3.3.3.1 Total number of awards / recognitions received for research/innovations won by institution/teachers/research scholars/students year wise during the year

33

| File Description | Documents |
|--------------------------|------------------|
| Upload the data template | <u>View File</u> |

Upload relevant supporting document View File

3.4 - Research Publications and Awards

3.4.1 - The institution ensures implementation of its stated Code of Ethics for research

- 3.4.1.1 The institution has a stated Code of Ethics for research and the implementation of which is ensured through the following
 - 1. Inclusion of research ethics in the research methodology course work
 - 2. Presence of institutional Ethics committees (Animal, chemical, bioethics etc)
 - 3. Plagiarism check
 - 4. Research Advisory Committee

A. All of the above

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

3.4.2 - The institution provides incentives to teachers who receive state, national and international recognitions/awards Commendation and monetary incentive at a University function Commendation and medal at a University function Certificate of honor Announcement in the Newsletter / website

B. Any 3 of the above

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

3.4.3 - Number of Patents published/awarded during the year

3.4.3.1 - Total number of Patents published/awarded year wise during the year

22

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

3.4.4 - Number of Ph.D's awarded per teacher during the year

3.4.4.1 - How many Ph.D's are awarded during the year

10

File Description Documents

| Upload the data template | <u>View File</u> |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

3.4.5 - Number of research papers per teacher in the Journals notified on UGC website during the year

138

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

- 3.4.6 Number of books and chapters in edited volumes published per teacher during the year
- 3.4.6.1 Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings during the year

53

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

3.4.7 - E-content is developed by teachers For e-PG-Pathshala For CEC (Under Graduate) For SWAYAM For other MOOCs platform For NPTEL/NMEICT/any other Government Initiatives For Institutional LMS

D. Any 2 of the above

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

3.4.8 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

| Scopus | Web of Science |
|--------|----------------|
| Nil | Nil |

| File Description | Documents |
|---|------------------|
| Any additional information | No File Uploaded |
| Bibliometrics of the publications during the year | No File Uploaded |

3.4.9 - Bibliometrics of the publications during the year based on Scopus/ Web of Science - h-Index of the University

| Scopus | Web of Science | |
|--------|----------------|--|
|--------|----------------|--|

| File Description | Documents |
|--|---------------------|
| Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution | No File Uploaded |
| Any additional information | No File Uploaded |

3.5 - Consultancy

3.5.1 - Institution has a policy on consultancy including revenue sharing between the institution and the individual and encourages its faculty to undertake consultancy

The university has a well defined policy for consultancy work and for revenue sharing amongst consultants (faculty, research scholars, technicians and students) and the university. The Research Development and Industrial Liaison (RDIL) ensures timely information transmission and policy implementation of consultancy activities. Some of the recently established consultancy facilities at the NorthCap University are NABL accredited The NorthCap University Testing Centre, Centre for Emerging Technologies, The NorthCap Techno Business Incubation Centre, NavIC Lab, CRDI Engine test rig, Daikin centre of excellence, Beijing wave lab, Mistubishi Electric PLC Lab and Central Research Facility. Taking advantage of its locational proximity to the industrial hub, the university encourages its faculty members for industry-academia collaborations and has signed MOUs with many industries for projects and mentorship. The procedures and forms pertaining to consultancy are available at https://ncuindia.edu/rdil

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

- 3.5.2 Revenue generated from consultancy and corporate training during the year (INR in Lakhs)
- 3.5.2.1 Total amount generated from consultancy and corporate training during the year (INR in lakhs)

9.4

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

3.6 - Extension Activities

3.6.1 - Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the year

NCU encourages and empowers students to become confident leaders of tomorrow and continuously strives to create well-balanced

personalities who are empowered to brave challenges in life. The Universities Student Activities and Leadership Sub-committee (SAL) actively engages the students in extracurricular and co-curricular extension activities aligned with sustainable development goals SDG:2030. SAL has 45 extracurricular activities clubs, 15 professional societies and 15 community service clubs, contributing efficiently in this direction. Some campaigns, Projects and initiatives undertaken are as follows:

NSS- NCU conducts donation drives, adoption of villages, blood donation camps etc.

Clubs Yukti, Aashayen, Awakening, Prayaas and Rotaract conduct frequent Old Age homes and NGO visits, donation drives, literacy drives and other activities aligned to SDG:2030.

The Legal Aid Society organizes legal Aid Clinics in villages, Juvenile Homes, District Jail, etc.

IEEE Humanitarian Wing, Udaan and Sehyog club conduct humanitarian activities like food donation drives, water conservation drives etc.

Enactus NCU undertakes projects such as effective waste management, empowering artisans etc.

Yoga and Manovriti clubs conduct sessions on maintaining good physical and mental health.

Road Safety Awareness workshops/campaigns in association with Delhi Traffic Police and Haryana Police are also conducted on a regular basis.

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

- 3.6.2 Number of awards received by the Institution, its teachers and students from Government /Government recognised bodies in recognition of the extension activities carried out during the year
- 3.6.2.1 Total number of awards and recognition received for extension activities from Government / Government recognised bodies during the year

29

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

3.6.3 - Number of extension and outreach programs conducted by the institution including those through NSS/NCC/Red cross/YRC during the year(including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

63

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

3.6.4 - Total number of students participating in extension activities listed at 3.6.3 above during the year

6437

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

3.7 - Collaboration

- 3.7.1 Number of collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year
- 3.7.1.1 Total number of Collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year

26

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

3.7.2 - Number of functional MoUs with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the year

12

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

4.1.1 - The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc.

Adequate facilities are provided by the institution for effective teaching-learning processes and are upgraded promptly.

Physical Facilities:

- 89 classrooms, 19 tutorial rooms, 54 labs, and 5 workshops with Wi-fi and LAN-enabled with 24X7 power backup.
- Two smart-classrooms with rooftop microphone arrays , voice-enabled cameras, 4 large TV screens.
- LCD display board
- 430-seat state-of-the-art auditorium
- Seminar Hall (seating capacity of 110), three conference/meeting rooms.
- Open-air amphitheater
- MOOT court
- Total 605 networked computer systems (55 high-end systems), latest licensed software and 115 printers.
- Labs like Daikin Centre-of-Excellence, Cisco Lab, Mitsubishi lab, High-performance computing lab, Beijing Wave lab, NaVIC lab, etc.
- Central Research Facility
- Incubation Centre, Institution's Innovation Council, Tinkering Lab, Maker's Space, and Design Centre
- Dedicated placement cell

ICT Facilities:

- Enterprise Resource Planning System (ERP) based on Cloud computing.
- Student e-Portfolio
- Online Parental Information System
- CANVAS LMS
- Student-computer ratio is 4:1 with allotment ratio of 1:1.
- Online teaching and examination facilities through MS-Teams, Microsoft Forms, and Mercer Mettl.
- Biometric attendance
- Smartboard facilities in some classrooms
- Repository of recorded lectures.

Library Resources:

- Library and Information Resource Centre (LIRC) is well stocked with books, journals, e-books, e-journals, and other online resources.
- Freely downloadable Android mobile app and fully automated Web OPAC software.

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

4.1.2 - The institution has adequate facilities for cultural activities, yoga, games (indoor, outdoor) and sports. (gymnasium, yoga centre, auditorium, etc.)

NCU's cultural, yoga, and sports activities are organized under the guidance of the 'Student Activities and Leadership (SAL)' Committee. The sports officer ensures that norms and procedures prescribed by the Sports Authority of India (SAI), as well as various sports and games Federations of India, are practiced in letter and spirit.

- NCU has a 430-seater avant-garde auditorium
- The cultural festival Momentum, SPICMACAY concerts, dance, music shows, Teachers Day, conferences, debates, and club activities are organized in the auditorium.
- The open-air Amphitheatre with seating capacity of 2000, is used for various university functions like Fresher's party, Farewell, Star nights etc.
- The Yoga Club of the University conducts yoga training sessions for faculty and students in University's Yoga Center.
- Modern facilities both for outdoor sports like Cricket, Hockey, Football, Basketball, Volleyball, Badminton, etc., and indoor sports like chess, carom, table tennis, etc. are available
- Cricket-cum-football ground with floodlights is arguably one of the finest well-maintained grounds in NCR.
- A common room is available for both boys and girls with reading and recreational facilities.
- A 4000 sqft Gymnasium is used by students, faculty, staff and alumni.

Students effectively use the locational advantage and infrastructure of campus for community services and social cause-related activities.

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

- The University campus located in a clean environment is spread over 10 acres, with a covered area of over 32,000 sqmts managed by an experienced estate manager. NCU has
- 89 classrooms, 19 tutorial rooms, 54 labs, 5 workshops, faculty rooms, seminar hall, conference/meeting rooms, common rooms, media centre, and a 430-seat state-of-the-art auditorium.
- Health center with a full-time doctor and two-bed facility.
- Separate parking space for students and staff.
- Wi-fi and LAN enabled
- One open-air Amphitheatre
- Sports facilities for nearly all indoor and outdoor sports with cricket-cum-football ground
- Two-storey cafeteria, student centre, and Incubation Centre
- Nestle and Coca-Cola outlets.
- Separate boys and girls hostel facilities
- 150 KW rooftop solar PV system
- Rainwater harvesting system
- 100-KLD sewage treatment plant
- No-touch sensor taps
- LED lighting, false ceilings
- Garbage handed over to MCG for proper disposal.
- No hazardous waste
- e-waste collection and handing over to external vendors.
- 6 acres (60 percent) of green area. Winner of HUDA garden competition in Gurugram for the 17th consecutive year.
- For differently-abled ramps/lifts, Disabled-friendly washrooms, human assistance, etc. .
- Canara Bank with an ATM.
- CCTV surveillance

| File Description | Documents |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |

4.1.4 - Total expenditure excluding salary for infrastructure augmentation during the year (INR in Lakhs)

4151.25

| File Description | Documents |
|-------------------------------------|------------------|
| Upload the data template | <u>View File</u> |
| Upload relevant supporting document | <u>View File</u> |

4.2 - Library as a Learning Resource

4.2.1 - Library is automated using Integrated Library Management System (ILMS) and has digitisation facility

```
The library has purchased 'Libsys 10.0' Library Software and
is fully automated.
Digital Library is functioning 24x7 via
    VPN facility
    Library android mobile-app
Central Library works from 08.00am to 08.00pm and extended
till 10.00pm during examinations.
Library and Information Resource Centre (LIRC) provides the
facility of online renewal of books through the WEB-OPAC
facility.
20 dual-core PCs with printer and scanner. Headphones for
access to audio-video materials are provided.
The library is a member of:
    DELNET (Developing Libraries Network)
    American Central Library, New Delhi
    National Digital Library of India
    (https://ndl.iitkgp.ac.in/) (NDL)
    Swayam
    ePG-Pathshala
    Shodhganga (submitting Ph.D. theses since 2015, as
    directed by UGC)
LIRC subscribes to:
    Tata McGraw-Hill (TMH) e-books database
    Springer
    American Society of Civil Engineers (ASCE)
    American Society of Mechanical Engineers (ASME)
    SAGE Journals
    Ebsco Business Source Elite
    Westlaw
    MANUPATRA
    SCC Online
```

Seven Department Libraries

NCU provides 'Plagiarism free Learning and Research' and uses Turnitin software to check plagiarism and has an institutional repository.

Regular updates on 'New Arrivals' are provided.

The library is also equipped with Educational Audio & Video Cassettes, CD-ROMs, Back Volumes, Project Reports / Ph.D.

thesis etc.

File Description Documents

Upload relevant supporting document View File

4.2.2 - Institution has subscription for e-

Library resources Library has regular

subscription for the following: e - journals A. Any 4 or all of the above e-books e-ShodhSindhu Shodhganga

Databases

File Description Documents

Upload relevant supporting document

View File

4.2.3 - Annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the year (INR in Lakhs)

52.00

File Description Documents

Upload the data template View File

Upload relevant supporting document View File

4.2.4 - Number of usage of library by teachers and students per day (foot falls and login data for online access)

387

File Description Documents

Upload relevant supporting document View File

4.3 - IT Infrastructure

4.3.1 - Number of classrooms and seminar halls with ICT - enabled facilities such as LCD, smart board, Wi-Fi/LAN, audio video recording facilities during the year

102

File Description Documents

Upload the data template View File

Upload relevant supporting document View File

4.3.2 - Institution has an IT policy, makes appropriate budgetary provision and updates its IT facilities including Wi-Fi facility

NCU's IT policy provides a frameworkto use the IT and internet facilities for academic and research purposes and makes appropriate budgetary provisions toupdateits IT facility regularly including the Wi-Fi facility. It is available at the link:

https://www.ncuindia.edu/wp-content/uploads/2018/11/IT-Policies.pdf

Some of the IT facilities availableare as follows:

- -Complete campus is Wi-fi and LAN enabled, 24X7 power backup.
- -All classrooms, seminar-hall, conference/meeting rooms, tutorial rooms, and labs are air-conditioned and equipped with speakers, LCD projectors, and whiteboards.
- -Student-computer ratio is less than 4: 1 and allotment ratio in labs is 1:1
- -55 systems and application licensed software, and 115 printers.
- -Enterprise Resource Planning System (ERP) based on Cloud computing.
- -Online Parental Information System for providing information to parents regarding their ward's academic development.
- -Facility for E-Content development by faculty members
- -CANVAS LMS provides students with online access to the course content and recorded lectures.
- -Facility for online teaching and examination through MS-Teams and Mercer Mettl.
- -High-performance computation lab.
- -The Library and Information Resource Centre (LIRC) has a rich collection of e-books, e-journals, and other online resources.
- -Freely downloadable and 24X7 available university Library Android mobile app and remote access facility through VPN
- -Biometric attendance for faculty and students.

File Description Documents

Upload relevant supporting document

View File

4.3.3 - Student - Computer ratio during the year

Number of students Number of Computers available to students for academic purposes

2956

890

4.3.4 - Available bandwidth of internet connection in the Institution (Leased line) • 500 MBPS - 1 GBPS

File Description Documents

Upload relevant supporting document View File

4.3.5 - Institution has the following
Facilities for e-content development
Media centre Audio visual centre Lecture A. All of the above
Capturing System(LCS) Mixing
equipment's and softwares for editing

File Description Documents

Upload relevant supporting document View File

Upload the data template View File

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Total expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the year

3888.76

File Description Documents

Upload the data template View File

Upload relevant supporting document View File

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

The general administration of the University is being taken care of by the Registrar, Functional Heads, and Head of the Departments as well as the Top Management. However, to encourage the active participation of students in the general administration, several sub-committees are being constituted at the university level to oversee the academic and non-academic functions and evolve and take actions for improvements, wherever required. These sub-committees have representation from management, faculty, and students. The students in the sub-committees are expected to give feedback as well assuggestions for improvements in both academic and non-academic matters. Sub-committees about physical, academic, and support facilities are as follows: (i) Examination Procedures and IT Integration (ii) Admission: Documents attached (iii) Professional Societies

As per the year's budget, a specified financial amount will be made available to the Departments/Schools at the beginning of the year.

Application in a prescribed format regarding updation of academic and support facilities are directly submitted toHOD which is further presented to the assigned committee.

The committee reserves the right to make recommendations for

special cases to the competent authority.

Once approved, the decision is communicated to the CFAO and the concerned faculty keeping the HOD, VC and GB informed.

File Description Documents

Upload relevant supporting document

View File

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Total number of students benefited by scholarships and free ships provided by the institution, Government and non-government agencies (NGOs) during the year (other than the students receiving scholarships under the government schemes for reserved categories)

541

File Description Documents

Upload the data template View File

Upload relevant supporting document View File

5.1.2 - Total number of students benefited by career counselling and guidance for competitive examinations offered by the Institution during the year

1342

File Description Documents

Upload the data template View File

Upload relevant supporting document View File

5.1.3 - Following Capacity development and skills enhancement initiatives are taken by the institution Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) Awareness of trends in technology

A. All of the above

File Description Documents

Upload the data template View File

Upload relevant supporting document View File

5.1.4 - The Institution adopts the following for redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organisation wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through

appropriate committees

• All of the above

File Description Documents

Upload relevant supporting document

View File

- 5.2 Student Progression
- 5.2.1 Number of students qualifying in state/ national/ international level examinations during the year (eg:NET/SLET/GATE/GMAT/CAT/ GRE/TOEFL/Civil Services/State government examinations)
- 5.2.1.1 Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

18

File Description Documents

Upload the data template View File

Upload relevant supporting document View File

5.2.2 - Total number of placement of outgoing students during the year

372

File Description Documents

Upload the data template View File

Upload relevant supporting document

No File Uploaded

5.2.3 - Number of recently graduated students who have progressed to higher education (previous graduating batch) during the year

57

File Description Documents

Upload the data template View File

Upload relevant supporting document

No File Uploaded

- 5.3 Student Participation and Activities
- 5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter -university/state/national/international events (award for a team event should be counted as one) during the year

2

File Description Documents

Upload the data template View File

Upload relevant supporting document View File

5.3.2 - Presence of Student Council and its activities for institutional development and student welfare

The NorthCap University believes in 'students first' as its motto and ensures that students are the driving force behind all its important initiatives and activities. This is ensured at all levels by involving students in all the important functioning committees of the University. NCU Promotes 'Student Class Committee' and 'Dean's List of Students', which fulfil the parameters of the student council. This, of course, is in addition to the many instructional level committees where students are active members. The nature of the issues raised by the Student Class Committee are a combination of academic and nonacademic matters, such as infrastructure, essential supplies, health and sanitization, attendance, course curriculum, IT, placement and other related issues.

The NorthCap University also has several Student Committees that function to build student profiles and enrich their overall experience at NCU. The Student Activities and Leadership Subcommittee is one such committee that looks after co-curricular and extra-curricular activities organised at the University.

Students also actively participate in various sub-committees listed as under: • Infrastructure Sub-committee • ERP Sub-committee • Academics Sub-committee • Feedback (Student Redressal Mechanism) Sub-committee • Students Grievance Redressal Committee • Career and Placements Sub-committee • Alumni Connect Sub-committee, etc.

File Description Documents

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5.3.3 - Number of sports and cultural events / competitions organised by the institution during the year

134

File Description Documents

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5.4 - Alumni Engagement

5.4.1 - The Alumni Association/Chapters (registered and functional)contributes significantly to the development of the institution through financial and other support services during the year

The NorthCap University feels proud for its 15000+ alumni who, as its brand ambassadors, have gone on to make a mark in every walk of life and have contributed significantly to the growth of our university. The NorthCap University considers its Alumni as part of its global family and is handled through Center Of Professional Attachment And Alumni Engagement (CPAA) which has team ensures that a strong connection is maintained with Alumni in every possible manner. The Institute's Alumni Association is registered

under the Haryana Registration and Regulation of Societies Act, 2012 (Haryana Act No. 1 of 2012).

Following are some of the important ways in which our alumni contribute towards the growth and improvement of our university:

- 1. Alumni act as mentors to our students for their professional and personal growth.
- 2. During induction programme, the Alumni interact with the students of the entry batch for their orientation and for preparing them for future.
- 3. For industry and other projects, alumni act as co-guides of students.
- 4. Alumni regularly conduct seminars, workshops, guest lectures, webinars and career counselling sessions for students.
- 5. They conduct pre-placement interviews every year for preparing students for campus placements.
- Alumni provides feedback on curriculum development as per market trends.

File Description Documents

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5.4.2 - Alumni contribution during the year (INR in Lakhs)

A. ≥ 5Lakhs

File Description Documents

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GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

6.1.1 - The institution has a clearly stated vision and mission which are reflected in its academic and administrative governance

The NorthCap University has a well-defined Vision, Mission and Core values which are stated on the website and are given below: VISION: "To be known globally for learning innovations, academic excellence and socially relevant research outcomes; strive to become the preferred destination for students, faculty, employers and collaborators & pride of alumni and the community".

MISSION:

Focus on quality of learning and innovation in all programmes with rigour and relevance.

Develop competent professionals - innovative, analytical and independent; committed to excel in all their endeavours. Develop linkages globally with government, industry, academia and alumni for knowledge generation, dissemination and application.

Encourage multidisciplinarity in programmes and projects to explore new frontiers of knowledge.

Continuously improve physical, academic and information infrastructure in pursuit of academic excellence.

Create a nurturing environment for lifelong learning. Focus on entrepreneurship and socially relevant projects.

Governance Structure of the Institution: University always strives towards excellence and has made all possible efforts to achieve the above stated vision and mission. This is effectively achieved through governing bodies, councils, boards and committees regularly meeting and functioning in coordination with each other. All the committees and offices have well defined SOP and policies focusing on achieving the vision and mission.

File Description Documents

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6.1.2 - The effective leadership is reflected in various institutional practices such as decentralization and participative management

The NCU believes in Participatory Management and Decentralization. NCU nominates all stakeholders' students, faculty, and other administrative staff to contribute in various bodies as mandated. Several committees are constituted to facilitate opportunities for all the stakeholders for actively participating in growth and decision making of the university. Some of the committees are as follows.

1. Board of Studies 2. Academic Council 3. Board of Doctoral Research 4. Grievance Redressal Committee 5. Selection Committee 6. Internal Quality Assurance Cell 7. Research Advisory Committee 8. Director of Schools and HOD's Committee 9. Department Faculty Board 10. Department Research Committee 11. Community Service Committee 12. Departmental Purchase Committee 13. Student Class Committees 14. Finance Committee

Following the Bottom-up approach, the various committees enable decentralization management establishing direct contact with students to relevant faculty, functionaries of the University and Vice Chancellor. The University being a well envisioned organization has departmental and school level coordinators who are empowered to take decisions regarding curriculum design, allocation of courses, outreach activities, continuous evaluation process, guest lectures, lab manual development and mentorship for both students and faculties. These activities are guided by Standard Operating Procedures (SOP) created at school level ensuring autonomy, accountability and academic freedom.

File Description Documents

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6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic plan is effectively deployed

NCU will continue to deliver quality education by introducing outcome driven pedagogies and student centric philosophy. In the VUCA (volatility, uncertainty, complexity, and ambiguity) world, we continue to keep track and pace with latest innovations in teaching learning process including the content, pedagogy, assessment and evaluation taking advantage of digital era. Enhancing Teaching Learning and Instilling Flexibility:

To meet the industry expectations the NorthCap University has revised B.Tech and M.Tech Curriculum to provide specialisations in emerging areas (Data Science, Artificial Intelligence, Cyber Security, IOT, VLSI, Robotics etc.). NCU has MoU with Arizona State University, where global signature courses are developed by Faculty to be offered online.

SOP is issued for providing financial support to the regular faculty members of The NCU for attending National/International conferences/Workshops within India and abroad.

In order to encourage utilizing the collective wisdom of highly experienced academicians and industry leaders Faculty Mentor-Mentee scheme is running successfully to further upskill the faculties.

Technology Driven Learning:

Recently the institute has upgraded LMS to Canvas for enhanced learning process.

Enterprise Resource Planning System based on Cloud computing to maintain attendance and broadcast notices to students is running successfully.

The library is fully automated having Web OPAC software.

File Description Documents

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6.2.2 - The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

The Governing Body, Board of Management (BOM), Academic Council and Finance Committee are the four statutory bodies with their specific roles, composition, and meeting schedules. The decision making is done through the said bodies. Issues flow upwards from departments, through Directors & Heads Committees, where detailed discussions bring out all aspects of an issue. The key issues go to concerned bodies i.e., Academic Council, BOM, Finance Committee for approvals as the case may be. The Vice Chancellor is head of both Academic Council and the BOM which have members from the Departments thus providing a continuity throughout the decision-making process. The Governing Body is the highest

A. All of the above

decision-making body, with the Chancellor as its Chairman, which provides directions, ratifies or reviews the various decisions, at the apex level. In addition, an Academic Advisory Board gives long term strategic advice on all academic matters and life at the University. The above system has functioned well in the last ten years of the University and is now well established. All roles and responsibilities of key personnel like Vice Chancellor, Registrar have been mentioned in the University Act vide different statutes and Ordinances.

File Description Documents

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6.2.3 - Institution Implements e-governance in its areas of operations

6.2.3.1 - e-governance is implemented covering following areas of operation

- 1. Administration
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examination

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6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has a performance appraisal system, promotional avenues and effective welfare measures for teaching and non-teaching staff

The NorthCap University has an excellent work culture which brings its employees together on a common platform and motivates them to deliver their best. To achieve this end, various steps in terms of annual appraisal system, promotion policy and welfare schemes have been implemented; some of these are mentioned as follows:

Annual Appraisal System: The Annual Faculty Appraisal Form is designed in a manner to make the process holistic, comprehensive, and participative in nature. The overall weightage of teaching/research and outreach activities are provided to ensure a broad coverage of all vital aspects of faculty development. The assessment factors have been clearly defined for an appraiser to provide objective rating/score against each parameter. All stakeholders like faculty, students, administration are involved in the process thereby ensuring a 360 degree feedback.

Promotional avenues: The NorthCap University has a well-defined Career Advancement and Progression Scheme for promotion of its staff. The norms and procedure for promotion for faculty members,

which have been detailed as per the statutes, are based on their respective School/Department and designation.

Effective welfare measures:

Salary structure as per 7th pay commission for all faculty having PhD qualification.

Social security benefits viz., Gratuity, EPF, ESI and Group health Insurance.

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6.3.2 - Total number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Nil

File Description Documents

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6.3.3 - Number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the year

Nil

File Description Documents

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6.3.4 - Total number of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the year(Professional Development Programmes, Orientation / Induction Programmes Refresher Course, Short Term Course)

143

File Description Documents

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6.4 - Financial Management and Resource Mobilization

6.4.1 - Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Mobilization of Funds:

The NorthCap University is a private, self-financed institute, where the funds are mobilized essentially through the fee paid

by the students.

The laboratory equipment & infrastructure are, to a certain extent, augmented by the financial grants, received from various funding agencies, for the research projects.

The University has a well-established Finance Committee, which oversees the budget, financial transactions, financial planning, etc.

Optimal Utilization of Funds:

The University has a well-defined mechanism to monitor effective and efficient utilization of available financial resources, for the development of academic processes and infrastructure development.

Budget planning and budget reviews are a continuous process, which is conducted periodically.

The University calls for the budget proposal from the Heads of Departments /Deans of the School before the beginning of a financial year.

The departments are required to submit the budget and the budget allocation and approval is done for every Department. The approved budget is placed before the Finance committee for approval from the members. All the major financial decisions are taken by the members of the Finance committee and approved thereafter by Board of Management and GB members.

The optimal utilization of the funds is reviewed at the end of the year.

File Description Documents

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6.4.2 - Funds / Grants received from government bodies during the year for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs)

Nil

File Description Documents

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No File Uploaded

Upload relevant supporting document

No File Uploaded

6.4.3 - Funds / Grants received from non-government bodies, individuals, philanthropists during the year for development and maintenance of infrastructure (not covered under Criteria III and V)(INR in Lakhs)

Nil

File Description Documents

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Upload relevant supporting document

No File Uploaded

6.4.4 - Institution conducts internal and external financial audits regularly

The university has a budgetary control system to monitor the effective and efficient use of financial resources and to give regulators and the society reasonable assurance that financial statements are accurate and complete. The Internal Audit of the University is conducted by M/s SRY & Associates and the statutory auditors are M/s S. Raman and Ayer and co. The aim of the internal and external audit of the University is to assure the key areas of finance, and independent examination of the financial statements. This provides credibility of the financial statements produced by management. This adds confidence in the financial statements, earnings and adopting best practices, reducing investor risk. It also covers all major systems and procedures of compliances like the Income Tax, UGC, and quality of education.

The scope of the audit includes an assessment of the following: -

Adequacy of accounting, financial and other controls.

Inspection relevant to financial statements.

All income due to the University is identified, collected, receipt, recorded, and banked promptly.

All the expenses are pre-approved in the budget.

The internal and external financial audits of the University have been conducted regularly and their reports have been discussed in the Finance Committee, BOM and GB meetings.

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6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes by constantly reviewing the teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals

The NorthCap University has constituted a well- organized and active team for IQAC as per the requirements of NAAC. The prime role of the IQAC is to develop and maintain a continuous improvement system for the overall quality and performance of the institution in various areas such as Teaching learning process, revamping of curriculum, Research, Faculty development, Cocurricular, Extracurricular, Alumni related activities, etc.

Some of the significant contributions made by IQAC are:

Major revamping of curriculum in consultation with the Industry and Academia and adopting best practices. Enhancing teaching effectiveness by increasing practical components and experiential learning. Establishment of tinkering and makerspace lab for hands-on

experience.

Skill based and experiential learning in curriculum for slow learners.

Implimenting peer tutor scheme.

Inclusion of 140 hrs community service scheme in the curriculum.

Implementation of NISP to promote innovation and startup culture.

Organising Technovation event where students showcase their projects and can receive best B.Tech project awards amounting upto 1 Lakh.

Improving and working towards internationalization of NCU through MoU's, semester abroad, immersion programmes and hosting international startup programmes.

Achieving a 5-Star QS Ranking for Teaching, Employability, Academic Development, Online Learning and Inclusiveness,

File Description Documents

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6.5.2 - Institution has adopted the following for Quality assurance Academic Administrative Audit (AAA) and follow up action taken Confernces, Seminars, Workshops on quality conducted Collaborative quality initiatives with other institution(s) Orientation programme on quality issues for teachers and studens Participation in NIRF Any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

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6.5.3 - Incremental improvements made for the preceding during the year with regard to quality (in case of first cycle) Post accreditation quality initiatives(second and subsequent cycles)

The NorthCap University has taken the necessary steps to strengthen the quality in academics and administration. The steps considered are in sync with the recommendations made by the NAAC peer team visit and auditors recommendations. Some of the quality initiatives are:

Academic collaboration with Arizona State University, USA and Mages Singapore for international exposure to students, enriching curriculum, joint research projects etc.

Introduction of more liberal courses in line with NEP-2020 through open electives.

Introduction of new programmes like BCA, BA English and specialisations like Artificial Intelligence, Blockchain etc.

Enhancing Digital Learning Assets with new LMS Platform-CANVAS.

Encouraging self-directed learning through credit transfer of MOOC courses from portals like Swayam, NPTEL, Coursera, etc.

Establishment of smart classrooms and recording studio for developing hybrid teaching and learning approach.

Special focus on improvement of slow learners through mentormentee process, e-portfolio management, VAC and skill-based workshops.

Financial support for students and faculty for innovative projects through Vice Chancellor Innovation Fund Scheme.

Encourage faculty to carry out quality research and quality publications through 360-degree appraisal mechanisms.

Establishment of Centre for Emerging Technologies to promote research and development in areas of AI, Cybersecurity, IoT, AR/VR, Robotics etc.

NAVIC Lab set up by ISRO.

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INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

At NCU we promote inclusivity and equal opportunity to all with no bias on gender. Various gender equity initiatives takenare as follows

- 1. Women occupy senior positions such as HoDs, CoE, CoA&F, Librarian and Deans. They are also nominated as members of the IQAC, BoS, Academic Advisory Board, Academic Council and Board of Management.
- 2.Internal Complaint Committee is constituted as per Vishaka Guidelines to address issues related to sexual harassment, discrimination and to promote gender equality. ICC ensures proper complaint resolution intime bound manner maintaining confidentiality and resorting to punitive actions as per the

guidelines. It conducts gender sensitization programs to give effect to a policy of zero tolerancefor gender based violence and harassment.

- 3. Women's Dayis celebrated to spread gender equality among employees and students. Various activities are planned around the theme #BalanceforBetter.
- 4. Grievance Redressal mechanism is in place toprovide resolution of complaints of employees and/or students at the workplace.
- 5.School of lawoffers an elective course on gender justice and feminist jurisprudencewhich inculcates sensitivity towards gender amongst students.
- 6.Common Rooms for girls and boys with TV, books and lounge furniture for socializing are available in University Campus

File Description Documents

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Annual gender sensitization action plan(s)

Nil

Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common rooms d. Daycare Centre e. Any other relevant information

Nil

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/power-efficient equipment

A. Any 4 or All of the above

File Description Documents

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7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

NCU is committed to the green movement. Campus-wide initiatives at reducing, reusing, and recycling are helping it achieve a green code of living:

Solid Waste Management:

• Garbage - The University garbage is handed over responsibly to the Municipal Corporation of Gurgaon (MCG) for the proper disposal of the same.

- Garden waste Dry leaves from garden is used to make manure at the backside of cricket lawn
- Kitchen waste NCU cafeteria generates nearly 10 kg/day of kitchen waste that is composted to make manure.

Liquid waste management:

A 100 KLD sewage treatment plant has been installed in the campus to ensure zero discharge to municipal sewer lines with plans to sustain campus irrigation requirements of horticulture from treated water.

Water harvesting:

Rainwater harvesting system with pipes going to 300 feet below ground level.

E-waste management:

All loosely discarded e- waste is collected at the university and handed over to external vendors. The University has an association with Attero Recycling Pvt. Ltd.

File Description Documents

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7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

A. Any 4 or all of the above

File Description Documents

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- 7.1.5 Green campus initiatives include
- 7.1.5.1 The institutional initiatives for greening the campus are as follows:
 - 1. Restricted entry of automobiles
 - 2. Use of bicycles/ Battery-powered vehicles
 - 3. Pedestrian-friendly pathways
 - 4. Ban on use of plastic
 - 5. Landscaping

A. Any 4 or All of the above

File Description Documents

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- 7.1.6 Quality audits on environment and energy are regularly undertaken by the institution
- 7.1.6.1 The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:
 - 1. Green audit
 - 2. Energy audit
 - 3. Environment audit
 - 4. Clean and green campus recognitions/awards
 - 5. Beyond the campus environmental promotional activities

A. Any 4 or all of the above

File Description Documents

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7.1.7 - The Institution has a disabled-friendly and barrier-free environment Ramps/lifts for easy access to classrooms and centres. Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

A. Any 4 or all of the above

File Description Documents

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7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socioeconomic and other diversities (within a maximum of 200 words)

Cultural harmony connects people of different backgrounds through social behaviour, religion, customs, traditions, faith, knowledge, language etc. The NorthCap University showcases and respects these diversities which are reflected through the various activities and practices undertaken in various clubs and societies.

The National Social Service (NSS), NCU Chapter is a platform that provides opportunity to the students to participate in various government-aided community service activities. The members of the Society work on Skilled Literacy Program, Swachh Bharat Abhiyan and many other government initiatives.

Rotaract NCU club organises visits to old age homes in Gurugram, awareness campaigns on social and health issues.

IEEE- Humanitarian Activities and Social Service Wing has taken several initiatives for the welfare of the society including Water and Forest Conservation drives Synergy, Webinar on COVID-19, Expressions 2020, Webinar on Breast Cancer Awareness.

The Society for the Promotion of Indian Classical Music and Culture Amongst Youth, (SPIC MACAY Chapter), promotes Indian classical music, Indian classical and modern dance forms.

Momentum is the Annual Cultural Fest spanning over two days, a vibrant amalgamation of technical and cultural events. Teams from various colleges and universities compete with zeal and enthusiasm during this fest. In 2020-2021 it was organised in virtual mode.

File Description

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7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

NCU endeavors to create and nurture a learning environment rooted in the sacrosanct values of the Indian Constitution.

NCU organizes Constitution Day or National Law Day on 26th November every year, inspiring the students to cherish and imbibe the noble ideals that laid the foundation of our Country.

The Constitutional Law Society was set up in 2020 to promote Constitutional values across the University. It is continually working to demonstrate the benefits of applying the Constitutional virtues in personal and professional spheres.

Our Legal Aid Society works in association with the District Legal Services Authority and National Legal Services Authority and has successfully organized various legal aid camps and webinars raising community awareness regarding our Fundamental Rights and Duties.

As the nation battled the unfortunate and unprecedented covid-19 waves, NCU students and staff stepped forward in the wake of our constitutional morality and duty, to organize food distribution drives. The Legal Aid Cell, NSS, and Rotaract Club also set up health check-up camps.

Constitutional values are also delivered to the students through a compulsory course on Human Values and Ethics. Moreover, Constitutional Law is taught as a compulsory course across two schools, namely School of Law and School of Management.

7.1.10 - The Institution has a prescribed All of the above code of conduct for students, teachers,

administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on Code of Conduct are organized

File Description Documents

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7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

NCU has been actively involved in celebration of various International, National Days and festivals to commemorate their significance.

Independence Day was celebrated with measures like maintaining social distance, wearing of masks, proper sanitization.

Teacher's Day on 05 September provided a platform to students to build relationship beyond formal classrooms and bring forth their meaning of 'GURUR BRAHMA GURUR VISHNU'.

World Environment Day signifying "The green we sow, the more we grow", was celebrated on 5th June.

National Science Day to pay tribute to Nobel Laureate Sir Chandrasekhar Venkata Raman and to spread the message of importance of science and its application was organized on 28 Feb 2022.

The International Yoga Day, celebrated on Summer solstice is attended by staff and students.

World Telecommunication and Information Society Day was celebrated on 17th May in collaboration with Institution of Engineers (India) society, Faridabad.

NCU organized a session on Women's Day, 8 Mar 2022 in collaboration with Police Department, Gurugram. IPS officer, Ms Jasleen Kaur graced the occasion and received felicitation by our first woman Vice Chancellor, Prof Nupur Prakash.

Holi and Diwali were celebrated on campus to rejoice and rekindle the spirit of oneness where everyone got together as one big family.

File Description Documents

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7.2 - Best Practices

- 7.2.1 Describe one best practice successfully implemented by the Institution as per NAAC format provided in the Manual
- 1. Title of the Practice: Strenghtening the innovation and incubation ecosystem at the university 2. Objectives of the Practice: To establish a functional ecosystem for development and nurchuring of new ideas 3. The Context: In order to promoted a culture of innovative thinking among its faculty members and students and develop entrepreneurial skills, NCU took a step to create a culture of innovation and start-up ideas. 4. The Practice: NCU established an incubation centre in 2017 to help students and faculty incubate innovative ideas through startup idea challenges, support, and mentorship. Organizing training sessions and workshops on startup, pitching sessions, and patent filling. 5. Evidence of Success: NCU secured band 'A' institution in the Category of 'University & deemed to be a University (Private-Self-Financed)' in the Atal Ranking of Institutions on Innovation Achievement (ARIIA) 2020.

Student startup ideas with sound business plans in the pipeline are mentioned below:

- i. Coopern4u (Fintech) www.coopern4u.com
- ii. Curesee (Healthtech) www.curesee.com
- iii. Thrifty AI (Deeptech) https://www.linkedin.com/in/thrifty-ai-309222190/#

International Idea2Business Competition, Indonesia - NCU Team Won 2 Awards amongst 500+Participants, 30 Universities, 12 Countries

6. Problems Encountered and Resources Required: Provising sufficient funding for startups is a challenge

7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

In order to provide industry exposure to its students, The NorthCap University distinctly extended its efforts towards developing industry linkages. It not only included industry professionals in delivering expert sessions, project conductions and evaluations, but also leveraged the industry connections for internships, innovation, research and short term courses. The following MoUs were signed:

1. With Hatch Associates India to contribute towards a scholarship scheme to support Female Students from economically weaker section pursuing STEM education.

- 2. Software Technology Parks of India (STPI), under Ministry of Electronics and Information Technology (MeitY) engaged in promoting IT/ITES Industry, innovation, R&D and start-ups
- 3. With XR Central (XRC Studios, Inc) Gurugram
- 4. With Shri Vishwakarma Skill University for joint certification and skill development programs.
- 5. With ICT Academy, New Delhi
- 6. With Association of Businesswomen in Commerce & Industry (ABWCI) to work together on services related to women entrepreneurship, women economic empowerment
- 7. With Green Tree Global, Gurugram, to provide consultancy services in the fields of energy efficiency, green building and renewable energy solutions.
- 8. With International Centre for Automotive Technology (ICAT) to enhance the Industry-Academia partnership for conducting joint short-term and mid-term courses and research in field of EVs
- 9. Volkswagen Group Technology in mutual areas of interest through its "Centre of Excellence".

7.3.2 - Plan of action for the next academic year

Launch of OL/ODL programs for BBA and B.Com. programs with the approval from DEB-UGC from Academic Year 2023-24

Infrastructure development with construction of new smart classrooms, augmentation of campus wide CCTV surveillance and upgradation of classrooms.

Old MoUs with 8 International universities revived and various new MoUs with reputed international Universities signed to promote Internationalization. Student Immersion programs with SIT-Japan, ASU-USA and UNF-USA being conducted

Introduction of 5 new programs in the area of Visual Communication and gaming technology with upgradation of infrastructure and new labs to offer these programs.

Student exchange and faculty exchange programs being promoted to enhance diversity and global exposure.



MINUTES OF THE XII MEETING OF ACADEMIC ADVISORY BOARD HELD ON 03 MARCH 2023 (FRIDAY) AT 11:30 A.M.

THE NORTHCAP UNIVERSITY
SECTOR - 23A
GURUGRAM - 122 017

MINUTES OF TWELFTH ACADEMIC ADVISORY BOARD MEETING ON 03 MARCH 2023 (FRIDAY)

The Twelfth Academic Advisory Board Meeting was held on **Friday, 03 March 2023 at 11:30 AM** in the University Campus. The following members attended the meeting:

| S. NO. | NAME | REPRESENTING | DESIGNATION |
|-----------|-----------------------------|--|---------------------|
| 1. | Prof. Prem Vrat | Pro Chancellor, Prof. of Eminence & Chief Mentor | Chairman |
| 2. | Prof. Nupur Prakash | Vice Chancellor | Member |
| 3. | Prof. Shiben Kishen Kak | Founder Vice Chancellor, Mahamaya Technical University (MTU) | Member |
| 4. | Prof. (Dr.) Ranbir Singh | Pro-chancellor, IILM University | Member |
| 5. | Prof. S. G. Deshmukh | Professor, IIT Delhi | Member |
| 6. | Dr. Girdhar J. Gyani | Director General, Association of Accredited Healthcare Providers, New Delhi | Member |
| 7. | Mr. Indu Bhaskar | Scientist G & HOD, DSIR, Team Leader (TPDU Program), DSIR, New Delhi | Member |
| 8. | Dr. Krishan Lal | Co-chair, IAP for Science, The Global Network of Science Academies | Member |
| 9. | Prof. Karmeshu | Former Professor & Dean, School of Computer & Systems Sciences, JNU, New Delhi | Member |
| 10. | Prof. Pritam Babu Sharma | Vice Chancellor, Amity University, Gurugram | Member |
| 11. | Dr. P. S. Rana | Chairman, Construction Industry Development Council | Member |
| 12. | Dr. Pradeep Kumar | Professor, Indian Institute of Technology Roorkee | Member |
| 13. | Prof. Kehar Singh | Ex Dean & Emeritus Fellow, IIT, Delhi | Member |
| 14. | Ms. Ruby Rajvanshi | Director, Hatch India Pvt. Ltd. | Member |
| 15. | Prof. Anshul Kumar | Honorary Professor, CSE Department, IIT Delhi | Member |
| 16. | Mr. Nitiraj Singh | Head Strategic Business, Nvidia, Gurugram | Member |
| 17. | Mr. Shiv Saran Mehra | Founder & Member – Governing Body | Member |
| 18. | Mr. Avdhesh Mishra | Founder & Member – Governing Body | Member |
| 19. | Dr. Zorawar Daulet Singh | Member, Non-Governing Member | Member |
| 20. | Prof. Manoj Gopaliya | Dean Academics | Special Invitee |
| 21. | Cmde. Diwakar Tomar (Retd.) | Registrar | Member Secretary |

The meeting was chaired by Pro-Chancellor on behalf of Chancellor NCU.

WELCOME ADDRESS BY PRO-CHANCELLOR

Pro-Chancellor, The NorthCap University, Prof. Prem Vrat welcomed all members to the Twelfth Academic Advisory Board Meeting and introduced the new members of the Academic Advisory Board viz. Ms. Ruby Rajvanshi, Prof. Anshul Kumar and Mr. Nitiraj Singh. He also introduced and welcomed the new Registrar and Member Secretary Commodore Diwakar Tomar (Retd.). Prof. Prem Vrat also applauded the outstanding contributions of the previous Registrar Col. Bikram Mohanty (Retd.) and thanked him on behalf of the University for his years of dedicated service rendered. He also welcomed Dean Academics Prof. Manoj Gopaliya as a Special Invitee to the meeting. Prof. Prem Vrat noted with satisfaction that all the members who had confirmed their availability for the meeting had turned up, and thanked them for their continued support and valuable advice to The NorthCap University, in its pursuit for constantly improving the quality of its academic endeavours / outcomes. Prof. Prem. Vrat then introduced all members of the Academic Advisory Board one by one, and requested them to share their thoughts and suggestions. He stated that the University takes the recommendations and observations of the members very seriously, and takes concrete steps in acting upon the recommendations. He stated that the combined depth of knowledge and expertise available in the forum today by virtue of the presence of the eminent members, can easily be the pride of any university, and once again thanked everyone for being a part of this Apex Think Tank of the University.

ITEM NO.1: PRESENTATION OF ANNUAL REPORT BY HONOURABLE VICE CHANCELLOR NCU

Prof. (Dr.) Nupur Prakash briefly outlined the evolution of The NorthCap University over the last 26 years. She highlighted the University's focus on STEM Education, pointing out that apart from Science, Technology, Engineering and Management, the Liberal Arts programme was also started a couple of years back, and has been doing very well. In her annual report she touched upon the following aspects:

- Rankings and Recognitions
- Achieving NAAC 'A' Grade in Cycle 2 in July 2022 for a period of 5 years.
- Eco-friendly and sustainable campus.
- MoUs with various Universities and leading industries.
- New programs launched last year and those being planned to be launched in Academic Session 2023-24.
- Publications, books, and patents.
- Research conclave, seminars and workshops, Research talk series.
- Internationalization and Summer Immersion Programs.
- International Student Start up Idea Competition.
- Fee Concession and Scholarship Distribution Ceremony, Hatch Scholarship for Girl students in STEM education and Convocation.
- Summer training programs and value-added courses.

- Lifetime Achievement award conferred upon Prof. Prem Vrat.
- Various Achievements and awards / prizes won.
- Campus placements, Alumni Connect and Engagement

Prof. (Dr.) Nupur Prakash then invited suggestions from the esteemed members on how to take the University to the next level.

Points discussed by the members:

1. Prof. P B Sharma: He congratulated the university for its all-round success in Academics, and said that the university deserves all praise for the same. He stated that we are now heading towards a new world, which looks forward to opportunities and challenges that lie ahead. Higher Education requirements for the new age will therefore be very different from those hitherto. New age learners are different and know very well where technology trends are moving, what scientific trajectories are taking place, and want to create a new world. He said it's important to assess what the universities should do to become game changers / catalysts of change for making a new India. Out of box thinking is required to create a new vision for the next 3-5 years. He further stated that correct nomenclature of programmes matters a lot. The 'family business' in BBA (Family business & Entrepreneurship) could be better termed as Social Business or Small and Micro Business. So, nomenclature of programs will need to be thought out in greater detail in the new age. He also stated that in the new age, we have to lay emphasis on all round development and having a healthy mind, healthy body and a happy soul, and such an environment needs to be created in the University ecosystem.

Giving concrete suggestions, Prof. PB Sharma stated that:

- We need to maximize our contribution to research and keep focus on citations, h- index achieved, and the cumulative impact factor that we are achieving, and whether the research is moving in the right direction or not.
- M.Tech in Electric Mobility is fine, but we should now also be looking at Hydrogen mobility, green mobility, and smart mobility.
- Outcome of R&D needs to be increased. He stated that there are tremendous opportunities in research funding, not only in India, but elsewhere in the world as well.
- **2. Prof. Ranbir Singh:** Whilst appreciating the annual report presented by Prof. (Dr.) Nupur Prakash, he stated the following:
 - It would be good to cover the aspect of MOOCs in the future, as this is a game changer and makes an impact which goes beyond the boundaries of the University.
 - Next time we should cover the aspect of how Sustainable Development Goals (SDGs)
 have been transmitted / achieved across various departments of the University, being
 a national and international mandate. Prof. Nupur Prakash mentioned that NCU has
 already achieved 5 out of 17 SDGs and follows green practices.
 - As we Celebrate 75 years of Independence, it would be good to invite people of eminence for lectures etc. so as to propagate the spirit of Independence by facilitating exchange of ideas and thoughts and establishing a connection.

- Covid has taught us several things, one among them being the need for universities to have community engagement and what kind of impact our studies in NEP are having on the community at large.
- **3. Prof. SK Kak:** He stated that the annual report presented by Prof. (Dr.) Nupur Prakash was very impressive, with some new ideas being presented. He stated that, being a relatively new and growing university, the focus should be on:
 - How efficient are the operations of the University, and how well it utilizes the available resources.
 - Engagement of faculty should be tuned to the future vision of the University.
 - Immersive learning should be adopted in the classrooms. Opportunities for learning through collaborations with outside agencies should also be utilized.
 - The productivity of the various MoUs should be designed / drafted in such a manner that the success of the MoU is measurable in real / quantifiable terms.
 - Outcome based education, and the learnings therefrom, should be pursued.
- **4. Prof. Karmeshu:** He stated that he has been associated with the University for almost a decade, and he finds it remarkable that the University adopts a 'growth mindset' which is driving the University to higher achievements. He further stated that:
 - There should be an emphasis on optimization of resources and their efficient utilization.
 - There should be an elective course on Sustainability.
 - Talking of all round happiness, he stated that in addition to the happiness of students, there should be emphasis on happiness of faculty as well.
 - The University may consider hand holding of lesser institutions through collaborative learning with them.
- **5. Prof. SG Deshmukh:** He suggested that being a university in a state famous for sportspersons, the University could examine starting a course on Sports Analytics. This could be started as an elective or some programme in the newly proposed NCU School of Business. He stated that this would establish a good connect with the local populace.
- 6. Ms. Ruby Rajvanshi: At the outset she thanked the Academic Advisory Board of NCU for including her as a member of the Academic Advisory Board, and stated that she was very happy for the same. She said that she could provide an industry perspective to the forum, and mentioned the following:
 - She suggested that while getting into MoUs with Industries, the University should concentrate on certain pain points that the industry is facing, and subsequent research could be directed towards addressing these issues. In the bargain, one could also look at getting sponsorship from the industry for the research, and this would benefit both parties. Prof. Prem Vrat indicated that paid internships with such industries could also be a good option.
 - She mentioned that big industrial organizations like Tata etc. could sponsor research in the University, and the same can be explored by the university.

- **7. Prof. Anshul Kumar:** The Professor thanked the University for including him as a member of the Academic Advisory Board, and said that the University, in such a short span of time, has made remarkable progress.
 - He felt that more needs to be done in the field of research. There is a requirement to
 focus on the qualities of faculty & students alike. Faculty networking, both with industry
 as well as academia, was an important part of carrying out quality research, as it gives
 opportunities to gain access to knowledge and technologies available with the
 institutions / organizations.
 - It was important for faculty as well as students to attend conferences, seminars etc. and the same should be encouraged.
- **8. Prof. Krishan Lal:** Prof. Krishan Lal said that he was very happy to see the progress made by the University, under a very inspired leadership.
 - He stated that there is a need for the University to connect with Haryana. In particular, the University can tap into the potential of using clay, which is abundantly available in Haryana, especially its possible uses at higher temperatures.
 - He further stated that use of waste by converting it into usable things, that can be of
 utility to the society, and which can have a significant impact in Haryana should be
 explored by the University.
- **9. Dr. P.S. Rana:** He stated that the new concept of a "six-month internship" is a good idea and must be made use of. In this regard, he stated that industries are offering such internships, and our MoUs with industries must incorporate these.
 - He stated that GIDC would be more than happy to help in such areas, and could provide help from their members, who are both contractors and developers, and could provide site facilities for internships.
- **10.Dr. Girdhar Gyani**: He stressed on the issues of:
 - Alumni connect, and said that the network of alumni should be tapped to its fullest, as
 it can provide tremendous outreach and opportunities to the passing out students.
 - A robust and well-established Faculty Development Program to be conducted every year.
 - Artificial Intelligence should be focus area, as it is in great demand.
- **11.Prof. Pradeep Kumar:** Prof. Pradeep Kumar observed and commented on the following:
 - Research was assessed to be a weak area of the University, and needs to be examined in detail. Prof. Prem Vrat brought out that in this regard now, the University is targeting 3 research papers per faculty per year.
 - The precise expectation from an MoU should be clearly spelt out during signing of MoUs, so that the utility / usefulness of the MoUs is clearly known to all.
 - Social aspects of sustainability like community service etc. also need to be brought out / pursued, so that all 3 pillars of sustainability get addressed.
 - Faculty achievement should be brought out, vis-à-vis benchmarks that have been set for them.

- A strategic plan for the next 5 years should be prepared towards achieving identified benchmarks and should bring out the process / plan for achieving those benchmarks.
 Prof. (Dr.) Nupur Prakash brought out that the university has already prepared a 5-year plan which encompasses the growth trajectory of the university for the next 5 years.
- 12. Prof. Kehar Singh: He complimented the Hon'ble VC for a very crisp presentation. Prof. Kehar Singh referred to the progress and development of labs and push towards quality research in the last 12 years, and stated that what started off with a good investment in terms of money (1 Cr seed grant) and vision, has somehow not fructified in totality, as faculty have not been able to optimally utilize the lab facilities (eg. Holography lab). He opined that one Technical Assistant needs to be working full time in the labs in collaboration with a faculty, so that good research can be carried out.
 - He was happy to see a steady rise in the number of publications, but stated that still more needs to be done through a concerted push.
 - There is a need to encourage our faculty to participate in conferences etc., and in the bargain, network with good Universities / Institutions to get access to their libraries etc.
 - He stated that utilizing Alumni is a good idea, as they become the Ambassadors of the University, and can spread good word about the University, and the university can in turn benefit from the positive propaganda.
 - Increase the number of visits from prominent learned personalities, so that students can be enthused with their knowledge and lectures.
- 13.Mr. Indu Bhaskar: Mr. Indu Bhaskar gave reference to a particular company viz. M/s AVL (Austrian) and stated that it is one of the strongest company in terms of engine research, and the University should tap into the presence of one Alumni in this company, and try and get more students to join the company. He suggested that the University should try and get its students to intern in the company. Prof. (Dr.) Nupur Prakash brought out that one student had got a 6-month internship with the company in Austria, but could not finally go because of the covid pandemic, but is now working in the AVL India Office. Mr. Indu Bhaskar suggested that connecting up with the company should be followed up by the university.
- **14.Mr. Nitiraj Singh:** He thanked everyone for including him into the Academic Advisory Board of the university. He stated that:
 - The University may like to focus on Artificial Intelligence and think of setting up an Al School, Al Lab, suitable M. Tech Courses on XR / VR, quantum simulation, healthcare solutions and such courses.
 - By focusing on AI, the University can provide solutions in a multitude of fields for research organizations like NTRO, DRDO etc. He stated that engagements with such organizations could immensely benefit the university.

The Governing Body members thanked all members of the Academic Advisory Board for the important suggestions given by them.

ITEM NO.2: ACTION TAKEN ON THE ELEVENTH ACADEMIC ADVISORY BOARD MEETING ON 11 MARCH 2022

Action Taken Report

- Strategic Plan of the University: On the topic of strategic plan, GB Members stated that a copy of the strategic plan of the University to be emailed to all members of the Academic Advisory Board. Strategic Plan of the University is enclosed as **Annexure 1.**
- Sustainability at NCU: Prof. P.B Sharma asked which specific SDG goals are being targeted
 by the University, since all 17 cannot be focussed upon at the same time. Prof. (Dr.) Nupur
 Prakash clarified that details of these are given in the sustainability Annual Report 2022, and
 that 5 goals have been diligently worked upon.
- Prof. Prem Vrat stated that "easily achievable goals" should be prioritized and then targeted for completion in a focussed manner.

ITEM NO.3: INTRODUCTION OF OPEN AND DISTANCE LEARNING MODE FROM ACADEMIC YEAR 2023-24

The Member Secretary informed the members about the proposal of the University to offer programmes in Open and Distance Learning and Online learning mode from the Academic Session 2023-24.

The points discussed are as follows:

Prof. P.B Sharma enquired if the University is starting only Open and Distance Education or Online Education as well. The Member Secretary clarified that both Open and Distance Learning, as well as Online programmes are planned by the University. Prof. P.B Sharma suggested that to begin with, the University may consider starting ODL / OL programmes in collaboration with universities with whom we already have partnerships. Once a momentum has been built up, and the programmes are running smoothly, then the University can run them independently.

ITEM NO.4: FOUR-YEAR UNDERGRADUATE MULTIPLE ENTRY & EXIT AS PER THE NEP 2020.

Following was discussed:

Prof. Prem Vrat stated that this was a part of NEP 2020, and the University is obliged to do the same. He however stated that this should add value to the concept, and must be such that it results in more people wanting to take up such programs, and not just to dish out something only because NEP 2020 mandates it.

Prof. P.B Sharma stated that this extension of one year should be looked at very closely, in that it must impart such skills and knowledge which were not possible in a three-year programme, and which are enablers for the student to improve his research skills, employability etc. and to acquire good jobs and perform well in them. Prof. Karmeshu stated that there should be some experiential

learning in the fourth year, or have knowledge subjects which have a relationship with society, and which impact society.

ITEM NO.5: OPPORTUNITIES AND CHALLENGES OF FOREIGN UNIVERSITIES OPENING THEIR CAMPUSES IN INDIA

Prof. Prem Vrat stated that this was a vast topic, and much can be said about it, but that it was too premature to deliberate at this stage. It would be better to wait and watch, and see how the concept pans out. For the time being, we should keep our eyes and ears open, and see the impact it creates. We can meanwhile see as per the emerging scenario, where we can leverage this to our advantage.

ITEM NO.6: ESTABLISHMENT OF A NCU SCHOOL OF BUSINESS

Prof. Prem Vrat brought out that the idea behind this move was to segregate the MBA from the other programmes, much like in other leading Business Schools. He stated that the proposal has been discussed and approved in the various statutory bodies of the University. It was unanimously agreed that it was a good idea. Prof. Karmeshu enquired if the University had an Executive MBA programme, and it was clarified that Executive MBA, MDPs etc. will be a part of the NCU School of Business. Mr. Nitiraj suggested that the University may consider MBA in Healthcare. Prof. Prem Vrat stated that once NCU School of Business starts its activities, programmes such as MBA in Healthcare, Construction Management, Hospital Management, and such functional areas, can be started.

ITEM NO.7: STRENGTHEN RESEARCH / SPONSORED RESEARCH / CONSULTANCY IN THE UNIVERSITY

Prof. Prem Vrat stated that this was indeed a weak area of the University, and focus has to be paid to this activity, especially in the area of sponsored research.

Prof. PB Sharma gave the following observations on this topic.

- The University must get 'research driven' faculty.
- The University must train its people to identify opportunities to get research funding, both from the Govt. as well as private players, in India as well as abroad.
- There should be more JRF, SRF as well as Post-Doctoral Fellows in the University.
- There needs to be object orientation in the research, and mission mode research is the need
 of the hour. There also should be need based research, as well as futuristic research. In this
 regard, he said that research in Defense Technology could be considered, as there is a push
 from the Government's side towards atmanirbharta in the defense sector.
- Semiconductors, research in waste and circular economy could also be targeted for research.

VOTE OF THANKS

The Registrar then thanked the members of the Governing Body and the members of the Academic Advisory Board for taking time out of their busy schedule, their involvement in making valuable suggestions during the meeting and stated that the University shall endeavour to incorporate the suggestions into its activities to the maximum extent possible.

Commodore Diwakar Tomar (Retd.)

Registrar 31 March 23