



**MINUTES OF THE XXXIV MEETING OF THE  
ACADEMIC COUNCIL OF THE NORTHCAP  
UNIVERSITY HELD ON 15 MAY 2024  
(WEDNESDAY) AT 11:00 AM.**

**THE NORTHCAP UNIVERSITY  
SECTOR – 23A  
GURUGRAM – 122 017**

## MINUTES OF XXXIV MEETING OF ACADEMIC COUNCIL HELD ON 15 MAY 2024 (WEDNESDAY) AT 11:00 AM

The following members attended the **XXXIV** Meeting of Academic Council on **15 May 2024** at **11:00 AM** in the Conference Room of the University.

S. No.	Name	Designation	Representing
1.	Prof. 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.	Dr. Agueda Benito <b>(Leave of Absence)</b>	Member	Chief Academic Officer, CINTANA
5.	Prof. V. G. Hegde	Member	Professor, Centre for International Legal Studies, JNU, New Delhi
6.	Prof. Rajesh Chadha	Member	Senior Fellow, Energy, Natural Resources & Sustainability, Centre for Social and Economic Progress, New Delhi
7.	Prof. Kumkum Garg (Retd.)	Member	Former HOD (Electronics and Computer Engg), IIT Roorkee
8.	Prof. Hari M Gupta (Retd.)	Member	Former HOD (EEE), IIT Delhi
9.	Dr. Pratishtha Pandey <b>(Leave of Absence)</b>	Member	Scientist 'F' and Head R&D Infrastructure Program, Department of Science and Technology, New Delhi
10.	Dr. Kavita Khanna	Member	Campus Director, Delhi Skill and Entrepreneurship University, New Delhi
11.	Dr. Amit Sangroya	Member	Scientist, TCS Innovation Labs, India
12.	Prof. Manoj K Gopaliya	Member	Dean – Academic Affairs
13.	Prof. Swaran Ahuja	Member	Advisor - Academic Affairs
14.	Dr. Rita Chhikara	Member	HOD – CSE
15.	Dr. Sharda Vashisth	Member	HOD – Dept. of Multidisciplinary Engineering
16.	Dr. Sona Vikas	Member	HOD – Management & Commerce
17.	Dr. Archana Sarma	Member	HOD – SOL
18.	Dr. Divyabha Vashisth	Member	HOD – CLL
19.	Dr. Neha Jain	Member	Program Chair – Psychology department
20.	Dr. Hukum Singh	Member	HOD – APS
21.	Dr. Anjali Garg	Member	Director - CDOE
22.	Dr. Vaishali Sahu	Member	Dy. Director - IQAC
23.	Dr. Nitin Malik	Member	Dy. Dean - RDIL
24.	Prof Hemalatha	-	Representing Dean – NCU School of Business Dr. GR Chandrashekhar <b>(Leave of absence)</b>
25.	Commodore Diwakar Tomar NM (Retd.)	Member Secretary	Registrar

## **MINUTES OF THE MEETING**

The Chairperson welcomed all members to the 34<sup>th</sup> meeting of the Academic Council of The NorthCap University. She also welcomed and introduced the 02 new members of the Academic Council, Mr. Amit Sangroya, Scientist, TCS Innovation Labs, India and Dr. Neha Jain, Program Chair, Dept. of Psychology. 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 XXXIII MEETING OF ACADEMIC COUNCIL held on 25 January 2024**, circulated by email on 06.02.2024 and enclosed as **Annexure 1**, including confirmation and progress on matters arising thereof.

(Member Secretary)

Point Discussed:

1. The issue of conjoining the classes of PhD and MBA was discussed, wherein it was brought out that MBA classes are held on weekdays, whilst the Ph.D classes are held on Saturdays. It was also brought out that weekdays do not suit the part-time scholars. To overcome this situation, Prof. S D Joshi suggested conducting the classes in the early morning or evening for part-time scholars. The Vice Chancellor suggested holding classes in the morning from 8:00 AM to 9:30 AM for the part-time scholars. Dean Academics stated that the feasibility of doing so will be examined.

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

**ITEM NO. 2: RATIFICATION OF RESTRUCTURING OF SCHOOL OF MANAGEMENT & LIBERAL STUDIES**

(Member Secretary)

The Member Secretary briefed the members about the restructuring of School of Management & Liberal Studies and establishment of Psychology Department under the umbrella of School of Management & Liberal Studies. He brought out that consequent to the restructuring, the School of Management & Liberal Studies now has three distinct Centre / Departments, as follows:-

- Department of Management & Commerce
- Centre for Language Learning (CLL)
- Department of Psychology

The revised organogram of the School of Management and Liberal studies is placed at **Annexure 2**.

**The members of the Academic Council took note of the above and approved the restructuring of School of Management & Liberal Studies.**

### **ITEM NO. 3: NEW PROGRAMME BACHELOR OF ARTS IN JOURNALISM & MEDIA PRODUCTION TO BE LAUNCHED FROM ADMISSION YEAR 2024**

(HOD – Centre for Language Learning)

The HOD - Centre for Language Learning briefed the members on introduction of a new programme B.A. Journalism and Media Production. She brought out that the Proposed programme B.A. Journalism and Media Production is a 3-year undergraduate program spread across 6 semesters. The program will allow students to gain in-depth knowledge of basics of Journalism, media ethics and impart the knowledge of skills required for news-based media production. She brought out that the program is designed to impart holistic, experiential, and globally relevant knowledge in the Journalism industry and its allied fields. Students will work on capstone projects and be able to gain expertise in different aspects of news-based media production. Minutes of the Board of studies for CLL are placed at **Annexure 3**.

Points Discussed:

1. Prof. S D Joshi enquired if there would be any entrance test for the students applying for this program. It was clarified by HOD-CLL that there is no entrance test, however a Personal Interview of the student will be held before granting admission.
2. Prof. V G Hedge recommended incorporating a course on Ethics into the curriculum to prevent the misuse of technology (such as deepfakes). It was clarified that the proposed curriculum already includes a course titled 'Media Law & Ethics.'
3. Mr Amit recommended inclusion of course on AI and use of Generative AI for media productions.

**The members of the Academic Council took note of the above and approved the new programme.**

### **ITEM No. 4: SCHOOL OF LAW – New / Revision of Schemes**

(HOD – School of Law)

HOD – SOL briefed the members on the following for consideration and approval:

**(a) Finalization of New Schemes for AY 24-25:**

**BBA.LLB. (Hons.)** – She brought out that the Course scheme of 5-year BB.A.LL.B (Hons.) AY 24-25 has been finalized with the Alternate Dispute Resolution (LBC 422) being shifted to 6<sup>th</sup> semester and Environmental Law (LBL317) being shifted to 8<sup>th</sup> semester. She brought out that the change was incorporated to bring symmetry in the scheme. The students would study ADR first followed by a specific course on Mediation & Conciliation and Arbitration.

**LL.B.** - The Course Scheme for LL.B AY 24-25 has been finalised to introduce the course 'Alternative Dispute Resolution' (ADR)-(LBL525) in 4<sup>th</sup> Semester, 'Civil Procedure Code' (LBL418) in 5<sup>th</sup> semester and 'Mediation & Conciliation and Arbitration' in 6<sup>th</sup> Semester.

**(b) Finalisation of Revised Course Scheme for LL.B (3 Y) AY 23-24:**

The following changes in the course scheme of 3-year LL.B have been introduced to incorporate the course 'Alternative Dispute Resolution' (ADR)-(LBL525) in 4<sup>th</sup> Semester, Civil Procedure Code (LBL418) in 5<sup>th</sup> semester and 'Mediation &

Conciliation and Arbitration (Code to be generated)' in 6<sup>th</sup> Semester from AY 23-24 onwards.

**(c) Revisions/Additions/Deletions in the Course templates of BBA.LL.B. (Hons.)/ LL.B./ LL.M.**

**BBA.LL.B. (Hons.)** - Constitutional Law-I (LBL211) [BB.A.LL.B(H)-3<sup>rd</sup> Semester], Law of Crimes-I- Bharatiya Nyaya Sanhita (LBL 213) [BB.A.LL.B-3<sup>rd</sup> Semester] Family Law-II (LBL214) [BB.A.LL.B(H)-4<sup>th</sup> Semester], Law of Evidence- Bharatiya Sakshya Adhinyam (LBL 313) [BB.A.LL.B-5<sup>th</sup> Semester], Business Formation (LBL 446) [BB.A.LL.B(H)-7<sup>th</sup> Semester], Advanced Contract Drafting (LBL 445) [BB.A.LL.B(H)-8<sup>th</sup> Semester], Professional Ethics (LBC521) [BB.A.LL.B(H)-10<sup>th</sup> Semester]. Recommended cases and subtopics in few units have been added.

**LL.B.-** Law of Crimes- I (3 Y)- Bharatiya Nyaya Sanhita (LBL 327) [LL.B-1<sup>st</sup> Semester], Family Law-II (LBL 324) (3 Y)- [LL.B-2<sup>nd</sup> Semester], Law of Evidence (3 Y)- Bharatiya Sakshya Adhinyam (LBL 417) [LL.B-3<sup>rd</sup> Semester], Constitutional Law-I (3 Y) (LBL419)- [ LL.B-3<sup>rd</sup> Semester]; and Professional Ethics (LBC526) (3 Y)- [LL.B-6<sup>th</sup> Semester]. Recommended cases and subtopics in few units have been added.

**LL.M.-** Three new courses in LL.M Corporate Law Specialization have been introduced to expand the horizon of elective courses viz; Corporate Cyber Law (LML 647), Competition Law (LML 649) and White-Collar Crime (Code to be generated).

Points Discussed:

1. Prof. Rajesh Chadha proposed exploring the possibility of offering a 4-year integrated LL.B + LL.M program. However, it was clarified that this is not feasible due to regulatory differences, since the LL.B. program falls under the ambit of the Bar Council of India whereas the LL.M. program is governed by the University Grants Commission (UGC). These distinct regulatory frameworks make it difficult to create an integrated program.
2. LL.M is already of one year duration and therefore LLB + LL.M can be done in 4 years time.

Minutes of the Board of studies for School of Law are placed at **Annexure 4**.

**The members of the Academic Council deliberated the above schemes and approved the proposed new / revised schemes.**

**ITEM No. 5: REVISED SCHEMES OF 4Y BBA AND 3Y BBA / BCOM / BA-ECO. PROGRAMMES WITH DIFFERENT SPECIALIZATIONS APPLICABLE TO THE BATCH OF 2024 ONWARDS.**

(HOD – Management & Commerce)

The Head of Department of Management & Commerce briefed the members on the changes that have been made to the overall credit scheme and program structure to align the undergraduate management programs with NEP 2020. She brought out that additionally, a four-year BBA program has also been proposed, and that the revised schemes would be applicable from Batch 2024 onwards.

#### Points Discussed:

1. Prof. Rajesh Chadha suggested that the university could consider the feasibility of offering an integrated BBA+MBA program. In response, the Dean Academics affairs expressed reservations about students' interest in such a program at this point of time, highlighting that many students prefer to go abroad for further studies after graduation. The Dean Academics also highlighted the popularity of the four-year Bachelor's program, which aligns with NEP 2020 guidelines. He stated that this was popular among those students who wish to pursue their masters abroad, where universities insist on a 4 year undergraduate course. Dr. Kavita Khanna added that the four-year Bachelor's program is also attractive to students because, under the new UGC regulations, it allows them to pursue a Ph.D. directly after a 4 year graduation.
2. The Hon'ble Pro-Chancellor suggested that the concept of the four-year BBA program could be replicated to other bachelor's programs as well. He also suggested that a provision should be made to avoid the need for separate approvals for each program. The Vice Chancellor also supported this approach, advocating for the gradual conversion of other three-year bachelor's programs into four-year programs in accordance with NEP 2020 guidelines.
3. Prof. Rajesh Chadha proposed offering a Bachelor of Business Economics program, noting its success at Delhi University. It was informed that NCU offers BA (Economics) and BBA can be offered with a minor in Economics through MOOCs. The Dean Academics will examine these possibilities.

Minutes of the Board of studies are placed at **Annexure 5**.

**The members of the Academic Council deliberated the above and approved the proposed revised/ new schemes.**

#### **ITEM No. 6: REVISED SCHEMES OF BACHELOR OF ARTS (HONORS) IN PSYCHOLOGY AND MASTER OF ARTS IN PSYCHOLOGY APPLICABLE TO THE BATCH OF 2024 ONWARDS.**

(Program Chair – Department of Psychology)

Dr Neha Jain, Program Chair Dept of Psychology, briefed the members regarding the adjustments that have been made to the existing scheme of studies for BA (Hons) Psychology and MA Psychology (Clinical/Organizational/Applied), which are in alignment with NEP 2020. She brought out that these changes involve the removal of overlapping courses, addition of contemporary courses to enhance employability, reorganization of courses between semesters to provide better exit options for students, a review of the Practical Experience (PE) component to align with the specializations offered in the MA program and to promote holistic learning in the BA program. The revised scheme of studies will take effect from the 2024 batch for both BA and MA programs.

#### Points Discussed:

1. Prof. Kumkum Garg inquired about the adequacy of available resources to support the diverse range of courses planned. It was clarified that the Psychology department currently has four regular faculty members. Considering that MA Psychology is being introduced for the first time, recruitment decisions will depend on the number of

admissions in the course. Shortlisting of CVs is in progress for additional faculty, and recruitment would be undertaken based on the requirements that may arise.

Minutes of the Board of studies are placed at **Annexures 6 and 7**.

**The members of the Academic Council deliberated on the above and approved the proposed revised schemes.**

#### **ITEM No. 07: SOET – New Specialisations & Amendments**

Respective HODs briefed the members on the following for their consideration and approval:-

- (a) Dr Sharda Vashisth briefed the members about introduction of new specialization track in "Semiconductor Technology" under B. Tech. (CSE) Programme, and amendments in the scheme of M.Tech. (ECE) Programme, replacing existing specialization tracks with new tracks in "Semiconductor Technology" and "IoT & 5G".
- (b) Prof Hukum Singh briefed the members on the amendments in the contents of Mathematics courses offered across programmes as core and/or elective courses.
- (c) Dr Rita Chhikara briefed the members on the amendments in the scheme of B.Tech.- Computer Science & Engineering to meet the industry requirements and to build coding skills in each year for good placements.

Minutes of the respective Board of studies are placed at **Annexure 8**.

Points Discussed:

1. Dr. Amit Sangroya inquired whether Python is included in the curriculum. Dr. Rita Chhikara confirmed that Python is already a part of the curriculum. Prof. Kumkum Garg asked about the inclusion of Java and advanced Java, and the same was confirmed by Dr. Rita Chhikara.

**The Academic Council members deliberated on the above and approved the new / revised schemes / specialisations.**

#### **ITEM No. 08: NCU-SOB – Programme Schemes & Evaluation Schemes**

The following program schemes and new evaluation scheme proposed by NCU SOB were presented by Dr. Hemalatha (**Annexure 9**), and deliberated upon:-

- (a) **MBA 3rd and 4th Semester Program Scheme for Entry Batch 2023-24.**
- (b) **MBA Program Scheme (Full Program) for Entry Batch 2024-25.**

The Academic Council members pointed out that the credit framework proposed for NCU SOB should be aligned with NEP and other schemes of NCU, and cannot be compared with trimester based PGDBM programs offered by IIMs and AICTE model curriculum. The MBA program offered by NCU is semester based and should be compared with FMS, Delhi University or Department of Management Studies (DMS), IIT Delhi only, and revised accordingly.

Dr. Hemlata proposed that **“Most of the courses will be offered in Project based Learning Mode”**.

However, Prof. Prem Vrat, Pro Chancellor, NCU pointed out that the project-based learning makes individual evaluation very subjective and does not reward individual excellence which is the basic underlying component of any evaluation system. Therefore, Project based Learning should be carefully integrated in the curricula only on need basis.

NCU SOB was advised to introduce Minor exams and Major exams in each subject along with continuous evaluation, giving due weightage to each examination component as per NCU norms.

The Vice Chancellor advised that the required changes be made by SOB in the above-mentioned schemes and be placed before the Academic Subcommittee within 10 days' time. Dean SOB did not attend the meeting due to medical reasons and Dr. Hemalatha agreed to incorporate all the suggestions made by the Academic Council members.

**NCU-SOB to incorporate the required changes and place the same before the Academic Sub-Committee within 10 days' time.**

#### **ITEM NO. 9: APPROVAL OF ACADEMIC CALENDAR FOR ODD SEMESTER AY 2024-25** (Dean-Academic Affairs)

Dean-Academic Affairs presented the Academic Calendar for the Odd Semester of Academic Year 2024-25 during the meeting. He brought out that the Academic calendar has been drawn up post incorporating all important and cardinal activities which are required to be undertaken in the forthcoming semester. Copy of the Academic calendar is placed at **Annexure 10**.

**All members of the Academic Council took note of the above and approved the Academic Calendar.**

#### **ITEM NO. 10: REPORTING MATTERS/ INFORMATION POINTS** (Member Secretary)

Important matters / activities which have taken place since the last meeting held on 25.01.2024:

##### **1. NCU granted UGC 12(b) Status**

The member secretary informed the members that the NorthCap University achieved a significant milestone on 21st March 2024 by obtaining recognition under Section 12B of the UGC Act 1956. This accomplishment highlights its steadfast commitment to providing excellence in education. He brought out that the recognition is a result of the dedicated efforts of the faculty and staff, who consistently pursue academic excellence and innovation.

**All members of the Academic Council congratulated the university on receiving the UGC 12(b) status.**

**2. 13th Fee Concession and Scholarship Distribution Ceremony, 2024**

The NorthCap University held its 13th Fee Concession & Scholarship Distribution Ceremony for deserving students on 5th March 2024. The Hon'ble Governor of Haryana, Shri Bandaru Dattatraya, was the Chief Guest for the ceremony. NCU demonstrated its commitment to supporting its students by disbursing fee concessions, Merit Scholarships, and financial aid totalling Rs. 1.55 Crore to 370 deserving students. Recognizing the importance of diversity and inclusivity in education, The NorthCap University awarded Hatch Associate Scholarships to 12 female students pursuing STEM education during the ceremony.

**3. 13<sup>th</sup> Academic Advisory Board Meeting – 02 April 2024**

The Annual 13<sup>th</sup> Academic Advisory Board Meeting of the University was held on 02 April 2024 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 11**.

**4. "100 Great IITians: Dedicated to the Service of the Nation,"**

Prof. Prem Vrat, Pro-Chancellor; Professor of Eminence and Chief Mentor, has been recognised in the prestigious publication "100 Great IITians: Dedicated to the Service of the Nation" edited by Commander V.K. Jaitly. His profile is aptly titled "An Academician Par Excellence," in the publication. It stands as a beacon of inspiration, chronicling his lifelong dedication to academic excellence and unwavering commitment to India's growth. This inclusion is a true testament to the exceptional calibre of the countless IITians who have chosen to serve our nation. We are incredibly fortunate to have Prof. Prem Vrat as a guiding light at NCU.

**All members of the Academic Council congratulated Prof. Prem Vrat on the recognition of being amongst the "100 Great IITians"**

**5. Sustainable Institutions of India – Green Rankings 2024**

The NorthCap University has been ranked in Gold institutional band / category in the Sustainable Institutions of India Green Rankings 2024, receiving the Certificate of Excellence. This recognition underscores our commitment to sustainability and reflects the dedication and hard work of entire NCU community.

**6. Visit of delegates from Santa Clara University (SCU), USA.**

The NCU has an active MoU with Santa Clara University, USA. Romana Bucur, Senior Assistant Dean, Strategic Initiatives and Global Engagement and Prof. Sriram Sundararajan, Professor of Marketing, Leavey School of Business visited The NorthCap University on 2nd February 2024. The purpose of the visit was to delve deeper into potential collaboration opportunities between The NorthCap University and Santa Clara University, USA. During their visit, they engaged with students and discussed the opportunities available at Leavey School of Business, Santa Clara

University, USA. Prof Sriram Sundararajan shared motivational success mantras. They also held discussions with the senior leadership team of NCU.

#### **7. Visit of delegates from Moscow State University, Russia.**

Delegates from Moscow State University visited NCU on 2<sup>nd</sup> February 2024. The Moscow State University (MSU) is one of the oldest and most renowned universities of Russia. Ranked 87 in the QS World University Rankings, it has more than 47,000 students, and inducts almost 4,000 international students every year. The purpose of the visit was to explore potential opportunities for collaboration between our institutions. Prof. Sharda Vashisth (HoD-MDE & Dy Dean International Affairs), Prof. Manoj Gopaliya (Dean Academics), Prof. Archana Sharma (HoD-SOL), Prof Manjula Batra (Sr. Professor, SOL) and other senior faculty members from NCU held discussions with the delegates on Semester Exchange Programs, Student and Faculty Exchange, Research Collaborations, Immersion Programs and holding of Joint Conferences.

#### **8. National School Innovation Contest and Junior Smart India Hackathon**

On February 6th, the Department of Computer Science and Engineering, IIC Cell, and The NorthCap Incubation and Innovation Centre (NIIC) at The NorthCap University successfully hosted the National School Innovation Contest and Junior Smart India Hackathon, organised by the Ministry of Education, Govt. of India. With an impressive turnout, more than 50 schools actively participated in an online pitching session on MS Teams for the shortlisted candidates of the School Innovation Contest.

#### **9. Android Study Jam 2.0**

On February 17th, the Google Developer Student Club at NCU successfully hosted Android Study Jam 2.0, a hybrid event conducted in collaboration with Google Developer Club Gurugram at The NorthCap University. Structured to cultivate a vibrant learning community and provide valuable insights into Android development, the event attracted both online and in-person participants, creating a dynamic learning experience for all attendees. The lineup of speakers included Vivek Chauhan (Lead Android Engineer, Cyntra New), Hitesh Garg (Product Manager & DevRel Lead, QuickBlox), Rituparna Warwatkar (Software Developer Intern, FIITJEE), and Luxmi Gupta (Software Engineer, Pine Labs). The diverse expertise of these speakers contributed to the event's success and offered valuable knowledge to the participants.

#### **10. Workshop on Web3**

On February 23rd, the IoT Club of the Department of Computer Science organised an educational workshop on Web3 tailored for CSE students. The workshop provided a comprehensive exploration of Web3, incorporating both theoretical insights and practical applications. The inclusion of industry experts like Mr. Anchit and Mr. Sanket as speakers added substantial value, offering students a deep understanding of Web3's potential, challenges, and career opportunities.

#### **11. Faculty Development Programme on AWS Cloud Practitioner Certification**

The Computer Science and Engineering Department, NCU organised a Faculty Development Programme from 22nd January-22nd February, dedicated to AWS Cloud Practitioner Certification, reinforcing our commitment to staying at the forefront of technological advancements. 19 members actively engaged in the programme, honing their skills in cloud computing, particularly within Amazon Web Services (AWS). The

FDP's primary goal was to prepare faculty members for the AWS Cloud Practitioner Certification through comprehensive training sessions and hands-on exercises. The AWS Cloud Practitioner Certification serves as a valuable credential, affirming proficiency in cloud concepts and readiness to leverage AWS services.

#### **12. Workshop on 'IOT based Home Automation using NodeMCU' organised by IEEE RAS Chapter of the NorthCap University**

The IEEE RAS Chapter of The NorthCap University conducted a workshop on IoT-based Automation using NodeMCU on 14th February, 2024. More than 50 participants delved into the realm of smart living and gained invaluable insights into NodeMCU's capabilities through hands-on sessions and expert guidance. They crafted innovative solutions for home automation, from controlling lights to monitoring environmental conditions. The workshop fostered collaboration and sparked creativity among its participants, empowering them to apply their newfound knowledge in real-world projects.

#### **13. Blog Writing Competition to Commemorate Be Electrific Day**

IEEE RAS NCU SB organised a Blog Writing Competition to commemorate Be Electrific Day, celebrated each year on February 11th to honour and celebrate Thomas Alva Edison's contributions to the world of science and technology. The event, which spanned from 11th-21st February, emphasised on the self-discovery of electricity within us. Blogs were invited from students under categories like 'Data is the New Electricity', 'From Homes to Cars– It's now time to Electrify Everything', and 'Live Life Electrified.'

#### **14. Intra Law School Moot Court Competition at NCU**

On 16th and 17th February, the School of Law organised the III Edition of NCU Intra Law School Moot Court Competition. This annual event serves as a platform for aspiring lawyers to hone their courtroom abilities, apply legal theory to practical scenarios, and engage in rigorous intellectual discourse. This year's moot court problem was centred around the use of Artificial Intelligence in criminal profiling of citizens and its impact on right to privacy. The problem challenged the participants to analyse complex legal issues and develop compelling arguments grounded in relevant statutes and legal precedents. The students of various batches showcased their proficiency in legal argumentation and advocacy. A team of third year students comprising Mohammad Azhad Hassa (21LLB026), Saima Hassan (21LLB027) and Gaurav Yadav (21LLB032) emerged as the winners. A team of second year students comprising Saundarya Singh (22LLB059), Dhruvansh Rai (22LLB072) and Keshav Vats (22LLB069) were the runners-up.

#### **15. Celebration of National Science Day**

On February 28th, the Department of Applied Sciences, The NorthCap University, celebrated the National Science Day to honour the discovery of Raman Effect by the great Indian Physicist Sir C.V. Raman. On this occasion, several speech and quiz competitions were organised for university students, under the gracious presence of Prof. Kehar Singh, Ex-Dean & Emeritus Fellow, IIT Delhi. He delivered a talk on the life of Sir C.V. Raman, including some intriguing lesser-known facts about his life.

## **16. Visit to the 18<sup>th</sup> Annual National Convention by UN Global Compact Network**

### **India**

Students of BA (Hons.) Economics and select research scholars of the School of Management— Ms. Purna Sharma, and Ms. Mansi Yadav along with faculty coordinator Dr. Priyanka Banerji, attended the 18th Annual National Convention hosted by the United Nations Global Compact Network India at Hotel Ashok, New Delhi. Themed 'Advancing Sustainable India: Driving Change with Forward Faster 2030,' the convention provided invaluable insights and inspiration towards our collective journey for sustainability.

## **17. Alumni Homecoming 2024**

On 17th February, The NorthCap University organised the Alumni Homecoming event. The day was filled with a myriad of engaging activities tailored to reconnect and entertain NCU's esteemed alumni. From heartwarming meet and greets to uproarious stand-up comedy acts, mesmerising dance performances by NCU students, and exciting games, every moment created lasting memories for the esteemed alumni. An enlightening session on "Knowing Your Alma Mater" was conducted, featuring engaging talks and captivating videos, further enriching the experience for the 170 odd NCU alumni present.

## **18. Health Awareness Session on Fatty Liver**

Manovriti – The Psychology Club, in collaboration with Institute of Liver and Biliary Sciences, organised a Health Awareness Session on Fatty Liver on February 22nd, 2024. The session was conducted by Iswarya S (Project Officer, SMiES, ILBS) along with 2 students from ILBS as facilitators. The session discussed the psychological effects of suffering from fatty liver, treatment interventions to control these effects, and select psychological case studies.

## **19. Third Regional Conclave of the Institution of Engineers India (IEI)**

The NorthCap University hosted the 3rd Regional Conclave of the Institution of Engineers India (IEI) on 16th March 2024 with the theme, 'Innovations Shaping the Future: Exploring Emerging Trends in Engineering. The chief guest, Dr. Sushil Kumar, Chief Scientist & Professor at CSIR National Physical Laboratory (NPL) and senior FIE members- engineers/entrepreneurs, speakers from ministry/industry attended the event shared insights. Dr. Rakhi Nangia, Semiconductor fab Policy Advisory, Ministry of Electronics and Information Technology, Ms. Divya Gera, Senior Data Scientist, Broadcom, Mr. Vineet Gupta, Manager Design & Branding, Gemini Solutions Pvt Ltd spoke about the cutting-edge technologies by sharing their experiences in their respective domains. Students of The NorthCap University and Manav Rachna Institute delved into in-depth discussions on emerging engineering trends in areas such as artificial intelligence, IoT, Robotics, sustainable buildings, waste management, cyber security, and more.

## **20. 'Cython 2024 – Roadshow'**

The pre-hackathon workshop held on 19th March 2024 was jointly organized by NCIIPC (A unit of NTRO) and FITT-IIT Delhi, aimed to inspire students, startups, and research scholars to address the challenges of the digital age. The workshop provided an exceptional platform for fostering innovation and entrepreneurship in the deep-tech domain. Participants engaged in interactive sessions and collaborative brainstorming activities, empowering them to translate innovative concepts into actionable solutions.

## 21. Students Achievements

### (a) E-Summit 2024 Ideathon

Students of Department of Computer Science & Engineering participated in the E-Summit 2024 Ideathon, hosted at LNM Institute of Information Technology (LNMIIT), Jaipur on February 3rd-4th, 2024. The victorious team, comprising of Jatin Dahiya (21CSU235), Aryan Dahiya (21CSU017), Jatin Gandhi (21CSU237), and Priyanka Nagpal (21CSU135), showcased their innovative project "AgriTech" under the mentorship of Dr. Anuradha Dhull and Dr. Shilpa Mahajan. The "AgriTech" solution is designed to assist farmers with features like voice-based support, multilingual voice assistance, crop yield prediction, optimal fertilizer recommendations, and more. The winning team received a prize of Rs. 40,000, along with gift hampers and internship opportunities, emphasizing the recognition of their innovative project idea. These students will further develop their project for potential funding from HARSAC (Haryana Space Application Centre) under the guidance of HARSAC scientists.

### (b) Robo Race competitions at Invictus

On 11th and 12th February, Invictus– the robotic event was hosted by Delhi Technological University. The NCU team from the Computer Science and Engineering Department, consisting of Rahul Kr Sangwan (21CSU360), Aayush Jindal (21CSU392), Agastya Srivastava (21CSU372), and Aman Kumar (21CSU390), bagged the 1st position in the Robo-Soccer competition and 3rd position in the Robo-Race competitions. Recognizing their outstanding performance, the team was honoured with a cash prize of ₹12,000.

### (c) Competition to commemorate National Productivity Week

Students of the Department of Computer Science & Engineering participated in the National Productivity Week Celebrations (Feb 12 ~ Feb 18, 2024), organized by the Haryana State Productivity Council, is a body comprising of government, Industries and Worker Unions and has been working for Productivity & Safety related issues in the state of Haryana. As a part of The National Productivity Week Celebrations, they organized a competition wherein students from different universities and colleges in Haryana presented ideas on the theme "Artificial Intelligence - Productivity Engine for Economic Growth" with a focus area – AI for Defense-Logistics in the form of a short video. NCU team comprising of Palak Rohilla (21CSU537), Pratham Jain (21CSU583) and Vishakha Srivastava (21CSU495) under the mentorship of Dr. Srishti got the runner-up position in the competition. The team has been awarded a cash prize of Rs. 3000/- for their achievement.

### (d) Jashn – E – Entrepreneur event

On February 22nd, Dr. SS Bhatnagar University Institute of Chemical Engineering & Technology, Panjab University, Chandigarh organised the Jashn-e-Entrepreneur event. Utkarsh Singh (21CSU108), a student of the Computer Science and Engineering Department, NCU participated in the event under the guidance of Dr. Anjali Garg, and achieved the runner-up position and was honoured with a cash prize of ₹15000 for his outstanding accomplishment.

(e) Student, 21CSU581 Riya Sharma of Department of Computer Science & Engineering, under the guidance of Dr. Poonam Chaudhary bagged the winner's position in the Microsoft AI Odyssey Challenge, a National Level Event. Riya has successfully completed all the 6 challenges at 2 levels and secured a position among top 10 at the National Level. Her hard work and skills facilitated her the privilege of attending the Microsoft AI Tour in Bengaluru in presence of Mr. Satya Nadela, CEO of Microsoft.

(f) National Social Summit at IIT Roorkee

The National Service Scheme (NSS) team at The NorthCap University was invited to attend the National Social Summit organised by IIT Roorkee from 9th-11th February, 2024. The team attended the summit and performed an impactful Nukkad Natak on sustainability and empowerment, attended informative webinars that broadened their horizons and took an active part in Esports that were organised by the team. Sareesha Chawla (21LLB002) bagged the first position in the Policy Case Competition.

**22.** Four final year (tenth semester) BBA LLB (H) students at the School of Law have been offered pre-placements as Consultants with annual pay packages of five L.P.A. and above in the renowned international audit, consulting and advisory firm, Mazars Advisory LLP. The students who have made us proud are Tanu Mehta 19LLB078, Sourabh Jha 19LLB069, Shivani Kataria 19LLB072, Anmol Kaur Sandhu 19LLB006.

### **23. Signing of MoU's**

#### **(a) MoU with Loyola Marymount University, USA**

An MoU with Loyola Marymount University (LMU), USA has been signed on 08 Feb 2024. LMU. Loyola Marymount University (LMU) is a private Jesuit and Marymount research university in Los Angeles, California. LMU is the parent school to Loyola Law School and offers 55 major and 59 minor undergraduate degrees and programs across six undergraduate colleges. The Graduate Division offers 47 master's degree programs, one education doctorate, one doctorate in juridical science, a Juris Doctor and 13 credential programs. The scope of the agreement includes: -

- i. Exchange information and experience regarding educational exchange programs and make cooperative efforts to promote such educational exchange programs.
- ii. Explore joint degree/ dual degree pathways.
- iii. Research collaboration between faculty and short-term exchange of faculty members.
- iv. Organize student exchange programs.
- v. Organize joint seminars and competitions for students.

### **(b) MoU Signing with City College of New York**

NCU and City College of New York signed a MoU on 18<sup>th</sup> March 2024, a significant partnership aimed at fostering academic collaboration. CCNY, a renowned institution within the City University of New York System, brings a rich history dating back to 1847 and recent rankings affirm its academic prowess with the following rankings:

- QS World University Rankings 2024 #1201-1400
- QS Sustainability Ranking 2024 #1000-1050
- QS US Uni Ranking #201-250
- Times Higher Education Ranking # 212

The purpose of this agreement may include, but is not limited to:

- Student and Faculty Exchange Programs
- Joint degree/dual degree pathways
- Research collaboration
- Organize joint conferences, seminars, and competitions

### **(c) MoU Signing with University of East Anglia**

On 22<sup>nd</sup> April 2024, The NorthCap University signed a Memorandum of Understanding with University of East Anglia. The University of East Anglia is UK Top 25 university (*Complete University Guide 2024*) and is ranked in the UK Top 30 in the Times/Sunday Times and Guardian University 2023. University of East Anglia is a renowned university, it offers academic and social facilities of the highest quality. UEA is an internationally renowned university and is located in 320 acres of rolling parkland, just two miles from the centre of Norwich, England's first UNESCO City of Literature. This alliance with University of East Anglia offers NCU with following benefits:

- Research Collaboration
- Student & Faculty Exchange
- Joint Degree / Dual Degree Pathways
- Joint Conferences, Seminars & International Competitions
- Immersion Programs.

### **(d) MoU renewed with UTM**

The NorthCap University and UTM renewed their MoU on 25<sup>th</sup> April 2024, strengthening the alliance. Universiti Teknologi Malaysia (UTM) is one of the leading universities in Malaysia, renowned for its excellence in engineering and technology education. Established in 1904 as a technical school, UTM has grown into a comprehensive university with campuses spanning across Malaysia. The university offers a wide range of programs across various disciplines, including engineering, science, management, and the humanities. UTM has a vibrant and diverse student body, with students from various backgrounds and cultures coming together to learn and grow. UTM's alliance with NCU offers the following benefits:

- Research Collaborations
- Student & Faculty Exchange
- Joint Degree / Dual Degree Pathways
- Joint Conferences, Seminars & International Competitions
- Immersion Programs

NCU has started exploring the possibilities of semester exchange and research exchange programs with UTM.

**(e) MoU Signing with ETS India**

On 9th February 2024, The NorthCap University signed a Memorandum of Understanding (MoU) with Educational Test Service India. Mr. Sachin Jain (Country Manager, ETS) and Commodore Diwakar Tomar NM (Retd.) (Registrar, NCU) signed the MoU in the event organised by Centre of Professional Attachment and Alumni Engagement. ETS India is a subsidiary of ETS, headquartered in Princeton, USA. ETS develops, administers, and scores more than 50 million tests annually – including the globally well-known TOEFL and GRE tests in over 160 countries worldwide. ETS India's alliance with NCU offers the following benefits:

- Special Discounts for students: Rs.2500 on TOEFL & Rs.2000 on GRE (Combo Discount Offer: Rs.5000)
- Official GRE and TOEFL Prep Material in Institutions LMS/Library
- TOEFL Practice Test for every registered test taker
- Seminars, Teacher Training & TOEFL Masterclasses for faculties as well as students

**24. Financial Support – Department of Science & Technology (DST)**

**MDE Dept**

The project titled "Early Prediction and Evaluation of Sepsis using Machine Learning" has been recommended for financial support of Rs 26 Lakhs for a period of 3 years from the Department of Science & Technology (DST). The Principal Investigator (PI) for this project is Ms. Shraddha Kumar, a Research Scholar in the MDE Department. The Mentor for the project is Dr. Pooja Sabherwal.

**APS Dept**

1. Three new research projects from the APS & MDE Departments got the sanction of the Government agency (DST-SERB), as follows: -

- Project Title: Designing of various hybrid structure phase masks for optical image encryption for information security using certain selected mathematical transforms. Grant amount: 33.12 Lakh, Duration: 3 Years. Principal Investigator - Prof. Hukum Singh. Agency: DST-SERB (Core Research Grant).
- Project Title: Development of air-stable perovskite semiconductor-based field-effect phototransistor with a high response speed. Grant amount: 16.8 Lakh, Duration: 3 Years, (Principal Investigator - Dr. Arjun Singh. Agency: DST-SERB (TARE).
- Project under WISE granted to Dr Pooja Sabharwal for 26 Lakhs.

**All members of the Academic Council expressed appreciation for this achievement.**

**25. The NorthCap University, Trademark Registration**

Consequent to our collaboration with Arizona State University (ASU) a new logo was prepared and sent to The Registrar of Trademark, Delhi. The Registrar of Trademark, Delhi had raised some objections, which were answered by our Advocate who has filed the Trademark application. The case came up for hearing on 08 January 2024,

but got postponed on the morning of 08 January 2024 due to administrative reasons. The case finally came up for hearing on 22 Feb 2024, wherein the Registrar of Trademark accepted the explanation of our Advocate to the objections raised. The trademark application has been advertised in the Trade Marks Journal on 11<sup>th</sup> March 2024, and in case no third party opposes the registration of the mark within 04 months of such advertisement in the journal, the mark will proceed for registration.

**The Academic Council members took note of the above.**

#### **ITEM NO. 11: ANY OTHER MATTER WITH THE PERMISSION OF THE CHAIR**

Dr. Nitin Malik briefed the Academic Council members regarding the Amendments in PhD Rules & Regulations. He brought out that the amendments are in alignment with some recent announcements by the University Grants Commission (UGC) regarding Ph.D programmes. He brought out that these amendments will enhance the academic landscape of the university and will provide a more inclusive and flexible pathway for highly qualified candidates to pursue doctoral studies, fostering a more interdisciplinary and dynamic research environment.

The amended rules and regulations are placed at **Annexure 12**.

Points Discussed:

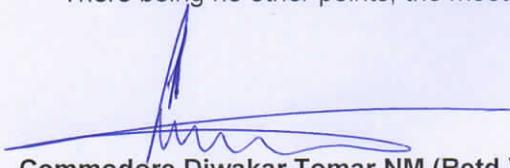
1. Prof. S. D. Joshi inquired about the rationale for keeping the required credits for students pursuing a Ph.D. after completing a four-year undergraduate program between 26 and 40 credits. The Hon'ble Pro Chancellor clarified that this range is as per the flexibility provided by the UGC. He stated that in some cases depending upon the undergraduate background of the PhD scholar, there could be a requirement of some bridge courses, and hence the range of 26 to 40 credits. He also brought out that to ensure high standards of PhD enrollments, only students with a minimum CGPA of 8.5, or at least 75% marks in their four-year undergraduate program will be eligible for enrollment.

#### **Other Closing Comments & Suggestions:**

1. Prof. Kumkum Garg discussed the significance of Artificial Intelligence (AI) in line with National AI Mission and in everyday life, and suggested that The NorthCap University could explore the possibility of establishing a School of Artificial Intelligence in the long term. She highlighted that AI is a rapidly growing field and would attract many students, making it a valuable addition to the university's academic offerings.
2. Prof. Rajesh Chadha suggested that to raise the profile of the faculty, it would be valuable to have a series of working papers from each School showcasing individual faculty members' research. However, these papers should be reviewed by their peers. Prof. Chadha also discussed the concept of 'Net zero emissions' and highlighted that the university could contribute to this goal. He suggested that the university could focus on four key areas of net zero emissions viz, wind turbines, solar panels, electric vehicles, and chips & modern technology. These could be done through in house research by faculty, or in collaboration with other research centers etc.

3. Prof. H. M. Gupta suggested that the university could explore the possibility of offering a course on 'Technology and Society', noting its relevance in modern times.

There being no other points, the meeting ended with a vote of thanks to the Chair.



**Commodore Diwakar Tomar NM (Retd.)**  
**Member Secretary**  
**Academic Council – The NorthCap University**  
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**MINUTES OF THE XXXIII MEETING OF THE  
ACADEMIC COUNCIL OF THE NORTHCAP  
UNIVERSITY HELD ON 25 JANUARY 2024  
(THURSDAY) AT 2:30 PM.**

**THE NORTHCAP UNIVERSITY  
SECTOR – 23A  
GURUGRAM – 122 017**

## MINUTES OF XXXIII MEETING OF ACADEMIC COUNCIL HELD ON 25 JANUARY 2024 (THURSDAY) AT 2:30 PM

The following members attended the XXXIII Meeting of Academic Council on **25 January 2024 at 2:30 PM** in the conference room of the University, is as under: -

S. No	Name	Designation	Representing
1.	Prof. 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.	Dr. Agueda Benito (Leave of Absence)	Member	Chief Academic Officer, CINTANA
5.	Prof. V. G. Hegde	Member	Professor, Centre for International Legal Studies, JNU, New Delhi
6.	Prof. Rajesh Chadha (Leave of Absence)	Member	Senior Fellow, Energy, Natural Resources & Sustainability, Centre for Social and Economic Progress, New Delhi
7.	Prof. Kumkum Garg (Retd.)	Member	Former HOD (Electronics and Computer Engg), IIT Roorkee
8.	Prof. Hari M Gupta (Retd.)	Member	Former HOD (EEE), IIT Delhi
9.	Dr. Pratishtha Pandey (Leave of Absence)	Member	Scientist 'F' and Head R&D Infrastructure Program, Department of Science and Technology, New Delhi
10.	Dr. Kavita Khanna	Member	Campus Director, Delhi Skill and Entrepreneurship University, New Delhi
11.	Prof. Manoj K Gopaliya	Member	Dean – Academic Affairs
12.	Prof. Swaran Ahuja	Member	Advisor - Academic Affairs
13.	Prof. G. R. Chandrashekhar	Member	Dean – NCU School of Business
14.	Dr. Rita Chhikara	Member	HOD – CSE
15.	Dr. Sharda Vashisth	Member	HOD – Dept. of Multidisciplinary Engineering
16.	Dr. Sona Vikas	Member	HOD – SOM & LS
17.	Dr. Archana Sarma	Member	HOD – SOL
18.	Dr. Divyabha Vashisth	Member	HOD – CLL
19.	Dr. Hukum Singh	Member	HOD – APS
20.	Dr. Anjali Garg	Member	Director - CDOE
21.	Dr. Vaishali Sahu	Member	Dy. Director - IQAC
22.	Dr. Nitin Malik	Member	Dy. Dean - RDIL
23.	Commodore Diwakar Tomar NM (Retd.)	Member Secretary	Registrar

## **MINUTES OF THE MEETING**

The Chairperson welcomed all members to the 33<sup>rd</sup> meeting of the Academic Council of The NorthCap University. She also welcomed and introduced the 03 new members of the Academic Council. 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 XXXII MEETING OF ACADEMIC COUNCIL held on 17 May 2023**, circulated by email on 06.06.2023 and enclosed as **Annexure 1**, including confirmation and progress on matters arising thereof.

(Member Secretary)

The Minutes of the XXXII Academic Council Meeting were confirmed by the members of the Academic Council, as there were no observations received on the circulated minutes by e-mail.

**ITEM NO. 2: CONFIRMATION OF MINUTES OF MEETING OF THE ACADEMIC COUNCIL STANDING COMMITTEE HELD ON 10.11.2023.**

(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 reason: -

- To seek approval for conferring degrees to the graduated students in the XII Convocation Ceremony scheduled on December 15, 2023.
- For approval of the Academic Calendar the Even Semester (January to June 2024) of the Academic Year 2023-24.
- For ratification of the Promotion Criteria for Undergraduate programs.
- To approve the proposal of offering certification / Diploma / PG Diploma courses from Jan-Feb 2024 under CDOE.
- To deliberate on the Table Agenda from NCU School of Business

The Standing committee meeting was held on 10<sup>th</sup> November 2023 and the Minutes of the meeting were circulated vide email dated 20<sup>th</sup> November 2023. The Minutes are enclosed as **Annexure 2**.

**Members of the Academic Council noted the above and confirmed the minutes of the meeting of the Standing Committee of the Academic Council held on 10 November 2023.**

**ITEM NO. 3: STUDENT ADMISSION FOR THE ACADEMIC YEAR 2023-24.**

(Member Secretary)

Member secretary updated the members about the intake and the total number of students admitted to various programmes for the Academic year 2023-24, for which the last date of admission was 31.10.2023. Details are as under.

<b>INTAKE FOR THE ACADEMIC YEAR 2023-2024</b>		
<b>PROGRAMS</b>	<b>INTAKE</b>	<b>ADMITTED</b>
BACHELOR OF TECHNOLOGY (BTECH-CSE)	400	401
BACHELOR OF COMPUTER APPLICATION (BCA)	60	45
M-TECH FOR ALL DEPARTMENTS OF SCHOOL OF ENGINEERING	20	23
MASTER OF COMPUTER APPLICATION (MCA)	20	17
BACHELOR OF BUSINESS ADMINISTRATION (BBA)	60	68
BBA DIGITAL MARKETING, BUSINESS ANYLITICS, FAMILY BUSINESS & ENTREPRENEURSHIP	60	50
B.COM (HONS.)	25	42
B.COM (H) FINANCIAL MARKETS	25	11
B.A (HONS.) PSYCHOLOGY	30	41
B.A (HONS.) ENGLISH	20	16
MASTER OF BUSINESS ADMINISTRATION (MBA)	30	26
BBA-LLB	60	52
LLB (3 YEARS)	30	12
LLM	20	11
BCA - MEDIA IT	40	42
BCA - GAME DEVELOPMENT	40	31
B.SC SOUND ENGINEERING	40	6
B.SC VISUAL COMMUNICATION	40	10
B.SC VISUAL EFFECTS & ANIMATION	40	21
<b>TOTAL</b>	<b>1060</b>	<b>925</b>

**Following points were discussed:**

1. Dr. Kumkum Garg expressed concern regarding less admissions in BCA and BCA Sound Engineering. Prof. H M Gupta also pointed out that there are less number of seats offered in M.Tech. and the university should offer more seats in M.Tech. Prof. Hedge also mentioned the low number of students in the Law programs.
2. Dr. Kavita Khanna shared that the total number of seats in M.Tech is approximately the same in the Delhi Skill and Entrepreneurship university as NCU, as not many students opt for MTech these days. It was also brought out that the students either prefer to take up a job or do MS from abroad rather than doing M.Tech these days. Prof. H M Gupta and Dr. Kumkum Garg highlighted that students should be encouraged to pursue M.Tech in more specialized fields like Semi Conductor Devices & Technology, VLSI, Green mobility, Sustainable Development etc.

3. The Chairperson highlighted that apart from the regular BCA program, the university is offering two more specialized programs viz. BCA in Game Development and BCA Media & Information Technology. She informed the Council that the 03 new B.Sc. programmes namely B.Sc. Sound Engineering, B.Sc. Visual Communication and B.Sc. Visual Effects & Animation which have been started in the University in 2023. She further added that the combined intake of various BCA/BSc. Programs offered by Centre for Media & Entertainment is 200 which is same as last year.

**The members of the Academic Council took note of the above along with number of students admitted in the Academic Year 2023-2024.**

#### **ITEM NO. 4.: 'NCU SCHOOL OF BUSINESS' – REVISION OF COURSE CURRICULUM FOR MBA PROGRAMMES**

(Dean – NCU School of Business)

Prof. Hemalatha Chandrashekar gave the presentation on the Amendments that NCU School of Business has made in the MBA Scheme which was earlier being offered by SoM&LS, NCU. The Scheme of Study had been shaped up iteratively after incorporating suggestions from the Academic Council Sub Committee duly constituted by the Vice Chancellor, NCU comprising of Dean, Academics, NCU and Advisor Academics. It was also brought out by Prof. Hemalatha that the scheme of study has been benchmarked with IIMs and the AICTE Model Curriculum

The following was discussed:

- No changes in the Scheme of Study 2022-24 since students of this batch were in their final semester.
- Changes in Scheme of Study 2023-25:
  - Semester 2: Five courses retained as in the earlier scheme; Two courses replaced by two others; Two new courses of 2 credits each introduced; the changes were aimed at making the curriculum more industry oriented.
  - Semester 3 & 4: Strategic Management shall continue as core course in Semester 3. Entrepreneurship and Innovation shall be offered as an elective and not as a core course. Major Project shall be retained in Semester 4. Among the twelve electives spread over the 3<sup>rd</sup> and 4<sup>th</sup> semesters, 8 would be from the major area of specialization and 4 would be from some minor area / open elective offered within NCU.

(Presentation made by Prof. Hemalatha is placed at **Annexure 3**)

**The members of the Academic Council deliberated the above issue and approved the proposed amendments in the MBA scheme of study 2023-2025, with the observation that the list of Electives should be presented before the Academic Council in the next meeting, tentatively scheduled in May 2024 for approval.**

## **ITEM NO. 5.: APPROVAL OF NEW COURSES – SOL AND APS**

(HOD – SOL & HOD - APS)

### **(A) SCHOOL OF LAW**

HOD School of Law briefed the members on approval required to commence new Juvenile Justice course as a Programme Elective for five-year BBA.LLB and three-year LL.B programmes.

#### **Points Discussed:**

1. The Council highlighted that the total number of hours for the course were not clearly defined in the Course Template, and the same needs to be incorporated.
2. Prof. Hegde suggested that the School of Law should tie-up with programs like Beti Bachao, Beti Padhao or other civil society so that the students get adequate exposure and can benefit from the practical experiences.
3. It was also suggested by Prof H M Gupta that a group can be formed within the School of Law, who can look at the cases of past 20 years on issues involving juvenile crimes. This would provide hands-on experience and better understanding of the issues being faced by society. The Chairperson highlighted that going through this exercise would give an understanding of how the society has evolved and the emerging pattern of the society at large. It was also suggested that the Department of Psychology could be involved in understanding the human behavioral pattern over the years.

Minutes of the Meeting of the Board of Studies along with course template are attached at **Annexure 4**.

### **(B) DEPARTMENT OF APPLIED SCIENCES**

HOD Applied Sciences Department briefed the members on approval required to commence new pre-PhD courses, as follows :-

#### **i) Principles of Biochemistry (ASL713)**

Department of Applied Sciences proposed to introduce a course for Pre-PhD students, which aims to provide insights about the principles that govern the complex biological systems and their experimental basis. He brought out that it will help the students to carry their research and acquire a specialised knowledge and understanding of selected aspects. The course has L-T-P: 3-0-2, with course credit of 4.

#### **ii) Biophysical Chemistry (ASL 715)**

This course aims to explicate the fundamental approaches used by physical chemists to understand the behaviour of biomolecules such as proteins, carbohydrates, nucleic acids etc. It also helps to illustrate practical application to solve biomedical research problems. The course has L-T-P: 3-0-2, with course credit of 4.

Minutes of meeting of Board of Studies, including detailed syllabus of both the courses are enclosed as **Annexure 5**.

## Points Discussed:

1. Dr. S D Joshi suggested that these courses can be offered on MOOCs platform if the number of students enrolled are few.
2. The members brought out that a good option for introducing such courses was via 'selected topics'. Prof. SD Joshi stated that such courses may have selected topics, without fixed contents. Prof HM Gupta brought out that these are particularly useful for introducing subjects in emerging areas which are normally not offered in regular courses, but nevertheless need to be taught in view of the technology involved, which itself could be in a nascent stage / in the process of maturing. Prof SD Joshi pointed out that the course could be run for one or two cycles, and once it crystallizes, it can be shifted to a regular course. The Vice chancellor suggested that such a course **on selected topics** should be properly designed with unit-wise course contents, with suggested books, e-content and reading material, before being offered. The syllabus and the credit framework should be approved by Dean Academic Affairs before the commencement of the semester.

**Members of the Academic Council noted the details and approved the above proposals.**

## **ITEM No. 06: AMENDMENTS IN PhD RULES & REGULATIONS & UPDATE ON PhD RELATED MATTERS**

(Dy. Dean – PhD)

Dy. Dean PhD – Dr. Nitin Malik gave the presentation and briefed all the members regarding the amendments in the PhD rules and regulations. Dr. Nitin also briefed the members about the schemes for financial assistance to faculty members for scholarly publications. Copy of the presentation is placed at **Annexure 6**.

### **(i) Amendments in PhD Rules & Regulations.**

Amendments in PhD Rules and Regulations were discussed in Board of Doctoral Research and recommended for approval by Academic Council.

#### **a) The minimum eligibility criteria for admission in PhD Program Centre for Language Learning (CLL).**

The minimum eligibility criteria for admission in PhD Program in CLL has been revised from 60% to 55% in CLL, citing difficulty in getting first division in English Literature

#### **b) Minimum duration of the PhD program for part-time scholars**

The minimum duration for submission of PhD Thesis has been revised to 3 years for both Full-Time and Part-Time scholars.

	<b>Earlier</b>	<b>Now</b>
Full-Time	3	3
Part-Time	4	3

### **(ii) Revised Policy for financial assistance for Publications by Faculty & PhD Scholars.**

The following policies have been revised and strategically framed to improve the quality and number of research publications within NCU. The purpose is to motivate and support faculty members in achieving improved research outcomes through scholarly activities.

- (a) **Revised Guidelines for Scholarly Engagement Grant.** Standard Operating Procedure for Availing Scholarship by Faculty Members for Attending National/ International Conferences/ Seminars/ Symposia/ Online Courses/ Workshops/ Short Term Training Programs/ Courses.
- (b) **Open Access Publishing Scholarship.** Indexed Publications.
- (c) **Scholarly Contribution Rewards Program.** Scholarship for publishing in unpaid indexed journals.

(iii) **Total No. of Ph.D. admissions done in July-Dec. 2023 semester**

Sr. No.	Dept./ School	No. of Candidates taken Admission
1.	CSE	06 (1 NET)
2.	CIVIL ENGINEERING	0
3.	CLL	02 (1 NET)
4.	APS	03 (1 NET)
5.	EECE	03 (1 NET)
6.	ME	01
7.	SOL	07
8.	SOM	06 (5 NET)
	<b>Total</b>	<b>28 (10 NET)</b>

(iv) **No. of seats offered for Ph.D. admissions in first semester 2023-24 (Jan-June 2024):**

No of applications received : 44  
No. of candidates admitted : 22 in Jan 2024

(v) **No. of PhD Degrees Awarded**

18 PhD Degrees were awarded in year 2023 during the convocation ceremony held on 15<sup>th</sup> Dec. 2023. The Ph.D. Scholars who have been awarded PhD degree are as follows: -

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)
3	Ayushi Aggarwal	SOL	DELAY IN EXECUTION OF DEATH SENTENCE IN INDIA WITH SPECIAL REFERENCE TO MERCY PETITIONS: A CRITICAL ANALYSIS

4	Parul Munjal	SOM	PERFORMANCE ANALYSIS OF BANKS IN INDIA - "A TRIPLE BOTTOM LINE APPROACH
5	Monika Lamba	CSE	BREAST CANCER ANALYSIS USING COMPUTATIONAL TECHNIQUES
6	Madhu Kumari	CSE	CLINICAL DECISION SUPPORT SYSTEM FOR THE PREDICTION OF NON COMMUNICABLE DISEASE
7	Pallavi Asthana	EECE	CLASSIFICATION AND SEGMENTATION OF BRAIN TUMORS FROM MR IMAGES FOR THE PREDICTION OF THE OVERALL SURVIVAL RATES
8	Sarita Yadav	APS	MATERIALS SYNTHESIS, CHARACTERIZATIONS, DEVICE FABRICATION AND PERFORMANCE EVALUATION OF SPINEL COBALTITES BASED NANOCOMPOSITE ELECTRODES FOR SUPERCAPACITOR APPLICATION
9	Nidhi Verma	APS	SYNTHESIS AND APPLICATIONS OF GRAPHENE OXIDE BASED NANOCOMPOSITES IN WASTEWATER TREATMENT AND ANTIMICROBIAL ACTIVITY
10	Manju Dabass	EECE	AUTOMATED COLON CANCER ANALYSIS IN HISTOPATHOLOGICAL IMAGES USING DEEP LEARNING TECHNIQUES
11	Poonam Sharma	CSE	DEEP LEARNING BASED DETECTION AND CLASSIFICATION OF VEHICLES FROM TRAFFIC VIDEOS
12	Shikha Kapila	EECE	DESIGN AND ANALYSIS OF HYBRID CIRCUITS USING PSEUDO-MEMRISTIVE EFFECT
13	Reena	APS	SYNTHESIS AND CHARACTERIZATION OF CHALCOGENIDE GLASS-BASED NANO COLLOIDS FOR OPTICAL LIMITING APPLICATIONS
14	Namita	CSE	DETECTION OF MALWARE USING BEHAVIOR BASED APPROACHES
15	Sarita Yadav	EECE	SYSTEM MODELING AND ANALYSIS OF STATIC AND UAV RELAY BASED MIXED COMMUNICATION SYSTEM FOR UNDERWATER APPLICATIONS
16	Yachana Gupta	APS	DEVELOPMENT OF PAPER-BASED BIOELECTRODES FOR THE DETECTION OF BACTERIAL INFECTION SPECIFIC BIOMARKER PROCALCITONIN USING GOLD NANOPARTICLE AND ITS COMPOSITES
17	Prerna Singal	CSE	RISK INTEGRATED APPROACH FOR SOFTWARE EFFORT ESTIMATION
18	Shaifali Ruhil	EECE	DESIGN AND SIMULATION OF LOW LEAKAGE QUAD GATE STACKED NANO-SHEETS FINFET DEVICE FOR APPLICATION IN MEMORY AND ANALOG CIRCUITS

#### Points Discussed:

1. Dr. Kumkum Garg observed that 03 years could be less time for the students to finish their Ph.D and also whether it is as per UGC norms. It was clarified that as per UGC norms issued in Nov. 2022 three years is the "minimum" time in which student can complete Ph.D.. It was brought out that, at NCU, it usually takes approximately 5 years for students to complete their Ph.D.

**The Academic Council members took note of the proposed amendments in PhD rules and regulations, and the revised policy for financial assistance for publications by faculty and PhD scholars aimed at improving quality and number of research publications.**

## **ITEM NO. 7: REPORTING MATTERS/ INFORMATION POINTS**

(Member Secretary)

The members secretary informed the important matters / activities which have taken place since the last meeting held on 17.05.2023:

### **1. Life Fellowship Award to Prof. Prem Vrat.**

We are delighted to share the remarkable achievement of our esteemed Pro-Chancellor, Professor of Eminence, and Chief Mentor, Prof. Prem Vrat, who has been honored with the prestigious 'Life Fellow Award' by the Indian Institute of Technology (IIT) Kharagpur on 18 December 2023. Prof. Prem Vrat's dedication to education, innovation, and excellence has been an inspiration to all of us at The NorthCap University. The 'Life Fellow Award' bestowed upon Prof. Prem Vrat reflects his unwavering commitment to academic excellence and his tireless efforts to push the boundaries of knowledge. It serves as a reminder of the high standards and values that he has instilled in all of us. We are immensely proud to have him as a guiding force at our institution. We extend our heartfelt congratulations to Prof. Prem Vrat on this well-deserved honour.

**All members of the Academic Council congratulated Prof. Prem Vrat on the honour bestowed upon him by IIT Kharagpur.**

### **2. Scheme for financial assistance to faculty members for scholarly publications.**

Research Outcomes form an important and significant component of a University's USP, and have a major bearing on the Rankings and Accreditations like NIRF & NAAC etc. The number of publications and citations have a heavy weightage in the "Research and Professional Practice" segment of such rankings. For mobilising research grants from DST and other funding agencies also, the h-index of the university is an important parameter. Increase in number of publications increases the citation index and h-index of a university, thereby aiding ease of getting funding. To boost the number of such publications in good quality journals with SCI/ESCI/ Scopus and other recognized indexing, it was felt that requisite impetus needs to be accorded for motivating/ facilitating faculty members to publish more papers in such journals. Towards this, two 'cash incentive' based schemes have been identified to achieve a target of two journal publications and two book chapters annually, in the next 1-2 years. Scheme 1 focusses on research publications in Scopus/ SCI indexed open access journals, and provides for reimbursement of processing fee granted as scholarship to faculty members. Scheme 2 pertains to scholarship to faculty members for publishing in unpaid recognized indexed journals. The amount of scholarship money varies depending on the type of journal/ publication.

### **3. Strategic implementation of blended teaching-learning.**

The NorthCap University Gurugram has consistently demonstrated its commitment to innovative teaching and learning methods, continually striving for educational excellence. In alignment with this commitment, NCU has meticulously crafted a comprehensive plan to seamlessly integrate online teaching into on-campus programmes. This initiative spans across three distinguished schools: SOET, SOM & LS, and SOL, and has evolved through extensive discussions among stakeholders at all levels. The action plan centres around adopting blended courses (First-Year Courses: Face-to-face delivery for all first year UG courses, with up to 50% blended mode in PG programs. Second-Year Courses: 10% blended mode for UG (except law), up to 50% in PG with MOOC options. Third and Fourth-Year Courses: Minimum 15% MOOC mode in UG (except law programs) and PG programs). Practice Sessions for Blended courses retain the face-to-face approach, evaluated by the university. Equivalent external courses from reputed MOOC platforms have been identified to complement NCU courses in a blended mode. The Evaluation Process would comprise of university-conducted summative evaluations (Minor and major tests). Faculty assignments based on enrolment to maintain a reasonable student-to-faculty ratio, ensuring effective and quality evaluations aligned with NCU standards has been ensured. Detailed guidelines have been framed and quality assured through adherence to best practices for evaluations with regular compliance reports. Blended mode reduces face-to-face lecture commitments, allowing faculty to focus on research. Advanced learners can opt for up to 40% of total credits in Full MOOC Mode.

### **4. Convocation Ceremony – 15 December 2023**

NCU held its 12<sup>th</sup> Annual Convocation Ceremony for its various undergraduate and postgraduate programmes on 15 December 2023. The event was a memorable one and was presided over by Hon'ble Prof. T. G. Sitharam, Chairman, AICTE. A total of 734 students were awarded degrees in their respective disciplines, including 429 from BTech, 4 from BSc Maths (H), 04 from BSc Data Science (H), 07 from BSc Chemistry (H), 07 from BSc Physics (H), 37 from BCom (H), 13 from BA Economic (H), 16 from BA Psychology (H), 87 from BBA, 64 from BBA-LLB (H), 11 from MTech, 28 from MBA, 9 from LLM and 18 awarded PhD. Gold, Silver and Bronze medals were awarded to 28 candidates who topped the list in their respective streams.

### **5. QS-IGauge awards**

The NorthCap University proudly received the Diamond Badge in the Overall Category and the Platinum Badge in the Engineering Category at the QS I-GAUGE awards. Prof. Rekha Vig, Professor & Dy. Dean (IQAC), received this honour on behalf of NCU. School of Law at The NorthCap University also won the Gold Badge from QS IGAUGE for Law and Legal Studies.

### **6. CSR Law Schools Survey 2023**

The School of Law at The NorthCap University has been ranked as a 'Top Eminent Law School' in India in the latest CSR Law Schools Survey 2023. The NorthCap University's School of Law has carved a remarkable path in the realm of legal education.

## **7. CSR-GHRDC Engineering Colleges Rankings 2023**

Competitive Success Review has released the GHRDC rankings for 2023 in its latest issue and The NorthCap University has once again emerged as a leader among Engineering Colleges in Haryana. The University has not just held on to its Number 1 position but has also aced in other categories as well. The University is:

- No. 6 in Top Engineering Colleges of Super Excellence
- No. 12 in Engineering Colleges Ranked by Faculty, Research, Consultancy, EDP & Other Programmes
- No. 15 in Engineering Colleges Ranked by Placements, USP, Social Responsibility, Networking & Industry Interface

## **8. GHRDC BBA Colleges Survey 2023**

NCU's BBA Programme has been awarded 2nd Rank in Northern Region and 3rd Rank in the Category of Eminence in the recent GHRDC BBA Colleges Survey, 2023.

## **9. MDP in Partnership with Shri Vishwakarma Skill University (SVSU)**

The School of Management and Liberal Studies at NCU, in partnership with Shri Vishwakarma Skill University, Haryana, (SVSU), conducted an engaging 2-day Management Development Programme (MDP) in July 2023 aimed at facilitating a smooth transition for new managers into effective leadership roles. The programme was carefully designed to focus on functional, managerial, and leadership skills necessary for success. Expert facilitators from both institutions delivered effective and engaging training sessions. From personal and interpersonal skills to group skills, all the key areas were explored. Leadership Essentials and Conflict Management, the participants got equipped with apt techniques to handle any challenges that come their way. Concepts of performance enhancement, problem solving, decision making and managing change in today's fast-paced world were all covered extensively.

## **10. Transformative FDP on “Design Thinking – A Problem-Solving Approach”- 19.07.23 to 24.07.23**

Faculty Development Programme (FDP) on 'Design Thinking - A Problem-Solving Approach' was organized by the Department of Multidisciplinary Engineering from 19th to 24th July 2023. This dynamic event brought together 47 passionate academicians from NCU and other prestigious universities across India. The FDP's mission was to empower participants with the methodologies and mindset of Design Thinking – a human-centric approach that fosters innovation and creativity.

## **11. 1-day workshop on 'The Sexual Harassment of Women at Workplace Act, 2013'**

The faculty of NCU's School of Law conducted a 1-day workshop on 'The Sexual Harassment of Women at Workplace Act, 2013' on 26 July 2023 at SD Memorial School, Gurugram. Over 100 faculty and staff members attended, gaining insights into the crucial POSH Law, which aims to combat sexual harassment in workplaces worldwide. The workshop was conducted by Prof. (Dr.) Archana Sarma, Dr. Unanza Gulzar, Ms. Arushi Anthwal and Mr. Himangshu Rathee. The team addressed the participants as law experts and assisted them in understanding what qualifies as sexual harassment at the workplace and how the law redresses the same via both formal and informal redressal mechanisms as prescribed under the POSH Act.

## **12. National Workshop on "Creating a Multi-disciplinary Research Environment in HEIs" on 23 & 24 May 2023**

A two-day National Workshop on "Creating a Multi-Disciplinary Research Environment in HEIs" was held in the University on 23 and 24 May 2023. The inaugural session of the Workshop was held in the Auditorium. Dr. Pankaj Mittal, Secretary General, AIU and Dr. G.S. Bajpai, Vice Chancellor, NLU Delhi were the Chief Guests at Inaugural and the Valedictory functions respectively.

## **13. DST Purse Program – 25 & 26<sup>th</sup> May 2023**

The NorthCap University successfully hosted the 16th Meeting of the Programme Management Board for the DST-PURSE Program on May 25-26, 2023. The PURSE (Promotion of University Research and Scientific Excellence) Program, an exclusive initiative by the Department of Science and Technology (DST) under Ministry of Science & Technology, Govt. of India aims to empower universities to achieve scientific excellence and strengthen the research ecosystem in performing universities across the country. The NorthCap University welcomed eminent academicians from various parts of the country as members of the Program Management Board of DST-PURSE program. Prof. Nupur Prakash, Vice Chancellor NCU had the privilege to participate as a member of the DST-Purse Program, in this prestigious event organised by the Department of Science and Technology at The NorthCap University.

## **14. Signing of MoU's**

### **(a) MoU with Shibaura Institute of Technology (SIT)**

Prof. Nupur Prakash, Hon'ble Vice Chancellor NCU, renewed the MoU signed with Shibaura Institute of Technology (芝浦工業大学) (SIT), Japan, on behalf of NCU on 30th June 2023 at Japan. Prof. Nupur Prakash met with Mr. Masato Murakami, President of SIT, Dr. Furuya Yutaka, Division of Global initiatives and Ms. Reiko Kageyama, International Programme Initiatives of SIT. Owing to this partnership, The NorthCap University students can avail:

- Semester Exchange Programme, where the admission fee and tuition fee has been waived off for UG & PG students of NCU. Additionally, a scholarship worth upto JPY 40,000 per month will be awarded to meritorious students. Deadline for the application is October 31, 2023.
- Research Exchange/Laboratory Internship programme, of 8 days upto 1 year, for B.Tech 3rd Year, M.Tech and PhD students from NCU. These programmes offer an incredible chance for the students to immerse themselves in the rich academic environment of SIT and gain invaluable international exposure.

### **(b) MoU with Santa Clara University – 23.06.2023**

NCU signed an MoU with Santa Clara University (SCU). The Vice Chancellor, Prof. Nupur Prakash signed the MoU on behalf of NCU in the presence of Dr. Toby Mcchesney, Vice Provost for Graduate Programs, Santa Clara University. This collaboration paves the way for exciting opportunities and unparalleled benefits for the students of NCU:

- Annual Application Fee Waivers for all applicants
- Two Annual Scholarships of US \$9000 for applicants in Engineering
- Two Annual Scholarships of US \$12000 for applicants in Business
- GRE and GMAT waived off.

This MOU marks the beginning of an inspiring journey of knowledge exchange, cultural enrichment, and transformative growth between NCU and Santa Clara University.

**(c) MoU with Queensland University of Technology (QUT) in Brisbane, Australia**

NCU signed an MoU with the prestigious Queensland University of Technology (QUT) in Brisbane, Australia, on 18.07.2023, opening a new door of possibilities for academic enrichment and collaboration. QUT is renowned for its exceptional academic credentials and global reputation. It is ranked #189 in the QS World University Rankings 2024, a testament to its commitment to excellence in education and research. This MoU signifies a strong partnership aimed at fostering academic growth and innovation. The purpose of this agreement encompasses a range of exciting initiatives that are set to enhance learning experience and global exposure of our students.

**(d) MoU with Seamless Education and Services Pvt. Ltd. (Seamedu)**

The NorthCap University signed an MoU with Seamedu - School of Expressionism on 24.07.2023, bringing together two academic powerhouses. In the esteemed presence of NCU's Pro-Chancellor Prof. Prem Vrat, Vice Chancellor Prof. Nupur Prakash, Governing Body Members Mr. Avdhesh Mishra and Mr. Shiv Saran Mehra, and all heads of departments, the Registrar Cmde. Diwakar Tomar NM (Retd.) signed the MoU on behalf of The NorthCap University, while Mr. Ajay Thomas COO signed it on behalf of Seamedu. This collaboration marks a significant step towards fostering innovation, creativity and excellence in education. Together, the aim is to redefine the boundaries of expression and open up new avenues of learning for the students in the form of exciting media and entertainment programmes.

**(e) MoU with BINUS University, Indonesia**

The NorthCap University signed an MoU with BINUS University, Jakarta Indonesia on 21.09.2023. BINUS University, accredited by the Indonesian Accreditation Agency and hailed by QS, Times Higher Education and AppliedHE is an international university of repute with 12 campuses across various cities, and a thriving online campus for remote learning. BINUS holds QS World University Ranking, featuring stellar performances in Computer Science and Business Management.

**(f) MoU with VILNIUS Tech University (VTU), Lithuania**

The NorthCap University signed an MoU with VILNIUS TECH University (VTU), Lithuania on 09.06.2023. Having received QS World University Ranking of 801-850, Vilnius Tech University in Lithuania is a prestigious institution at the forefront of education, research and innovation. With a legacy spanning several years, VTU has earned recognition for providing excellence in education via its engineering, technology, economics and business studies programmes. The agreement signed between the two universities includes direct admission to master's degree studies, student exchange, collaborative curriculum development, joint research ventures, active participation in global conferences and workshops, publication opportunities in esteemed scientific journals, faculty and staff exchanges and sharing of valuable scientific materials and information.

### **(g) MoU with NGO's NeoFusion Creative Foundation & Sansarino Development Foundation**

The NorthCap University entered into Memorandums of Understanding with two NGOs, Neofusion Creative Foundation and Sansarino Development Foundation on 29.05.23. Through these MoUs, NCU's psychology students will be able to collaborate on internships, placements, and live projects and gain practical experience. These MOUs are expected to increase visibility and outreach in the context of human psychology and other related areas. The partnership will prove to be fruitful in enabling joint certification courses, mentorship programmes, training sessions, capacity building sessions, research, as well as other publications.

### **15. Visit to (i) University of Indonesia, (ii) MAPUA Malayan Colleges, Laguna, Philippines and (iii) Universitas Esa Unggul, Jakarta, Indonesia**

Prof. Manoj Kumar Gopaliya, Dean of Academic Affairs, visited the campus of the University of Indonesia on 25th July 2023. During this visit, Prof. Gopaliya met with Dr. Eng. Radon Dhelika & Mr. Agus S. Pamitran from Department of Mechanical Engineering, Faculty of Engineering and Dr. Yanki Hartijasti and Prof. Dr. Irwan Adi Ekaputra, Department of Management, Faculty of Economics and Business, and held discussions on faculty-to-faculty collaborations, joint research, PhD supervision, conferences, seminars, and workshops.

Prof. Gopaliya, also met representatives from Mapúa Malayan Colleges Laguna, Philippines at UEU, and discussed potential collaborations with The NorthCap University to explore student exchange programmes, faculty mobility, joint conferences, joint PhD supervisions and other global partnership opportunities. In a world that is increasingly interconnected, fostering partnerships between universities and colleges across borders has become crucial.

Prof. Gopaliya also attended High-Impact Strategic Meetings with different departments of Universitas Esa Unggul at Jakarta, Indonesia during the UEU Summer Immersion Programme. Dr. Manoj Kumar Gopaliya held numerous meetings to strengthen cultural exchange and academic ties between NorthCap and Esa Unggul.

### **16. Technovation 2023**

The Final Round of TECHNOVATION 2023 was held on June 09<sup>th</sup> 2023 in the University. A total of 8 shortlisted teams from the School of Engineering and Technology competed and presented their final year project for the annual “**Best Project Award**” of the university.

With pioneering vision, critical questioning, knowledge and patience, the panel of three esteemed judges from academia and industry evaluated the teams on the parameters FOCUSS (Financial Viability, Originality-Innovativeness/Newness, Customer end applicability/takers, Usefulness to Society-addresses large cross-section, Sustainability-long term/environment-friendly, Structured Approach). In the final round of TECHNOVATION 2023, the following teams won the prizes as indicated:-

Abhinav chutani	19CVU001	Investigation of self healing geopolymer mortar: A step toward sustainable material	Mr. Lokesh Choudhary	<b>2nd Position</b>  <b>(INR 75000 Prize to be</b>
Dhruv Kumar	19CVU004			
Rishi B Mathur	19CVU013			
Aastha Verma	19ECU003	Tongue Driven Wheelchair	Dr. Pooja Sabherwal and Prof. Sharda Vashisth	
Yogesh Yadav	19ECU024			
Neha Saini	19ECU014			

Saumay Sharma	19ECU019			shared in teams)
Sarthak Srivastava	19CSU378	DASH - Device Automation System for Homes	Dr Rita Chhikara & Dr. Mehak Khurana	3rd Position  (INR 50000 Prize to be shared in teams)
Tanu Verma	19CSU320			
Yajus Gakhar	19CSU349			
Abhishek	19CSU372			
Ansh Mathur	19ECU032	Calculating Carbon Emissions of Working Computer Systems in an Organization	Dr. Vandana Khanna and Dr. Anu Tonk	

No team was found suitable for the 1<sup>st</sup> position.

### 17. Immersion Program at Shibaura Institute of Technology, Japan

Our students completed a transformative summer immersion programme from 28 July to 5 August 2023 at Shibaura Institute of Technology in Japan Guided by Prof Sharda Vashisth, Dy. Dean International Affairs, our students had the opportunity to explore Tokyo's bustling markets, futuristic marvels and rich cultural tapestry. They participated in guided tours, industrial visits and engaging presentations and workshops across the city

This experiential journey expanded our students' horizons, fostering a profound appreciation for Japan's beauty and warm people. As they return with new friendships and infinite memories, it's clear that this adventure will shape their futures and contribute to their growth as confident professionals.

### 18. Orientation Programme for newly admitted students

Orientation Programme for newly admitted students was held on 10<sup>th</sup> & 11<sup>th</sup> of August 2023 in the University. After the address by the Vice Chancellor, Registrar, Directors & HODs of Schools, the students were taken around the campus and shown the classrooms, Labs & other sports facilities and infrastructure available in the University. This was followed by a three weeks Induction Programme for these students.

### 19. Celebration of Anti Ragging Week

The Anti Ragging week was celebrated from 11.08.2023 to 18.08.2023. During the Anti Ragging Week, NCU conducted several activities to encourage meaningful conversations and unleash creativity among the students, fostering an atmosphere of camaraderie and friendship. The highlight of the week-long activities was a riveting Debate Competition on the topic 'Ragging: A Violent Social Contract Between Seniors and Juniors'. The Slogan Writing Competition was a thrilling showcase of the students' unified voices against ragging. Udaan, NCU in collaboration with IEEE Humanitarian Activities Committee, joined forces for a Poster Making Event. The posters created were a visual testament to NCU's commitment to eradicating this social ill. As part of the activities, a Pledge Taking Ceremony was also held in the spirit of unity and compassion, with a resolve and commitment to make NCU a ragging-free campus.

## **20. Celebration of Independence Day**

The 77th Independence Day was celebrated with fervor and gaiety in the University campus. The National Flag was unfurled by the Registrar, after which he addressed the gathering. This was followed by a small cultural performance by the students on the theme of Independence.

## **21. Masterclass Series**

Master class series lectures were held from 16 Aug 23 to 31 Aug 23. People from various industries came forward to share their invaluable insights, wisdom and guidance. The following eminent speakers participated in the Masterclass series :

- ❖ Kapil Arora, Director, Grant Thornton
- ❖ Subhasish Acharya, Teacher, Consultant & Coach
- ❖ Noopur R Chablani, Vice President, Mavcomm Consulting
- ❖ Hon'ble Justice Dharmesh Sharma, Judge, Delhi High Court
- ❖ Dr. Ranjana Kumari, Social Activist & Director, Centre for Social Research
- ❖ Shreya Arora Mehta, Officer on Special Duty, NALSA, Supreme Court of India
- ❖ Raj Gupta, GM, HR, Tata Consultancy Services
- ❖ Vidya Bhushan, Co-Founder, Dalchini Technologies

## **22. Honeywell Centre of Excellence by ICT Academy**

Department of CSE at NCU in collaboration with Honeywell and ICT Academy inaugurated the Honeywell Center of Excellence for Youth Empowerment on 21.08.2023. Honeywell's journey commenced with the successful inauguration in the presence of Prof Rita Chhikara, HoD CSE and other NCU Faculty members, Mr. Abhinandan Kr. Pandey, State Head-Delhi NCR ICT Academy India, Mr. Shubham Verma, Mr. Harshit, Coordinators at ICT Academy, along with trainers Mr. Saarthak Pathak, Ms. Leesha and Mr. Varun were also present.

## **23. Workshop on Linear Algebra and its applications**

A workshop on 'Linear Algebra and Its Applications, 2023' was organised by The Department of Applied Sciences of The NorthCap University from 21<sup>st</sup> August – 25<sup>th</sup> August 2023. Various speakers from different IITs, IIITs, and VIT delivered lectures during the workshop. Dr. G. Naga Raju (VNIT, Nagpur), Dr. G. Arunkumar (IIT Madras), Dr. Sathish Kumar (IIT Madras), Prof. R. K. Sharma (IIT Delhi), Dr. Ramakrishna Bandi (IIIT, Naya Raipur), Prof. Prabha Sharma (Emeritus Professor, NCU and Retired Professor, IIT Kanpur), and Prof. Phool Singh (Central University of Haryana) delivered lectures on various topics, including vector space, linear transformation, eigen values, diagonalisation, singular value decomposition, principal component analysis, coding theory, and image processing, among others. Approximately 180 faculty members, research scholars, and students from various states of India participated in the workshop.

## **24. Apex Utsav 2023**

Department of Computer Science and Engineering successfully organised APEX UTSAV-2023 in collaboration with INOAUG (India Oracle Apex User Group) on 2nd September, 2023. Various delegates from the IT sectors, professionals, developers, NCU faculty and students participated in exploring the latest trends and best practices in Oracle APEX and engaged in thought-provoking discussions and hands-on training. The journey throughout UTSAV was marked by enriching interactions and the acquisition of valuable knowledge, setting the stage for limitless future possibilities.

## **25. Expert Session on Effective Use of Social Media: Exploring the importance of Social Media for Educators – 08.09.2023**

The NCU faculty got an opportunity to attend a session on effective use of social media, that delved into the realms of social media, featuring Prof. Sona Vikas, Head - School of Management and Liberal Studies and Anu Gulmohar, Digital & Content Marketing Specialist. Prof. Sona Vikas covered the topic of 'Intentional Networking through LinkedIn', wherein she talked about the important strategies and tips for creating meaningful professional connections on the world's largest professional network, LinkedIn. Her session was highly insightful and transformative. Ms. Anu Gulmohar discussed the 'Importance of Social Media' for the academicians of today. From fostering student engagement to sharing knowledge far and wide, her insights encouraged the NCU faculty to utilise the full potential of digital platforms.

## **26. International Conference on Smart and AI-Enabled Technology for Sustainable Development**

The International Conference on Smart and AI Enabled Technology for Sustainable Development was held from 12.09.2023 to 13.09.2023 and was a big success. Shri B N Ramakrishna, Director of ISRO's Telemetry, Tracking and Command Network (ISTRAC), was the Guest of Honour. He provided invaluable insights about using technology for sustainability and shared his experience about ISRO's recent success, the Chandrayaan-3 Moon Mission in which he played a pivotal role. The conference provided a crucial platform for international researchers, academicians, and industry experts to unite and contribute to the advancement of Sustainable Development through Smart and AI-enabled Technologies. Addressing all pressing global challenges, the conference was a testament to the power of collaboration, knowledge exchange and innovation.

## **27. Teacher's Day Celebration**

The event was conducted to recognise and honour the invaluable contributions of our mentors in lighting the educational path of countless students with their passion and dedication. Details of awardees on this occasion are as follows:

- Lifetime Achievement Award: Prof. Prem Vrat and Prof. Swaran Ahuja
- Best Academic Administrator: Prof. Sharda Vashisth, Prof. Anjali Garg and Prof. Manoj K Gopaliya
- Star Performer of the Year: Prof. Rita Chhikara
- Best Teacher: Dr. Shrutimita Mehta, Dr. Meghna Sharma, Dr. Prachi and Mr. Himangshu Rathee
- Best Researcher: Dr. Tejpal S Chundawat and Dr. Mona Aggarwal
- Emerging Team Leader of the Year: Prof. Sona Vikas

The multi-talented educators also regaled the NCU community with lively performances on stage.

## **28. Workshop on 'India's Tryst with Meditation: Strategies and Opportunities'**

The Pro Bono Club at School of Law, NCU hosted a workshop on 'India's Tryst with Mediation: Strategies and Opportunities' on 16.09.2023. During the workshop, participants had the privilege of engaging with some of the finest minds in the industry. Mr. Hemant Batra, Vice President SAARC Law and Sr. Legal Consultant at Shardul Amarchand Mangaldas & Co., led a riveting discussion on the 'Legitimacy of Mediation: Exploring its nature, scope and significance in Modern Dispute Resolution'. Adding to

the discussion was Mr. Nitin Mittal, General Counsel & Cluster Head of Legal & Company Secretary - India SC/Pacific Region at Signify, who shared his invaluable insights into 'Mediation law and practice in India: Perspective of a General Counsel'. The workshop was an immersive experience that combined theoretical knowledge with practical skills and gave a deep understanding of Mediation as a powerful tool for resolving disputes.

### **29. Visiting Professor from Mapua Malayan Colleges, Mindanao**

Dr. Ann Perez from Mapúa Malayan Colleges Mindanao came to NCU as a visiting professor from 25.09.23 to 29.09.2023. Dr. Ann Perez is a leading expert in Climate Change, Sustainability and Green Audit. During her visit, she interacted with the Vice Chancellor, Prof. Nupur Prakash and had productive discussions with faculty members from the School of Management and Liberal Studies (SOM&LS), to explore potential research collaborations. She also had interactive sessions on sustainable finance with NCU's BBA and MBA students. Her expertise extended to PhD scholars, where she shared insights into contemporary research areas within the fields of finance and accounting.

### **30. Visit of delegates from Loyola Marymount University (LMU), Los Angeles.**

The NorthCap University had the privilege of hosting a team of delegates from Loyola Marymount University (LMU), Los Angeles, California on 29.09.2023. Loyola Marymount University (LMU) is renowned for its academic excellence. With 55 major and 59 minor Undergraduate Degrees, 47 Master's Programmes, and a strong commitment to research, LMU is ranked #93 in National Universities and #12 in Entrepreneurship in the 2024 edition of US News and World Report. The following delegates from LMU came to NCU:

Dr. Tina Choe, Dean of the Frank R. Seaver College of Science and Engineering

Dr. Maureen Weatherall, Vice Provost

Dr. Ammar Dalal, Assistant Vice Provost for Graduate Enrollment.

From NCU, Vice Chancellor Prof. Nupur Prakash, Dy Dean International Affairs Prof. Sharda Vashisth, Dean Academic Affairs Prof. Manoj Gopaliya; and other senior faculty members met with the team and discussed key pointers of collaboration between the two universities.

### **31. 'Ek Tareekh Ek Ghanta - A Cleanliness Drive' on 01.10.2023**

'Ek Tareekh Ek Ghanta - A Cleanliness Drive' on October 1st at 10:00 AM at Carterpuri Village was undertaken as per the directives of the Ministry of Housing and Urban Affairs, Government of India. This event served as a rallying cry for unity in the name of cleanliness, hygiene and environmental awareness. Students and Faculty members from all schools participated in the cleanliness drive.

### **32. Workshop on 'Combating Acid attack: A Gender Neutrality'**

The Pro Bono Club at School of Law organized a workshop on 'Combating Acid attack: A Gender Neutrality' on 06.10.2023. Ms. Santosh Snehi Mann, Officer of Delhi Higher Judicial Services and Member Secretary of the National Legal Services Authority, and Dr. Navpreet Kaur, Co-Founder of the Laxmi Foundation for Acid Attack Survivors, shared their invaluable insights on the critical issue of combating acid attacks from a gender neutrality perspective.

### **33. Students' Achievements:**

- (a) 21CSU183 Ashutosh Gairola from CSE Department won the 'Stage 1 Essay Writing Competition under the Model G20 Initiative'. His remarkable essay on the theme of "Circular Economy and Lifestyle for Environment" stood out in the North Zone, earning him a well-deserved prize of INR. 5,000.
- (b) 22CSU216 Ankit Das participated in the ASU Summer Experience on Sustainable and Innovative Solutions 2023 from 19th June - 30th June, 2023. Joining a diverse group of students from across the globe, Ankit immersed himself in the vibrant atmosphere of the stunning campus of Arizona State University, USA. He engaged in enriching lectures, lived on campus and embraced the true essence of student life in the US. While the exploration of sustainable solutions during this programme could possibly shape the trajectory of Ankit's future career, we hope it has also equipped him to make a positive impact within the student community.
- (c) 20CSU087 Ripudaman Singh has seized the opportunity to pursue an accelerated Master's in Software Engineering at Arizona State University. Ranked as the top university in USA for sustainability and global impact, Arizona State University is consistently recognised as a top-rated institution in national and global rankings. By transferring credits earned in his final year, Ripudaman will be set to complete his Master's degree in just one year at ASU, enjoying substantial cost savings including a year of living expenses. This remarkable achievement opens doors to a world of possibilities and a bright future in the dynamic field of technology.
- (d) Our KALAKRITI team consisting of 19CSU424 Shruti Gupta, 19CSU422 Diksha, 19CSU345 Vinay Rana and 19CSU368 Zaid Hasan Khan from Dept. of CSE bagged the first position at Srijan (Senior) 2023 - Project Showcase platform on diverse contemporary domains, held at Manav Rachna International Institute of Research and Studies, Faridabad.
- (e) 19CSU327 Udit Kapoor and 19CSU322 Tarun Sharma were awarded a grant of USD 8500 (approx. Rs 7 Lakhs) from Tezos Foundation for their Revolutionary Blockchain Based Game, TEZTILE under the mentorship of Dr. Poonam Chaudhary.
- (f) 20MEU008 Aayush Kumar, 20MEU012 Sarthak Rithaliya and 20MEU002 Amit Yadav from the Department of Multidisciplinary Engineering won First Prize in the Poster Presentation Competition in REFCON - Refrigeration and Cold Chain Conference organised by ISHRAE Gurugram Chapter organised in August 2023.

### **34. Visit to Tender Hearts, NGO**

The psychology students of NCU had an endearing experience while visiting the Tender Hearts NGO in Faridabad. They got the opportunity to interact with the brilliant children and adults while simultaneously learning about their mental health needs and the varied techniques used to support them. Seeing different ways of giving support and learning about the ways of helping those with autism, ADHD and intellectual disabilities was a great learning for our psychology students.

### **35. NCU Research Scholar at the 'Frontiers of Optics' Conference at Washington, USA**

Ms. Poonam Yadav, Research Scholar at NCU got an opportunity to shine in the world of optics and photonics in USA. Ms. Yadav was selected for a Student Leadership Conference on 'Frontiers in Optics' by OPTICA USA, which took place from 08 to 12 October 2023 at Washington. Her participation is a testament to her exceptional talent, as only 5 students from India were chosen for this honour.

### **36. Inclusion of Special topics in M.Tech Civil Engineering**

The inclusion of a course on special topics in civil engineering for a Master's program (M.Tech) in Civil Engineering is highly valuable. Civil engineering is a diverse field with rapidly evolving technologies, materials, and methodologies. A special topics course ensures that students are exposed to the latest advancements, ensuring their knowledge remains current and relevant to industry needs. Special topics courses often involve research components, encouraging students to explore innovative solutions to real-world problems. This can contribute to advancements in the field and prepare students for potential research opportunities or doctoral studies.

The following three courses are proposed to be added as special topics that shall be floated under Program Electives or Program Core to the students.

CEL570 Special topics in Construction Engineering

CEL580 Special topics in Structural Engineering

CEL590 Special topics in Environmental Engineering

#### **Points Discussed:**

1. Dr. Kumkum Garg inquired about the status of the MOUs and whether they were active or not. Dr. Sharda informed the members about the MOUs, bringing out that they are active, and NCU has been regularly conducting immersion programs, student exchange programs with these universities. 03 students from CSE Department are joining the immersion program in April 2024. It was also highlighted that faculty members from Santa Clara are visiting NCU on 2<sup>nd</sup> February 2024 to discuss the credit framework, course mapping etc. towards offering Dual degree with Santa Clara University. It was also highlighted that the requirement of GMAT / GRE scores has also been waived off for NCU students. She also brought out that articulation with Queensland University is in progress to offer Dual Degree wherein the students can complete 02 years at NCU and 02 years at the Queensland University. Dr. Kumkum Garg asked if it is as per the UGC regulations. The Chairperson highlighted that since NCU is a NAAC "A" accredited university, it is eligible to offer dual degrees. It was also brought out that NCU is in the process of offering Semester Exchange program with Binus University.
2. In other discussions, Dr. Kavita Khanna brought out that as per NEP2020, all Honours programs are to be of 04 years duration. Dean Academics clarified that NEP 2020 says that it is recommended to have Honours program as 04 years program, however it is not mandatory. He also brought out that currently, 02 Honours program at NCU have been offered as 4 years programs, and by 2025-2026, NCU intends to offer all the Honours programs as 4 years programs.

**The Academic Council took note of these items and complimented NCU for their continuous efforts at improving the learning experience and introducing new and latest technologies.**

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

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

### (a) School of Management & Liberal Studies

(HOD SOM&LS)

To approve the courses to be offered to PhD Scholars as part of their coursework in the current Jan – May 2024.

Following Pre-PhD courses were proposed for inclusion by the HOD SOM&LS:-

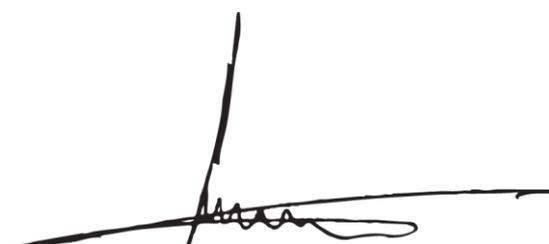
S. No.	Course	Code	LTP
1	Introduction to Environmental Economics	SMM 702	3-0-0
2	Foundations of Accounting and Finance	BSL 702	3-0-0
3	Financial Management for Managers	BSL 704	3-0-0

Minutes of meeting of Board of Studies for School of Management & Liberal Studies & Course Description are enclosed at **Annexure 7**.

### Points Discussed:

1. Dr. Sona Vikas brought out that these courses are only for PhD students to increase their domain knowledge. All these courses are offered as blended learning with Swayam. These courses would have once a week interaction with the faculty.
2. Dean Academics suggested to run these courses along with NCU School of Business as they are offering these courses. Also Dr. Sona Vikas may work alongside School of Business to add some of their courses to School of Management which would be put up for approval in May 2024 during the next Academic Council Meeting.
3. Prof. H M Gupta brought out that PhD students could attend classes with post graduate batch, which would be beneficial for the Post graduate students as they could benefit from the knowledge of the PhD students.

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



**Commodore Diwakar Tomar NM (Retd.)**

**Member Secretary**

**Academic Council – The NorthCap University**

[diwakartomar@ncuindia.edu](mailto:diwakartomar@ncuindia.edu)

**+91-9910995228**

	<b>INTER OFFICE MEMO</b>	<b>Review Date:</b>
		<b>Sheet 1 of 1</b>

**From: HR**

**To: Faculty,Admin,Tech**

**CC: GB, PC, VC, Registrar, Academic Advisor, Dean-Academics, HoDs, Dr Neha Jain,Dr Sona Vikas, Ms Priyanka Bhalla**

**Date: 8 Feb 24**

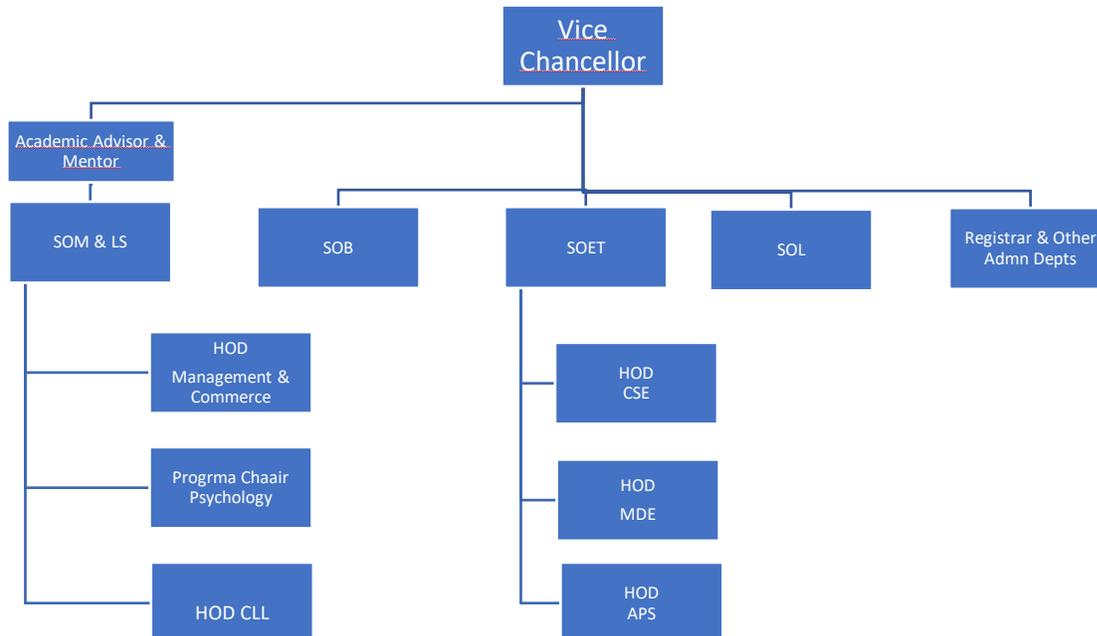
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**SUBJECT: Creation of Psychology dept and roles and responsibilities of Program Chair (Psychology)**

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A separate dept of Psychology is established under the umbrella of SOM&LS with **Dr. Neha Jain, Associate Prof as Program Chair (Psychology)** who shall lead the activities of the psychology dept. with **independent reporting to Vice Chancellor** under the mentorship of **Prof Swaran Ahuja, Academic Advisor**.

The proposed restructured organization chart is shown below:



**Consequent to this restructuring, the existing SOM&LS will have three distinct centre/departments (as follows):**

- 1. Dept of Management and Commerce under HoD, 898Prof Sona Vikas**
- 2. Centre for Language Learning (CLL) under HoD, Dr Divyabha**
- 3. Department of Psychology under Program Chair, Dr Neha Jain**

**Currently, the psychology stream has four full-time regular faculty members:**

- 1. Dr Neha Jain, Asso Prof**
- 2. Dr Jyotika Goyal, Asstt Prof**
- 3. Dr Samiksha Jain, Asstt Prof**
- 4. Ms. Harshita Jha, Asstt Prof**

The three Assistant Professors shall report directly to **Dr Neha Jain , Program Chair (Psychology)**

The **Psychology lab** shall also be under the charge of the Program Chair. The full -time Psychologist, **Ms Priyanka Bhalla** shall also work in sync with the Psychology dept under **Dr Neha Jain.**

### **Roles and Responsibilities:**

The program Chair (Psychology) shall be responsible for:

- (i) Smooth running of all existing programs including all academic and other related activities of the psychology dept.
- (ii) Periodic review of existing curriculums including lab work, adding new courses etc and their BOS/Academic Council approvals.
- (iii) Introduce new programs as per market requirements including PG programs
- (iv) Strengthen Research activities including Ph.D programs and improve research outcomes
- (v) Strengthen outreach activities and students' engagement through NGOs/field work/MOUs and internships.
- (vi) Support to Admissions Team for full enrolment with quality admissions in UG and PG programs
- (vii) Mentoring and motivating all faculty and staff for enhanced outcomes and good academic ambience
- (viii) Other necessary initiatives from time to time for enhancing quality and growth in the dept.
- (ix) To constitute an Academic Advisory Board/Board of Studies with eminent academicians and practitioners as members duly approved by VC,NCU.
- (x) Co-ordinate with Marketing Team to kickstart the promotional activities.

### **Seating Proposal:**

**Room 205A** has 7 cabins which will be used to seat the current 4 Psychology faculty with option to provide space for growth. The rest of the two staffrooms **Room no 239 and 206** shall continue to be occupied by the remaining 18 Management Faculty.

We wish good luck to Dr. Jain for new role and responsibilities.

*Deepika*

**Manager – HR  
Deepika Deswal**

## B.A. (Journalism and Media Production) - 2024-27

Semester	Semester Course Code, Course Name (L-T-P) Credits							Community Service	GP	Hrs. Per Week			Contact Hours Per Sem	Credits
	L	T	P											
1	Media Communication Concepts (3-0-0) 3	Translation Skills (2-1-0) 3	Introduction to Journalism (3-1-0) 4	News Production for Television and Print (1-0-6) 4	Human Values & Professional Ethics (2-0-0) 2	Environmental Studies (3-0-0) 3	CS-I	GP-I 1 Credit	14	2	6	22*15=330	20	
2	Media Technology (4-0-0) 4	Development Communication (2-0-0) 2	Reporting and Journalistic Writing (2-1-0) 3	PE 1 (1-0-4) 3	Digital Media Production and Techniques (1-0-4) 3	CLL130 Effective Comm-I (1-0-2) 2	CS-II (140 Hrs)* 2 Credit	GP-II 1 Credit	11	1	10	22*15=330	20	
Summers	Vocational Course / Minor Project (0-0-8) 4									0	0	8		4
3	Media Laws and Ethics (3-0-0) 3	Public Relation and Corporate Communication (3-1-0) 4	Production of Live Shows (2-0-4) 4	PE 2 (1-0-4) 3	Foreign Language Elective (1-2-0) 3	CLL140 Effective Comm-II (1-0-2) 2	CS-III	GP-III 1 Credit	11	3	10	24*15=360	20	
4	Research Techniques (4-0-0) 4	Data Journalism (2-0-0) 2	Media and Society (2-1-0) 3	PE-3 (2-0-0) 2	Anchoring and Presentation Skills (1-0-4) 3	Open Elective-I (2-0-2) 3	CS-IV (140 Hrs)* 2 Credit	GP-IV 1 Credit	13	1	6	20*15=300	20	
Summers	Vocational Course / Summer Internship (0-0-8) 4									0	0	8		4
5	Media and Contemporary Issues (3-1-0) 4	Global Media (3-1-0) 4	Documentary Production (1-0-6) 4	PE-4 (4-0-0) 4	Open Elective-II (2-0-2) 3		CS-V	GP-V 1 Credit	13	2	8	23*15=345	20	
6	Internship (0-0-12) 6	Major Project (0-0-16) 8	Open Elective-III (Full MOOC) 3				CS-VI (140 Hrs)* 2 Credit	GP-VI 1 Credit	0	0	28	28*15=420	20	
<b>TOTAL</b>													<b>128</b>	

- 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 give the culminating touch to the preparedness of students for placements and to develop them as global citizens.

\* Students completed one vocational course of 4 credits during the summer vacation of the first year, they are allowed to re-enter the degree programme within three years and complete it within the stipulated maximum of seven years.

\* If students complete one vocational course of 4 credits during the summer vacation of the second year, they are allowed to re-enter within three years and complete the degree programme within the maximum period of seven years

Program Electives		
Track	Track 1 - Journalism	Track 2 - Production
PE-1	Photo Journalism (1-0-4) 3	Radio and Podcast Production (1-0-4) 3
PE-2	Civic and Crime Reporting (1-0-4) 3	Production Management (1-0-4) 3
PE-3	Busines and Sports Journalism (2-0-0) 2	Media Post Production (2-0-0) 2
PE-4	Political Reporting (4-0-0) 4	News Feature Production (4-0-0) 4

	<b>INTER- OFFICE MEMO</b>	<b>Review Date:</b>
		Sheet 1 of 1

From: Head, CLL

To: Vice Chancellor

Cc: Dean Academics, Registrar  
BOS Members, VC office,  
Registrar office,  
all other concerned

Date: 12 March 2024

**SUBJECT: Constitution of Board of Studies (BOS) of Centre for Language Learning**

The Board of Studies of the Centre for Language Learning has been constituted for approving the new courses/ programmes/ amendment in existing courses/ programmes.

Following is the constitution of BOS of Centre for Language Learning: V

S. no.	Name	Designation	Department (Representing)
1.	Dr Divyabha	Chairperson, Head of the Department	Head, Centre for Language Learning
2.	Senior expert from Academia from outside reputed University*  Prof Mukesh Ranjan (English)  Prof Harish Narang (English)  Dr Durgesh Tripathi (Journalism and Media Production)  Prof Aman Vats (Journalism and Media Production)	Member	Professor, Dept of English, International Relations, Jamia Millia Islamia, Delhi  Retd. Professor, Dept of English, Jawahar Lal Nehru University, New Delhi  Associate Professor, University School of Mass Communication Guru Gobind Singh Indraprastha University, Delhi  Professor & Deputy Director, Amity School of Film and Drama, Amity University
3.	Dr Shrutimita Mehta	Member	Senior Faculty, Centre for Language Learning
4.	Dr Payal Khurana	Member	Senior Faculty, Centre for Language Learning

5.	Prof Manoj Gopaliya	Dean Academics	Dean Academics, Vice Chancellor's Nominee
6.	Dr Gouri Kapoor	Member Secretary	Faculty, Centre for Language Learning
7.	Mr Roger Walker, (Centre Head - Seamedu Delhi NCR )	Member	Expert from Industry

\*The external experts of the specific subjects shall be requested to be present as and when the meeting of Board of Studies for their respective courses is to be conducted.

The Constitution is hereby presented for your approval:

Regards

Dr Divyabha

Head, Centre for Language Learning

Approved

Hon'ble Vice Chancellor:

*[Signature]*

14/3/2024



## The NorthCap University

### CENTRE FOR LANGUAGE LEARNING (CLL)

#### Meeting of The Board of Studies, CLL

Minutes of BoS meeting held on 4<sup>th</sup> April, 2024 at 2:30 PM in Meeting Room (26A)

#### BoS Members

S. no.	Name	Designation	Department (Representing)
1.	Dr. Divyabha	Chairperson, Head of the Department	Head, Centre for Language Learning
2.	Senior expert from Academia from outside reputed University:  Dr. Durgesh Tripathi (Journalism and Media Production)	Member	Associate Professor, University School of Mass Communication, Guru Gobind Singh Indraprastha University, Delhi
3.	Dr. Shrutimita Mehta	Member	Senior Faculty, Centre for Language Learning
4.	Dr. Payal Khurana	Member	Senior Faculty, Centre for Language Learning
5.	Prof. Manoj Gopaliya	Dean Academics	Dean Academics, Vice Chancellor's Nominee
6.	Dr. Gouri Kapoor	Member Secretary	Faculty, Centre for Language Learning
7.	Mr. Roger Walker (Centre Head - Seamedu Delhi NCR )	Member	Expert from Industry

#### Minutes of the BoS meeting

1. The external expert, Dr. Durgesh Tripathi, was welcomed by Dr. Divyabha Vashisth, Head-CLL.
2. A presentation was made to explain the rationale behind introducing B.A. Journalism and Media Production, and the scheme and course curriculum of the programme was presented for approval during the meeting.

### **The following points were discussed during the meeting:**

- During the presentation of the B.A. Journalism and Media Production programme scheme, the scheme was discussed in detail.
- The external expert, Dr. Durgesh Tripathi, expressed his reservations with regard to the nomenclature of the programme. He stated that the programme should ideally be named “B.A. Journalism and Mass Communication” following the academic tradition set by UGC. Mr. Roger Walker then discussed why the course has been named B.A. Journalism and Media Production. Some of the unique subjects included in the scheme were highlighted by him to show the importance of going behind the camera. He stated that since many of these subjects are not traditionally included for Journalism and Mass Communication degrees provided by other institutions, it was decided by the faculty members designing the courses to name the programme B.A. Journalism and Media Production. Following this detailed discussion, Dr. Tripathi stated that he has no objections against the programme being called “B.A. Journalism and Media Production”, provided the Government of Haryana approves of the same.
- Prof. Gopaliya pointed out the non-compliance he identified in the scheme with regard to NEP 2020, and requested that necessary changes be made before the programme scheme was presented for approval before the Academic Council.
- It was discussed during the meeting as to how 3<sup>rd</sup> year courses for the programme were made specific to students’ portfolio, and how every course was linked to a project from 3<sup>rd</sup> semester onwards.
- Core courses and programme electives were also discussed during the meeting. It was pointed out that the electives were not exhaustive, and tracks offered through them should be made more flexible. Based on these suggestions, two tracks have been made, one Journalism Centric and the other Media Production Centric. Electives are more focused on Production with higher Practical Credit assigned to those courses.
- The external expert appreciated the course designing, but he also pointed out the absence of continuity in courses. He suggested that the programme should begin with the teaching of Communication Theory and other basic ideas related to the course. He also suggested that the syllabus should be in accordance with the nomenclature, and thus more courses related to media production should be included in the scheme. Based on this suggestion, ‘Media Communication Concepts’ has been included in SEM I to give more emphasis on basics.
- It was suggested during the meeting that courses should be rearranged and balanced out so that in cases where students avail the exit options, their undergraduate certificate or diploma in media production should prove to be useful. Based on this feedback, The courses have been moved across Semesters to give more emphasis towards Mid-Year Exits as per NEP 2020, with respect to Certificate, Diploma & Undergraduate Degree. Below are the courses which were moved:
  - ✓ ‘Programme Elective I’ has been moved to SEM II - to increase the practical objective for candidates taking an exit from Year I.
  - ✓ ‘Anchoring & Presentation Skills’ has been moved to Semester IV – which will prove as an add-on to the Certificate and students completing this course will be eligible to obtain a Diploma.
  - ✓ As per the Programme Electives introduced, students can either earn an additional certificate after opting for one of tracks being offered.

- Changes in relation to minor projects, and credits for internship/vocational courses were also requested during the meeting. It was specified in the meeting that internship/vocational courses should have 4 credits. As a result of this, the following changes have been made in the scheme:
  - ✓ Internship is the only mandatory option provided in the Scheme as per the suggestion by the board.
  - ✓ Minor Project and Summer Internship (or) Vocation Course are streamlined to 4 credits each.
- It was pointed out during the meeting that Open Elective III must be offered in the Full MOOC form.
- Some further suggestions were made by the board in relation to internship and case study. Case Study has been removed and students will now only opt for Internship.
- The external expert also suggested that the name of the course "Contemporary Issues" should be rethought and revised. It was suggested by the board that the course curriculum should be developed every year with respect to the recent trends and updates in the Journalism Field.
- The board also discussed if the programme can be offered as an Honours programme. The conclusion drawn was that it cannot be offered as an Honours programme as it does not meet the credit and duration requirements of an Honours degree. It was discussed once the B.A. programme is launched B.A.(Hons) Programme can be explored for the upcoming batches.

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

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

Enclosures:

**Annexure 1 – B.A. Journalism and Media Production Programme Scheme**



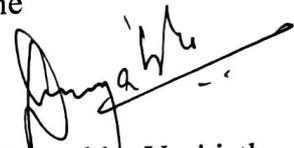
Dr. Durgesh Tripathi  
(External Expert)



Dr. Shruti Mehta  
(Internal Expert- Member)

  
Prof. Manoj Gopaliya  
(Dean Academics)

  
Mr. Roger Walker  
(Expert from Industry)



Dr. Divyabha Vashisth  
(Head, CLL- Member)



Dr. Payal Khurana  
(Internal Expert- Member)



Dr. Gouri Kapoor  
(Member Secretary, BoS CLL)

Course Credit Scheme of the B.B.A. LL.B. (Hons.) 2024-25																	
SEM	COURSE 1	COURSE 2	COURSE 3	COURSE 4	COURSE 5	COURSE 6	COURSE 7	GENERAL PROFICIENCY/ VALUE ADDED COURSES	COMMUNITY SERVICES	TOTAL COURSES	MOOT COURT HRS	L	T	P	Project Work Hours	Contact Hours per week	Credits
I	CLL103 Effective Communication for Law-I (3-1-0) 4	BSL101 Entrepreneurship (2-0-2)3	BSL102 Principles of Management (2-0-2) 3	LBL113 Law of Contract-I (4-1-0)	PCL130 Introduction to Psychology (2-0-2) 3	LBL 112 Legal Method (4-1-0) 4		LBR 101 GP-I 1 credit	LCS 101 CS I	6	6	17	3	2	6	36	22
II	CLL104 Effective Comm for Law-II (3-1-0) 4	ENL102 Principles of Economics (2-0-2)3	CML101 Professional Accounting (2-0-2)3	CHL100 Environmental Studies (3-0-0)3	LBL116 Law of Contract-II (4-1-0) 4	LBL111 Law of Torts (4-1-0)4	LBT101 Internship-I (0-0-4) 2	CLL120 Human Values and Professional Ethics (2-0-0)2	LCS102 CS II (140 Hours) 2 Credits**	7	6	19	3	6	2	36	27
III	BSL230 Organization Theory and Behaviour (2-0-2) 3	BSL203 Human Resource Management (2-0-2) 3	LBL211 Constitutional Law-I (4-1-0) 4	LBL114 Law and Society (4-1-0) 4	LBL213 Law of Crimes - I (IPC) (4-1-0) 4	LBL214 Family Law-I (4-1-0) 4		LBR201 GP-II 1 credit	LCS 201 CS III	6	6	20	4	4	2	36	23
IV	BSL205 Fundamentals of Financial Management (3-1-0) 4	BSL335 Marketing of Services (2-0-2) 3	LBL215 Constitutional Law-II (4-1-0) 4	LBL216 Law of Crimes - II (CrPC) (4-1-0) 4	LBL217 Family Law-II (4-1-0) 4	PROGRAMME ELECTIVE- 1 (4-1-0)4	LBT 201 Internship-II (0-0-6) 3		LCS202 CS IV (140Hours) 2 Credits**	6	6	21	5	2	2	36	28
V	BSL207 Introduction to Marketing Management (2-0-2) 3	LBL311 Labour Law-I (4-1-0) 4	LBL312 Company Law (4-1-0) 4	LBL313 Law of Evidence (4-1-0) 4	PROGRAMME ELECTIVE- 2 (4-1-0)4	LBL314 Public International Law (4-1-0) 4		LBR301 GP-III 1 Credit	LCS301 CS V	6	6	22	5	2	1	36	24
VI	BSL330 Business Environment (2-0-2) 3	LBL315 Property Law (4-1-0) 4	LBL316 Labour Law-II (4-1-0) 4	LBC422 Alternate Dispute Resolution (4-1-0)4	LBL318 Jurisprudence (4-1-0) 4	PROGRAMME ELECTIVE- 3 (4-1-0)4	LBT301 Internship-III (0-0-6) 3	Foreign Language-I (1-2-0) 3 *NC	LCS302 CS VI (140 Hours) 2 Credits**	7	6	23	7	2		38	28
VII	LBL411 Intellectual Property Rights (4-1-0) 4	LBL412 Civil Procedure Code (4-1-0) 4	Honours 1/1 (4-1-0) 4	Honours 1/2 (4-1-0) 4	PROGRAMME ELECTIVE- 4 (4-1-0)4	LBC421 Moot Court (Project) (0-0-6) 3	LBL414 Mediation & Conciliation and Arbitration (4-1-0) 4	LBR401 GP-IV 1 Credit	LCS401 CS VII	7	6	25	6	6		36	28
VIII	LBL 317 Environmental Law (4-1-0) 4	LBL413 Administrative Law (4-1-0)4	Honours 1/3 (4-1-0) 4	Honours 1/4 (4-1-0) 4	PROGRAMME ELECTIVE- 5 (4-1-0)4	LBC423 Seminar Course (Project) (0-0-6) 3	LBT 401 Internship-IV (0-0-6) 3	Foreign Language-II (1-2-0)3 *NC	LCS402 CS VIII (140Hours) 2 Credits**	6	6	21	7	6		40	28
IX	LBL511 Law of Taxation (4-1-0) 4	LBC522 Drafting, Pleading and Conveyance (4-1-0) 4	Honours 2/1 (4-1-0) 4	Honours 2/2 (4-1-0) 4	PROGRAMME ELECTIVE- 6 (4-1-0) 4			LBR501 GP-V 1 Credit	LCS501 CS IX	5	5	20	5	0	2	32	21
X	LBC521 Professional Ethics (4-1-0)4	Honours 2/3 (4-1-0) 4	Honours 2/4 (4-1-0) 4	LBT501 Moot Court and Professional Internship (0-0-10)5					LCS502 CS X (140Hours) 2 Credits	3	3	12	3	0		18	19
										58	56	197	47	30	15	360	248
										Total Courses	Moot Court Hours	L	T	P	Project Work Hours	Contact Hours per week	Credits
		*NC- 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															
		1. The University shall conduct introductory & special sessions on soft skills, which are a set of transferable skills and key personal traits essential for personality development during 3 rd & 4 th semesters. 2. Two value-added courses over and above the programme scheme shall be offered during the 5 th and 6 th semesters to impart special skills to students for enhancing their employability. 3. 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 industry ready for national and international jobs.															

### Course Credit Scheme of the B.B.A. LL.B. (Hons.) 2023-24

SEM	COURSE 1	COURSE 2	COURSE 3	COURSE 4	COURSE 5	COURSE 6	COURSE 7	GENERAL PROFICIENCY/ VALUE ADDED COURSES	COMMUNITY SERVICES	TOTAL COURSES	MOOT COURT HRS	L	T	P	Project Work Hours	Contact Hours per week	Credits
I	<b>CLL103</b> Effective Communication for Law-I (3-1-0) 4	<b>BSL101</b> Entrepreneurship (2-0-2) 3	<b>BSL102</b> Principles of Management (2-0-2) 3	<b>LBL113</b> Law of Contract-I (4-1-0) 4	<b>PCL130</b> Introduction to Psychology (2-0-2) 3	<b>LBL112</b> Legal Method (4-1-0) 4		<b>LBR101</b> GP-I 1 credit	<b>LCS101</b> CS I	6	6	17	3	2	6	36	22
II	<b>CLL104</b> Effective Comm for Law-II (3-1-0) 4	<b>ENL102</b> Principles of Economics (2-0-2) 3	<b>CML101</b> Professional Accounting (2-0-2) 3	<b>CHL100</b> Environmental Studies (3-0-0) 3	<b>LBL116</b> Law of Contract-II (4-1-0) 4	<b>LBL111</b> Law of Torts (4-1-0) 4	<b>LBT101</b> Internship-I (0-0-4) 2	<b>CLL120</b> Human Values and Professional Ethics (2-0-0) 2	<b>LCS102</b> CS II (140 Hours) 2 Credits**	7	6	19	3	6	2	36	27
III	<b>BSL230</b> Organization Theory and Behaviour (2-0-2) 3	<b>BSL203</b> Human Resource Management (2-0-2) 3	<b>LBL211</b> Constitutional Law-I (4-1-0) 4	<b>LBL114</b> Law and Society (4-1-0) 4	<b>LBL213</b> Law of Crimes - I (IPC) (4-1-0) 4	<b>LBL214</b> Family Law-I (4-1-0) 4		<b>LBR201</b> GP-II 1 credit	<b>LCS201</b> CS III	6	6	20	4	4	2	36	23
IV	<b>BSL205</b> Fundamentals of Financial Management (3-1-0) 4	<b>BSL335</b> Marketing of Services (2-0-2) 3	<b>LBL215</b> Constitutional Law-II (4-1-0) 4	<b>LBL216</b> Law of Crimes - II (CrPC) (4-1-0) 4	<b>LBL217</b> Family Law-II (4-1-0) 4	PROGRAMME ELECTIVE-1 (4-1-0) 4	<b>LBT201</b> Internship-II (0-0-6) 3		<b>LCS202</b> CS IV (140Hours) 2 Credits**	6	6	21	5	2	2	36	28
V	<b>BSL207</b> Introduction to Marketing Management (2-0-2) 3	<b>LBL311</b> Labour Law-I (4-1-0) 4	<b>LBL312</b> Company Law (4-1-0) 4	<b>LBL313</b> Law of Evidence (4-1-0) 4	PROGRAMME ELECTIVE-2 (4-1-0) 4	<b>LBL314</b> Public International Law (4-1-0) 4		<b>LBR301</b> GP-III 1 Credit	<b>LCS301</b> CS V	6	6	22	5	2	1	36	24
VI	<b>BSL330</b> Business Environment (2-0-2) 3	<b>LBL315</b> Property Law (4-1-0) 4	<b>LBL316</b> Labour Law-II (4-1-0) 4	<b>LBL317</b> Environmental Law (4-1-0) 4	<b>LBL318</b> Jurisprudence (4-1-0) 4	PROGRAMME ELECTIVE-3 (4-1-0) 4	<b>LBT301</b> Internship-III (0-0-6) 3	Foreign Language-I (1-2-0) 3 *NC	<b>LCS302</b> CS VI (140 Hours) 2 Credits**	7	6	23	7	2		38	28
VII	<b>LBL411</b> Intellectual Property Rights (4-1-0) 4	<b>LBL412</b> Civil Procedure Code (4-1-0) 4	Honours 1/1 (4-1-0) 4	Honours 1/2 (4-1-0) 4	PROGRAMME ELECTIVE-4 (4-1-0) 4	<b>LBC421</b> Moot Court (Project) (0-0-6) 3	<b>LBL414</b> Mediation & Conciliation and Arbitration (4-1-0) 4	<b>LBR401</b> GP-IV 1 Credit	<b>LCS401</b> CS VII	7	6	25	6	6		36	28
VIII	<b>LBC422</b> ADR (4-1-0) 4	<b>LBL413</b> Administrative Law (4-1-0) 4	Honours 1/3 (4-1-0) 4	Honours 1/4 (4-1-0) 4	PROGRAMME ELECTIVE-5 (4-1-0) 4	<b>LBC423</b> Seminar Course (Project) (0-0-6) 3	<b>LBT401</b> Internship-IV (0-0-6) 3	Foreign Language-II (1-2-0) 3 *NC	<b>LCS402</b> CS VIII (140Hours) 2 Credits**	6	6	21	7	6		40	28
IX	<b>LBL511</b> Law of Taxation (4-1-0) 4	<b>LBC522</b> Drafting, Pleading and Conveyance (4-1-0) 4	Honours 2/1 (4-1-0) 4	Honours 2/2 (4-1-0) 4	PROGRAMME ELECTIVE-6 (4-1-0) 4			<b>LBR501</b> GP-V 1 Credit	<b>LCS501</b> CS IX	5	5	20	5	0	2	32	21
X	<b>LBC521</b> Professional Ethics (4-1-0) 4	Honours 2/3 (4-1-0) 4	Honours 2/4 (4-1-0) 4	<b>LBT501</b> Moot Court and Professional Internship (0-0-10) 5					<b>LCS502</b> CS X (140Hours) 2 Credits	3	3	12	3	0		18	19
										<b>58</b>	<b>56</b>	<b>197</b>	<b>47</b>	<b>30</b>	<b>15</b>	<b>360</b>	<b>248</b>
										<b>Total Courses</b>	<b>Moot Court Hours</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Project Work Hours</b>	<b>Contact Hours per week</b>	<b>Credits</b>
*NC- 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																	
<p>1. The University shall conduct introductory &amp; special sessions on soft skills, which are a set of transferable skills and key personal traits essential for personality development during 3 rd &amp; 4 th semesters.</p> <p>2. Two value-added courses over and above the programme scheme shall be offered during the 5 th and 6 th semesters to impart special skills to students for enhancing their employability.</p> <p>3. Advanced sessions on soft skills shall then be conducted in the 7 th &amp; 8 th semesters to hone up the preparedness of students for placements and make them industry ready for national and international jobs.</p>																	

## Course Credit Scheme of Three-Year LL.B Programme (2023-26)

SEM	COURSE 1	COURSE 2	COURSE 3	COURSE 4	COURSE 5	GENERAL PROFICIENCY/ VALUE ADDED COURSES	COMMUNITY SERVICES	TOTAL COURSES	MOOT COURT HRS	L	T	P	Project Work Hours	Contact Hours per week	Credits
I	<b>LBL321</b> Legal Methods (3 Y) (4-1-0) 4	<b>LBL323</b> Law of Contract I (3 Y) (4-1-0) 4	<b>LBL325</b> Law of Torts (3 Y) (4-1-0) 4	<b>LBL327</b> Law of Crimes I (3 Y) (4-1-0) 4	<b>LBL329</b> Family Law-I (3 Y) (4-1-0) 4	<b>LBR303</b> GP-I (3 Y) 1 Credit	<b>LCS303</b> CS-I (3 Y)	5	5	21	5	0	5	36	21
II	<b>LBL322</b> Jurisprudence (3 Y) (4-1-0) 4	<b>LBL324</b> Family Law II (3 Y) (4-1-0) 4	<b>LBL326</b> Law of Crimes II (3 Y) (4-1-0) 4	<b>LBL328</b> Environmental Law (3 Y) (4-1-0) 4	<b>LBL332</b> Law of Contract-II (3 Y) (4-1-0) 4	<b>LBT104</b> Internship-I (3 Y) (0-0-6) 3	<b>LCS304</b> CS-II (3 Y) (140 Hours) 2 Credit*	5	5	20	5	0	5	35	25
III	<b>LBL415</b> Company Law (3 Y) (4-1-0) 4	<b>LBL417</b> Law of Evidence (3 Y) (4-1-0) 4	<b>LBL419</b> Constitutional Law-I (3 Y) (4-1-0) 4	<b>LBL423</b> Public International Law (3 Y) (4-1-0) 4	<b>LBL425</b> Interpretation of Statutes (3 Y) (4-1-0) 4	<b>LBR403</b> GP-II (3 Y) 1 Credit	<b>LCS403</b> CS-III (3 Y)	5	5	21	5	0	5	36	21
IV	<b>LBL416</b> Property Law (3 Y) (4-1-0) 4	<b>LBL418</b> Civil Procedure Code (3 Y) (4-1-0) 4	<b>LBL422</b> Constitutional Law-II (3 Y) (4-1-0) 4	<b>LBL424</b> Administrative Law (3 Y) (4-1-0) 4	<b>LBL426</b> Human Rights Law & Practice (3 Y) (4-1-0) 4	<b>LBT204</b> Internship-II (3 Y) (0-0-6) 3	<b>LCS404</b> CS-IV (3 Y) (140 Hours) 2 Credit*	5	5	20	5	0	5	35	25
V	<b>LBC523</b> Drafting, Pleading and Conveyance (3 Y) (4-1-0) 4	<b>LBL513</b> Labour Law-I (3 Y) (4-1-0) 4	<b>LBC525</b> ADR (3 Y) (4-1-0) 4	<b>LBL515</b> Intellectual Property Rights (3 Y) (4-1-0) 4	ELECTIVE I (3 Y) (4-1-0) 4	<b>LBR503</b> GP-III (3 Y) 1 Credit	<b>LCS503</b> CS-V (3 Y)	5	5	21	5	0	5	36	21
VI	<b>LBC524</b> Moot Court (3 Y) (0-0-6) 3	<b>LBL514</b> Labour Law-II (3 Y) (4-1-0) 4	<b>LBC526</b> Professional Ethics (3 Y) (4-1-0) 4	ELECTIVE II (3 Y) (4-1-0) 4	<b>LBL516</b> Law of Taxation (3 Y) (4-1-0) 4		<b>LCS504</b> CS-VI (3 Y) (140 Hours) 2 Credit*	5	5	20	5	0	5	35	22
								<b>30</b>	<b>30</b>	<b>123</b>	<b>30</b>	<b>0</b>	<b>30</b>	<b>213</b>	<b>135</b>
								<b>Total Courses</b>	<b>Moot Court Hours</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Project Work Hours</b>	<b>Contact Hours per week</b>	<b>Credits</b>
*Students can utilise the entire year including the summer and the winter break for completing 140 community service hours.															

**Program/Specialization Electives for Three-Year LL.B Programme (2023-26)**

<b>Course Code</b>	<b>Course Name</b>	<b>L-T-P</b>	<b>C</b>
LBL571	Criminology (3Y)	4-1-0	4
LBL572	Right to Information and Accountable Governance (3Y)	4-1-0	4
LBL573	Competition Law (3Y)	4-1-0	4
LBL574	Food Security Laws (3Y)	4-1-0	4
LBL575	Penology & Victimology (3Y)	4-1-0	4
LBL576	Affirmative Action and Discriminative Justice (3Y)	4-1-0	4
LBL577	International Air and Space Law (3Y)	4-1-0	4
LBL578	Corporate Governance and CSR (3Y)	4-1-0	4
LBL579	Disaster, Development & Human Rights (3Y)	4-1-0	4
LBL581	Insurance Law (3Y)	4-1-0	4
LBL582	Criminal Justice Administration (3Y)	4-1-0	4
LBL583	Media Law (3Y)	4-1-0	4
LBL584	Health Law (3Y)	4-1-0	4
LBL585	Clean Energy & Sustainability Laws (3Y)	4-1-0	4
LBL586	Science, Technology and Law (3Y)	4-1-0	4
LBL587	International Trade Law (3Y)	4-1-0	4
LBL588	International Commercial Arbitration (3Y)	4-1-0	4
LBL589	Election Laws (3Y)	4-1-0	4

## Course Credit Scheme of Three-Year LL.B Programme (2023-26)

SEM	COURSE 1	COURSE 2	COURSE 3	COURSE 4	COURSE 5	GENERAL PROFICIENCY/ VALUE ADDED COURSES	COMMUNITY SERVICES	TOTAL COURSES	MOOT COURT HRS	L	T	P	Project Work Hours	Contact Hours per week	Credits
I	<b>LBL321</b> Legal Methods (3 Y) (4-1-0) 4	<b>LBL323</b> Law of Contract I (3 Y) (4-1-0) 4	<b>LBL325</b> Law of Torts (3 Y) (4-1-0) 4	<b>LBL327</b> Law of Crimes I (3 Y) (4-1-0) 4	<b>LBL329</b> Family Law-I (3 Y) (4-1-0) 4	<b>LBR303</b> GP-I (3 Y) 1 Credit	<b>LCS303</b> CS-I (3 Y)	5	5	21	5	0	5	36	21
II	<b>LBL322</b> Jurisprudence (3 Y) (4-1-0) 4	<b>LBL324</b> Family Law II (3 Y) (4-1-0) 4	<b>LBL326</b> Law of Crimes II (3 Y) (4-1-0) 4	<b>LBL328</b> Environmental Law (3 Y) (4-1-0) 4	<b>LBL332</b> Law of Contract-II (3 Y) (4-1-0) 4	<b>LBT104</b> Internship-I (3 Y) (0-0-6) 3	<b>LCS304</b> CS-II (3 Y) (140 Hours) 2 Credit*	5	5	20	5	0	5	35	25
III	<b>LBL415</b> Company Law (3 Y) (4-1-0) 4	<b>LBL417</b> Law of Evidence (3 Y) (4-1-0) 4	<b>LBL419</b> Constitutional Law-I (3 Y) (4-1-0) 4	<b>LBL423</b> Public International Law (3 Y) (4-1-0) 4	<b>LBL425</b> Interpretation of Statutes (3 Y) (4-1-0) 4	<b>LBR403</b> GP-II (3 Y) 1 Credit	<b>LCS403</b> CS-III (3 Y)	5	5	21	5	0	5	36	21
IV	<b>LBL416</b> Property Law (3 Y) (4-1-0) 4	<b>LBC525</b> Alternate Dispute Resolution (3 Y) (4-1-0) 4	<b>LBL422</b> Constitutional Law-II (3 Y) (4-1-0) 4	<b>LBL424</b> Administrative Law (3 Y) (4-1-0) 4	<b>LBL426</b> Human Rights Law & Practice (3 Y) (4-1-0) 4	<b>LBT204</b> Internship-II (3 Y) (0-0-6) 3	<b>LCS404</b> CS-IV (3 Y) (140 Hours) 2 Credit*	5	5	20	5	0	5	35	25
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VI	<b>LBC524</b> Moot Court (3 Y) (0-0-6) 3	<b>LBL514</b> Labour Law-II (3 Y) (4-1-0) 4	<b>LBC526</b> Professional Ethics (3 Y) (4-1-0) 4	ELECTIVE II (3 Y) (4-1-0) 4	<b>LBL516</b> Law of Taxation (3 Y) (4-1-0) 4	Mediation & Conciliation and Arbitration (3 Y) (4-1-0) 4	<b>LCS504</b> CS-VI (3 Y) (140 Hours) 2 Credit*	5	5	20	5	0	5	35	25
								<b>30</b>	<b>30</b>	<b>123</b>	<b>30</b>	<b>0</b>	<b>30</b>	<b>213</b>	<b>138</b>
								<b>Total Courses</b>	<b>Moot Court Hours</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Project Work Hours</b>	<b>Contact Hours per week</b>	<b>Credits</b>

\*Students can utilise the entire year including the summer and the winter break for completing 140 community service hours.

**Program/Specialization Electives for Three-Year LL.B Programme (2023-26)**

<b>Course Code</b>	<b>Course Name</b>	<b>L-T-P</b>	<b>C</b>
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LBL572	Right to Information and Accountable Governance (3Y)	4-1-0	4
LBL573	Competition Law (3Y)	4-1-0	4
LBL574	Food Security Laws (3Y)	4-1-0	4
LBL575	Penology & Victimology (3Y)	4-1-0	4
LBL576	Affirmative Action and Discriminative Justice (3Y)	4-1-0	4
LBL577	International Air and Space Law (3Y)	4-1-0	4
LBL578	Corporate Governance and CSR (3Y)	4-1-0	4
LBL579	Disaster, Development & Human Rights (3Y)	4-1-0	4
LBL581	Insurance Law (3Y)	4-1-0	4
LBL582	Criminal Justice Administration (3Y)	4-1-0	4
LBL583	Media Law (3Y)	4-1-0	4
LBL584	Health Law (3Y)	4-1-0	4
LBL585	Clean Energy & Sustainability Laws (3Y)	4-1-0	4
LBL586	Science, Technology and Law (3Y)	4-1-0	4
LBL587	International Trade Law (3Y)	4-1-0	4
LBL588	International Commercial Arbitration (3Y)	4-1-0	4
LBL589	Election Laws (3Y)	4-1-0	4

**COURSE SYLLABUS**
**LAW OF CRIMES I (CORE)**

<b>1. Department:</b>	School of Law		
<b>2. Course Name:</b> Law of Crimes I	<b>3. Course Code</b>	<b>4. L- T- P</b>	<b>5. Credits</b>
	Code: LBL213	4-1-0	4
<b>6. Type of Course (Check one):</b>	Programme Core <input checked="" type="checkbox"/>	Programme Elective <input type="checkbox"/>	Open Elective <input type="checkbox"/>
<b>7. Frequency of offering (check one):</b>	Odd <input checked="" type="checkbox"/>	Even <input type="checkbox"/>	Either semester <input type="checkbox"/> Every semester <input type="checkbox"/>
<b>8. Brief Syllabus:</b>			
<p>The focus of this course is on the substantive part of Law of Crimes which refers to understanding of the basic concept of crime and its elements, essential principles of criminal liability, the definitions of specific offences and the operation of criminal liability. The newly introduced Bharatiya Nyaya Sanhita, 2023 comprises of a wide range of measures arranged in section form devoted to general issues, range of punishments and their applicability, variations in liability, elements of diverse types of offences including new terms like organized crimes, terrorist acts and the sanctions thereof etc. Though the Sanhita accords recognition to most of the Common Law general principles of criminal liability, these principles have to be understood in the light of the specific codified provisions only. Thus, the Course aims to introduce the essential features of the substantive criminal Law of the land both in terms of the general principles and also the select specific offences.</p>			
<b>9. Course Outcomes (COs)</b>			
Possible usefulness of this course after its completion i.e. how this course will be practically useful to him once it is completed			
<b>CO 1</b>	Understanding the substantive criminal law and its application in the criminal justice system in India		
<b>CO 2</b>	Define, analyze and paraphrase the basic concepts of mens rea and actus reus which form the basis of criminal liability.		
<b>CO 3</b>	Differentiate situations using laws which are enumerated in the Bharatiya Nyaya Sanhita, 2023		
<b>CO 4</b>	Equip the students with litigation skills in the area of criminal law.		
<b>CO 5</b>	Appraise value of landmark cases and synthesize the impact on modern society.		
<b>10. Total lecture, Tutorial and Practical Hours for this course (Take 15 teaching weeks per semester): 75</b>			
<b>Lectures: 60</b>	<b>Tutorials: 15</b>	<b>Practical: 0</b>	
<b>11. UNIT WISE DETAILS No. of Units: 6</b>			
<b>Unit Number: 1</b>	<b>Title: Fundamentals of Criminal Law</b>	<b>No. of Lectures: 10</b>	
<b>Content Summary:</b>			

## LBL213-Law of Crimes I

1. Nature and definition of crime
2. Distinction between crime and civil wrong
3. Principles of criminal liability
4. Introduction to Bharatiya Nyaya Sanhita, 2023 (BNS, 2023)
5. A comparative analysis of BNS, 2023 with Indian Penal Code, 1860
6. Definitions & General Explanations
7. Territorial operation of Bharatiya Nyaya Sanhita, 2023

### Suggested Reading:

8. J W Cecil Turner (ed.), Kenny's Outlines of Criminal Law, 18<sup>th</sup> edition, Cambridge
9. Taxmann's Handbook on New Criminal Laws, 2024
10. K. D. Gaur, Criminal Law, Criminology and Administration of Criminal Justice, Third Edition, Lexis Nexis (2017)
11. K I Vibhute, PSA Pillai's Criminal Law
12. Ratanlal & Dhirajlal, Indian Penal Code
13. K.D. Gaur, Cases and Materials on Criminal Law

### Case Laws:

14. Union Carbide Corporation v. Union of India AIR 1992 SC 248
15. R v. Prince [1875] LR 2 CCR 154 (HL)
16. Queen v. Tolson [1889] 23 QBD 168 (HL)
17. Sherras v. De Rutzen (1895) 1 QB 918
18. Shailesh Jasvantbhai v. State of Gujarat, (2006) 2 SCC 359
19. Om Prakash v. State of Punjab AIR 1961 SC 1782

**Unit Number: 2**    **Title: General Principles in Bharatiya Nyaya Sanhita, 2023**    **No. of Lectures: 10**

### Content Summary:

1. Punishment
2. Conditions negating criminal liability (General Exceptions)
3. Law of Abetment, Criminal Conspiracy and Attempt

### Suggested Reading:

1. J W Cecil Turner (ed.), Kenny's Outlines of Criminal Law, 18<sup>th</sup> edition, Cambridge
2. K I Vibhute, PSA Pillai's Criminal Law
3. Ratanlal & Dhirajlal, Indian Penal Code
4. K.D. Gaur, Cases and Materials on Criminal Law

### Case Laws:

1. State of West Bengal v. Shew Mangal Singh AIR 1981 SC 1917
2. Jethuram Sukhra Nagbhansi v. State (AIR 1960 MP 242)
3. Gopal Naidu v. Emperor AIR 1923 Mad 523
4. R v. Dudley and Stephens [1884] 14 QBD 273
5. Baburam Mahali v. State of West Bengal (2005)3CALLT331(HC)
6. Mobarik Ali v. State of Bombay (AIR 1957 SC 857)
7. State v. Rangaswami (AIR 1952 Nag 268)
8. X v. Hospital Z (AIR 1999 SC 495)
9. Munshi Ram v. Delhi Administration AIR 1968 SC 702
10. Mannu v. State of UP AIR 1997 SC 1230

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11. Nagendra Pal singh AIR 1993 SC 950
12. Yeshwant Rao, AIR 1992 SC 1683
13. Mahbub Shah v. Emperor, AIR 1945 PC 118

**Unit Number: 3 Title: Offences against Women and Child (Section 63 – 99) No. of Lectures: 10**

**Content Summary:**

1. Sexual offences
2. Criminal Force and assault against women
3. Offences relating to marriage
4. Offences against child

**Suggested Reading:**

1. J W Cecil Turner (ed)., Kenny's Outlines of Criminal Law, 18<sup>th</sup> edition, Cambridge
2. K I Vibhute, PSA Pillai's Criminal Law
3. Ratanlal & Dhirajlal, Indian Penal Code
4. K.D. Gaur, Cases and Materials on Criminal Law

**Case Laws:**

1. Mota Ram V. State of Haryana, AIR 2010 SC 3780
2. Aruna Ramchandra Shanbaug v. Union of India Writ Petition (Crl) No. 115 of 2009
3. Tukaram v. State of Maharashtra AIR 1979 SC 185
4. Imrana Rape Case
5. State through Reference v. Ram Singh & Ors. 212(2014)DLT99
6. Cherubin Gregory v. State of Bihar AIR 1964 SC 205
7. Soumya Murder Case
8. Mumbai Gang Rape
9. Bhanwari Devi Gang Rape Case
10. Scarlett Keeling Rape and Murder
11. Surendra Koli v. State of UP AIR 2011 SC 970
12. Dhananjay Chatterjee v. State of West Bengal (1994) 2 SCC 220

1.

**Unit Number: 4 Title: Offences affecting the Human Body No. of Lectures: 15**

**Content Summary:**

1. Culpable Homicide & Murder
2. Causing Death by Negligence
3. Abetment of Suicide
4. Organized Crime
5. Terrorist act
6. Hurt and Grievous Hurt
7. Wrongful Restraint and Wrongful Confinement
8. Criminal force and Assault
9. Kidnapping and Abduction

**Suggested Reading:**

1. Malimath Committee Report on Reforms in Criminal Justice System

LBL213-Law of Crimes I

2. K. D. Gaur, Criminal Law, Criminology and Administration of Criminal Justice, Third Edition, Lexis Nexis (2017)
3. K I Vibhute, PSA Pillai's Criminal Law
4. Ratanlal & Dhirajlal, Indian Penal Code
5. K.D. Gaur, Cases and Materials on Criminal Law

**Unit Number: 5 Title: Offences affecting the State and Offences against Public Tranquility**  
**No. of Lectures: 5**

**Content Summary:**

1. Waging war against the Government of India
2. Act endangering sovereignty, unity and integrity of India.
3. Group/ Joint Liability - Common Intention and Common Object
4. Unlawful Assembly

**Case Laws:**

5. Queen v. Bal Gangadhar Tilak
6. Kedar Nath v. State of Bihar AIR 1962 SC 955
7. State (N.C.T of Delhi) v. Navjot Sandhu and Syed Abdul Rehman Gilani, AIR 2005 SC 3820
8. Case of Hardik Patel
9. Niharendu Dutta Majumdar v. Emperor AIR 1942 FC 22
10. Tara Singh Gopi Chand v. The State (AIR 1951 East Punjab 27)
11. Case of Ashim Trivedi & Binayak Sen

**Unit Number 6: Title: Offences against Property No. of Lectures: 10**

1. Theft
2. Snatching
3. Extortion
4. Robbery and Dacoity
5. Criminal Misappropriation and Criminal Breach of Trust
6. Cheating
7. Mischief
8. Criminal Trespass

**Suggested Reading:**

1. K. D. Gaur, Criminal Law, Criminology and Administration of Criminal Justice, Third Edition, Lexis Nexis (2017)
2. K I Vibhute, PSA Pillai's Criminal Law
3. Ratanlal & Dhirajlal, Indian Penal Code
4. K.D. Gaur, Cases and Materials on Criminal Law

**Case Laws:**

1. K N Mehra v. State of Rajasthan AIR 1957 SC 369
2. Pyarelal Bhargava V. State Of Rajasthan A.I.R. 1963 SC 1094
3. Ram Chandra V. State Of Uttar Pradesh A.I.R. 1957 SC 381

## LBL213-Law of Crimes I

Om Prakash V. State A.I.R. 1956 ALL 163

### Books Recommended:

- J W Cecil Turner (ed)., Kenny's Outlines of Criminal Law, 18<sup>th</sup> edition, Cambridge
- K I Vibhute, PSA Pillai's Criminal Law
- K.D. Gaur, Cases and Materials on Criminal Law

### Reference Books:

- K. D. Gaur, Criminal Law, Criminology and Administration of Criminal Justice, Third Edition, Lexis Nexis (2017)
- Sarkar, Indian Penal Code

### Reference websites:

1. SCC Online (through the library of NCU)
2. Manupatra (through the library of NCU)
3. <http://supremecourtsofindia.nic.in/>
4. <https://indiankanoon.org/>
5. [www.livelaw.in/](http://www.livelaw.in/)
6. <http://www.legalindia.com/>
7. Westlaw
8. Jstor
9. Heinonline

## Evaluation Scheme

TYPE OF COURSE	PARTICULAR	ALLOTTED RANGE OF MARKS	PASS CRITERIA
Theory+ Practical (L-T-P/L-0-P)	Minor Test	15%	Must Secure 30% Marks Out of Combined Marks of Major Test Plus Minor Test with Overall 40% Marks in Total.
	Major Test	35%	
	Continuous Evaluation Through Class Tests/Practice/Assignments/Presentation/Quiz	10%	
	Online Quiz	5%	
	Court Room Exercise/ Project	35%	

## Mapping of PO's and CO's

LBL213-Law of Crimes I

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>
<b>CO1</b>	1	3	1	2	3	3	3	2	1	2	1
<b>CO2</b>	2	3	1	3	2	1	2	3	2	3	2
<b>CO3</b>	1	1	2	1	2	3	2	1	1	1	1
<b>CO4</b>	3	2	1	3	3	1	3	2	1	3	2
<b>CO5</b>	2	2	2	1	1	2	1	3	3	2	2

**COURSE SYLLABUS**
**LAW OF EVIDENCE (CORE)**

<b>1. Department:</b>	School of Law			
<b>2. Course Name:</b> Law of Evidence	<b>3. Course Code</b>	<b>4. L- T- P</b>	<b>5. Credits</b>	
	Code: LBL313	4-1-0	4	
<b>6. Type of Course (Check one):</b>	Programme Core <input checked="" type="checkbox"/>	Programme Elective <input type="checkbox"/>	Open Elective <input type="checkbox"/>	
<b>7. Frequency of offering (check one):</b> Odd semester <input checked="" type="checkbox"/>	Even <input type="checkbox"/>	Either semester <input type="checkbox"/>	Every <input type="checkbox"/>	
<b>8. Brief Syllabus:</b>				
<p>Law, as a system of rules, has been categorized into substantive, procedural and adjective law. Law of Evidence is the most important branch of adjective law. It is a system of rules and standards that is used to determine which facts may be admitted, and to what extent a judge may consider those facts, as proof of a particular issue in a lawsuit. The course focuses on the basic concepts and principles underlying the law of evidence and the recognized forms of evidence and its sources. It intends to acquaint the students with an understanding of the statutory rules governing the introduction of evidence in the civil and criminal courts in India, to apply the rules of evidence in problem scenarios and, in particular, to analyse factual situations and give a considered opinion as to admissibility, relevance, weight and usefulness of different kinds of evidence in varying situations. The course also reflects on the art of examination, cross-examination and the shifting nature of burden of proof.</p>				
<b>9. Course Outcomes (COs)</b>				
Possible usefulness of this course after its completion i.e. how this course will be practically useful to him once it is completed				
<b>CO 1</b>	Analyse and define the concept and general nature of evidence, and illustrate the different types of evidence and court procedures relating to evidence.			
<b>CO 2</b>	Analyse the rule relating to relevance of evidence and admissibility of evidence before the court.			
<b>CO 3</b>	Differentiate situations using laws which are enumerated in the Bharatiya Sakshya Adhinyam, 2023			
<b>CO 4</b>	Equip the students with litigation skills in the area of law of evidence			
<b>CO 5</b>	Appraise value of landmark cases and synthesize the impact on modern society.			

<b>10. Total lecture, Tutorial and Practical Hours for this course (Take 15 teaching weeks per semester): 75</b>		
<b>Lectures: 60</b>	<b>Tutorials: 15</b>	<b>Practical: 0</b>
<b>11. UNIT WISE DETAILS No. of Units: 6</b>		
<b>Unit Number: 1</b>	<b>Title: An introduction to Law of Evidence</b>	<b>No. of lectures: 10</b>
<b>Content Summary:</b>		
<ol style="list-style-type: none"> <li>1. Law of Evidence as an adjective law</li> <li>2. Law of evidence in classical Hindu and Islamic Jurisprudence</li> <li>3. Principles of evidence under the English law</li> <li>4. Legislation dealing with evidence (Introduction to Bharatiya Sakshya Adhiniyam, 2023 )</li> </ol>		
<b>Suggested Reading:</b>		
<b>Case Laws:</b>		
<b>Unit Number: 2</b>	<b>Title: Basic concepts in Law of Evidence</b>	<b>No. of lectures: 5</b>
<b>Content Summary:</b>		
<ol style="list-style-type: none"> <li>1. Facts: Definition</li> <li>2. Evidence: Meaning and kinds</li> <li>3. Presumption</li> <li>4. "Proved", "Disproved" and "Not proved"</li> <li>5. Witness</li> <li>6. Appreciation of evidence</li> </ol>		
<b>Suggested Reading:</b>		
<b>Case Laws:</b>		
<b>Unit Number: 3</b>	<b>Title: Relevancy of Facts</b>	<b>No. of lectures: 15</b>
<b>Content Summary:</b>		
<ol style="list-style-type: none"> <li>1. Doctrine of res gestae</li> <li>2. General principles regarding admission</li> <li>3. Differences between "admission" and "confession"</li> <li>4. Inadmissibility of confession made before a police officer</li> <li>5. Admissibility of custodial confessions</li> <li>6. Admissibility of "information" received from accused person</li> <li>7. Confession by co-accused</li> <li>8. Dying Declaration</li> <li>9. Expert Evidence</li> <li>10. Relevancy of character</li> </ol>		

**Suggested Reading:**

**Case Laws:**

**Unit Number: 4      Title: Oral and Documentary evidence      No. of lectures: 10**

1. General principles concerning oral evidence
2. General principles concerning Documentary Evidence
3. General Principles Regarding Exclusion of Oral by Documentary Evidence

**Suggested Reading:**

- 1.

**Unit Number: 5      Title: Burden of Proof & Estoppel      No. of lectures: 10**

**Content Summary:**

- The general conception of onus probandi
- General and special exceptions to onus probandi
- Presumption as to certain offences
- Presumptions as to abetment of suicide by a married women
- Presumption as to dowry death
- Presumptions as to absence of consent in certain prosecution of rape
- Estoppel: General principle
- Estoppel, res judicata and waiver and presumption

**Case Laws:**

- 1.

**Unit Number 6:      Title: Examination of witness      No. of lectures: 10**

1. Competent witness
2. State privilege
3. Professional privilege
4. Accomplice
5. General principles of examination and cross examination
6. Leading questions
7. Lawful questions in cross-examination
8. Compulsion to answer questions put to witness
9. Hostile witness (Section 154)
10. Impeaching of the standing or credit of witness (Section 155)

**Suggested Reading:**

**Case Laws:**

## LBL313 Law of Evidence

### Books Recommended:

#### Reference Books:

1. Vepa P. Sarathi, Law of Evidence (6th ed., 2006)
2. M. Monir, Law of Evidence (14th ed., 2006)
3. Batuk Lal, Law of Evidence Allahabad Law Agency(2021)
4. Ratanlal and Dhiraj Lal's Law of Evidence, LexisNexis, (2023)
5. P.S.A. Pillai, Law of Evidence, Thomson Reuters (2023)

#### Reference websites:

1. SCC Online (through the library of NCU)
2. Manupatra (through the library of NCU)
3. <http://supremecourtfindia.nic.in/>
4. <https://indiankanoon.org/>
5. [www.livelaw.in/](http://www.livelaw.in/)
6. <http://www.legalindia.com/>
7. Westlaw
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9. Heinonline

### Evaluation Scheme

TYPE OF COURSE	PARTICULAR	ALLOTTED RANGE OF MARKS	PASS CRITERIA
Theory+ Practical (L-T-P/L-O-P)	Minor Test	15%	Must Secure 30% Marks Out of Combined Marks of Major Test Plus Minor Test with Overall 40% Marks in Total.
	Major Test	35%	
	Continuous Evaluation Through Class Tests/Practice/Assignments/Presentation/Quiz	10%	
	Online Quiz	5%	
	Court Room Exercise/ Project	35%	

### Mapping of PO's and CO's

LBL313 Law of Evidence

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
<b>CO1</b>	1	3	1	2	3	3	3	2	1	2	1
<b>CO2</b>	2	3	1	3	2	1	2	3	2	3	2
<b>CO3</b>	1	1	2	1	2	3	2	1	1	1	1
<b>CO4</b>	3	2	1	3	3	1	3	2	1	3	2
<b>CO5</b>	2	2	2	1	1	2	1	3	3	2	2



THE NORTHCAP UNIVERSITY  
GURUGRAM

Review Date:  
08-04-2024

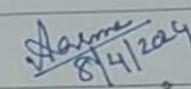
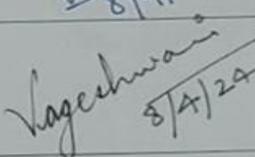
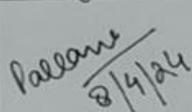
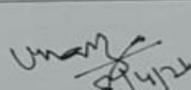
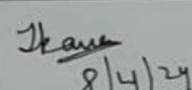
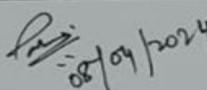
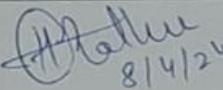
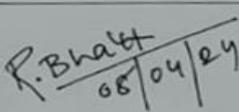
BOARD OF STUDIES MEETING  
SCHOOL OF LAW

Page 1 of 5

MINUTES OF BOARD OF STUDIES

MINUTES OF BOARD OF STUDIES

A meeting of Board of Studies for School of Law, The NorthCap University, Gurugram was held on 08.04.2024 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	 8/4/24
2.	Prof. (Dr.) Vageshwari Deswal	External Expert Member, Professor of Law, Faculty of Law, University of Delhi, New Delhi	 8/4/24
3.	Dr. Pallavi Bajpai	Member & Assistant Professor, School of Law, NCU	 8/4/24
4.	Dr. Unanza Gulzar	Member & Associate Professor, School of Law, NCU	 8/4/24
5.	Dr. Tavleen Kaur Khurana	Member & Assistant Professor (Senior Scale), School of Law, NCU	 8/4/24
6.	Dr. Tapobrata Pakrashi	Member & Assistant Professor (Sel.Gr), School of Law, NCU	 08/04/2024
7.	Mr. Himangshu Rathee	Member & Assistant Professor (Senior Scale), School of Law, NCU	 8/4/24
8.	Dr. Rituparna Bhattacharjee	Member Secretary & Assistant Professor (Sel.Gr), School of Law, NCU	 08/04/24

Following were the agendas of the Meeting:

**I. Seeking approval for new schemes for AY 24-25**

- a. BBA.LL.B. (Hons)
- b. LL.B. (3 Y)
- c. LL.M

**II. Seeking approval for Revised Course schemes for LL.B (3 Y)AY 23-24**

**III. Seeking approval for Revisions/Additions/Deletions in the Course templates of :**

- a. BBA.LL.B. (Hons)
- b. LL.B. (3 Y)
- c. LL.M

**IV. Closing Remark**

Following are the Minutes of the Meeting:

- 1) Prof. (Dr.) Archana Sarma, Head, School of Law, NCU welcomed the external expert, Prof. (Dr.) Vageshwari Deswal.

**I. Seeking approval for new schemes for AY 24-25**

**a. BBA.LL.B. (Hons)**

That, the Course scheme of 5-year BB.A.LL.B (Hons.) AY 24-25 was duly approved with the following changes: (Annexure I A & I B)

- i. That Alternate Dispute Resolution (LBC 422) is shifted to semester 6<sup>th</sup>
- ii. That, Environmental Law (LBL317) is shifted to semester 8<sup>th</sup>

**b. LL.B.**

The Course Scheme for LL.B AY 24-25 was duly approved.

**c. LL.M**

The Course Scheme for LL.M AY 24-25 was duly approved.

**II. Seeking approval for Revised Course schemes for LL.B (3 Y) AY 23-24**

- a. That, the following change in the course scheme of 3-year LL. B should be implemented- to introduce the course 'Alternative Dispute Resolution (ADR)-(LBL525) in 4<sup>th</sup> Semester, Civil Procedure Code (LBL418) in 5<sup>th</sup> semester and 'Mediation & Conciliation and Arbitration (Code to be generated)' in 6<sup>th</sup> Semester from AY 23-24 onwards.

(Annexure II A & II B)

### III. Seeking approval for Revisions/Additions/Deletions in the Course templates of

#### a. BBA.LL.B. (Hons)

i. That, for Constitutional Law-I [BB.A.LL.B(H)-3<sup>rd</sup> Semester]; Family Law-II [BB.A.LL.B(H)-4<sup>th</sup> Semester] and Professional Ethics [BB.A.LL.B(H)-10<sup>th</sup> Semester] recommended cases and subtopics in few units were added and approved for as follows:

Programme	Course	Subject Code	Modifications	Recommended case Laws
5 Year BB.A.LL.B (Hons)	Constitutional Law-I	LBL211	Added Unit -I Subtopic 'Power to Convert State into a Union Territory- Jammu and Kashmir case study'	Dr. Janet Jayapaul v. SRM University, (2015) 16 SCC530 Lt. Col Nitisha v. Union of India, 2021 SCC Online SC 261 Rohtas Bhankar v. Union of India, (2014) 8 SCC 872 Jarnail Singh II v. Lachmi Narain Gupta, 2022 SCC Online SC 96 Dr. Jaishri Laxmanrao Patil v. The Chief Minister, Maharashtra, 2021 SCC Online SC 362 Joseph Shine v. Union of India, (2019) 3 SCC 39 Janhit Abhyay v. Union of India, (2022 SCC Online SC 1540) Prabhu Raj Chhabra v. Union of India, (2020) 4 SCC 727 Anuradha Bhasin v. Union of India, (2020) 3 SCC 637 Foundation for Media Professionals v. Union Territory of Jammu and Kashmir & Another, (2020) 5 SCC 746 Kantaru Rajeevaru v. Indian Young Lawyers Association, (2020) 9 SCC 121 Aishat Shafa v. State of Karnataka and others, (2023) 2 SCC 1
5 Year BB.A.LL.B (Hons)	Family Law - II	LBL217		M Sivadasan (Dead) through LRs v. A.Soudamini (Dead) through LRs and others 2023 LiveLaw (SC) 721 Azad Ahmad Khan vs. Income Tax Appellate Tribunal 2023 LiveLaw (AB) 239 Smt. Monika Yadav v. Aakash Singh And 3 Others 2023 LiveLaw (AB) 465 Basangouda And Muddangouda & Others 2023 LiveLaw (Kar) 117 Nabisab s/o, Huchhesab Agaramani AND Hatelsab s/o Huchhedab Sammamani 2023 LiveLaw (Kar) 293 T N Sushelamma & ANR AND Chirag Raghavendra & Others 2023 LiveLaw (Kar) 399 Arumughom Achari Ranganathan Achari & Ors v. Rajamma Sarojam & Ors. 2023 LiveLaw (Ker) 256 Vineeta Sharma v. Rakesh Sharma, (2020) 9 SCC 1 Kattukandi Edathil Krishnan v. Kattukandi Edathil Valsan, 2022 SCC OnLine SC 737. Sarvamma v. U.R. Virupakshiah, 2010 SCC OnLine Kar 136. Gurdip Kaur v. Ghamand Singh, 1964 SCC OnLine Punj 180. Arunachala Gounder v. Ponnusamy, (2022) 11 SCC 520. Prakash v. Phulavati and Ors (2016) Lokmani v. Mahadevamma (2016) 684 SCC 22 Danamma v. Amar (2018) 186 SCC 2
5 Year BB.A.LL.B (Hons)	Professional Ethics	LBC521	Amendment Act 2023 & Supreme Court Rules, 2013 to be added to Unit 3	Bar Council of India v. A.K. Balaji AIR 2018 SC 1382 Balraj Singh Malik vs Supreme Court of India AIR 2012 DELHI 79 (2012) Noratammal Chouraria vs M.R. Marli & Anr 2004 AIR SCW 2894 R.D. Saxena vs Balram Prasad Sharma AIR 2000 SC 2912 In Re: Prashant Bhushan and another (2020) In Re: Hon'ble Justice Shri C.S. Karnan (2017) M.V. Jayarajan v. High Court of Kerala (2015) 4 SCC 81 Hari Singh Nagra v. Kapil Sibal and others (2010) 8 S.C.R. 879 Abhyudaya Mishra v. Kunal Kamra (2020) Aditya Kashyap v. Rachita Taneja (2020) Bar Council of India vs High Court Of Kerala (2004) Santosh Kumar Mishra vs State of Bihar (2021) Rakesh Tiwari advocate vs. Alak Pandey CJM (2019) B Sumitha vs. State of Telangana and others (2017) K. Anjinappa v. K.C Krishna Reddy (2021)

ii. The Corporate Law Honor courses for 5-year BB.A.LL.B (H) -Business Formation (LBL 446) (7<sup>th</sup> Semester) and Advanced Contract Drafting (LBL 445) (8<sup>th</sup> Semester) were presented before the board and were duly approved with minor modifications as follows:

Programme	Course	Subject Code	Modifications
5 Year BB.A.LL.B (Hons)	Business Formation	LBL446	Unit IV Title was changed from 'Doing Business in US' to 'Doing Business Internationally' and contents were modified accordingly. Added a new sub topic '7.MSME Meaning and Classification Steps for Udyam Registration Legal difference between MSME and Start-ups Benefits of MSME Registration'
5 Year BB.A.LL.B (Hons)	Advanced Contract Drafting	LBL445	Under unit II, the following subtopic was added : '15.Indemnification Concept of Basket, Tipping Basket, Deminimus and Cap Under unit IV, the following subtopic was added : Relevance of Harvey Weinstein Clause

- iii. That, since major changes has been made with respect to Criminal Laws in India, the revised syllabus for Law of Crimes-I- Bharatiya Nyaya Sanhita (LBL 213) [BB.A.LL.B-3<sup>rd</sup> Semester was presented and duly approved by the board.
- iv. Similarly, a revised template of Law of Evidence- Bharatiya Sakshya Adhiniyam (LBL 313) [BB.A.LL.B-5<sup>th</sup> Semester] was presented and duly approved by the board.
- v. That, the above changes are higher in count and hence for convenience has been highlighted and annexed as Annexure III & IV

**b. LL. B**

i. That, for Constitutional Law-I (3 Y)- [ LL.B-3<sup>rd</sup> Semester]; Family Law-II (3 Y)- [LL.B-2<sup>nd</sup> Semester] and Professional Ethics (3 Y)- [LL.B-6<sup>th</sup> Semester] recommended cases and subtopics in few units were added and approved for as follows:

Programme	Course	Subject Code	Modifications	Recommended case Laws
3 Year LL.B	Constitutional Law-I	LBL419	Added Unit -1 Subtopic 'Power to Convert State into a Union Territory- Jammu and Kashmir case study'	Dr. Janet Jeyapaul v. SRM University, (2015) 16 SCC530 Ll. Col Nitisha v. Union of India, 2021 SCC Online SC 261 Rohtas Bankar v. Union of India, (2014) 8 SCC 872 Jarnail Singh II v. Lachmi Narain Gupta, 2022 SCC Online SC 96 Dr. Jaishri Laxmanrao Patil v. The Chief Minister, Maharashtra, 2021 SCC Online SC 362 Joseph Shine v. Union of India, (2019) 3 SCC 39 Janhit Abhiyan v. Union of India, (2022) SCC Online SC 1540 Prathvi Raj Chauhan v. Union of India, (2020) 4 SCC 727 Anuradha Bhasin v. Union of India, (2020) 3 SCC 637 Foundation for Media Professionals v. Union Territory of Jammu and Kashmir & Another, (2020) 5 SCC 746 Kantararajeevaru v. Indian Young Lawyers Association, (2020) 9 SCC 121 Aishat Shifa v. State of Karnataka and others, (2023) 2 SCC 1
3 Year LL.B	Family Law - II	LBL324		M Sivadasan (Dead) through LRs v. A.Soudamini (Dead) through LRs and others 2023 LiveLaw (SC) 721 Azad Ahmad Khan vs. Income Tax Appellate Tribunal 2023 LiveLaw (AB) 239 Smt. Monika Yadav v. Aakash Singh And 3 Others 2023 LiveLaw (AB) 465 Basangouda And Muddangouda & Others 2023 LiveLaw (Kar) 117 Nabisab s/o. Huchchesab Agnamani AND Hatelsab s/o Huchchedab Sannamani 2023 LiveLaw (Kar) 293 T N Susheelamma & ANR AND Chirag Raghavendra & Others 2023 LiveLaw (Kar) 399 Arumughom Achari Ranganathan Achari & Ors v. Rajamma Sarojam & Ors. 2023 LiveLaw (Ker) 256 Vineeta Sharma v. Rakesh Sharma, (2020) 9 SCC 1 Kattukandi Edathil Krishnan v. Kattukandi Edathil Valsan, 2022 SCC OnLine SC 737. Sarvamma v. U.R. Virupakshiah, 2010 SCC OnLine Kar 136 Gurdip Kaur v. Ghamand Singh, 1964 SCC OnLine Punj 180. Arumachala Gounder v. Pomasamy, (2022) 11 SCC 520. Prakash v. Phulavati and Ors (2016) Lokmani v. Mahadevamma (2016) 684 SCC 22 Danamma v. Amar (2018) 186 SCC 2
3 Year LL.B	Professional Ethics	LBC526	Amendment Act 2023 & Supreme Court Rules, 2013 to be added to Unit 3	Bar Council of India v. A.K. Balaji AIR 2018 SC 1382 Balraj Singh Malik vs Supreme Court of India AIR 2012 DELHI 79 (2012) Noratammal Chouraria vs M.R. Murli & Anr 2004 AIR SCW 2894 R.D. Saxena vs Balram Prasad Sharma AIR 2000 SC 2912 In Re: Prashant Bhushan and another (2020) In Re: Hon'ble Justice Shri C.S. Karman (2017) M.V. Jayarajan v. High Court of Kerala (2015) 4 SCC 81 Hari Singh Nagra v. Kapil Sibal and others (2010) 8 S.C.R. 879 Abhyudaya Mishra v. Kunal Kamra (2020) Aditya Kashyap v. Rachata Taneja (2020) Bar Council of India vs High Court Of Kerala (2004) Santosh Kumar Mishra vs State of Bihar (2021) Rakesh Tiwari advocate vs. Alok Pandey CJM (2019) B Sunitha vs. State of Telangana and others (2017) K. Anjanappa v. K.C Krishna Reddy (2021)

ii. That, since major changes has been made with respect to Criminal Laws in India, the revised syllabus for Law of Crimes- I (3 Y)- Bharatiya Nyaya Sanhita (LBL 327) [LL.B-1<sup>st</sup> Semester was presented and duly approved by the board.

- iii. Similarly, a revised template of Law of Evidence (3 Y)- Bharatiya Sakshya Adhinyam (LBL 417) [LL.B-3<sup>rd</sup> Semester] was presented and duly approved by the board.
- iv. That, (III)(v) be referred for the same purpose.

**c. LL.M-**

That, three new courses in LL.M- Corporate Law Specialization were introduced to expand the horizon of elective courses viz; Corporate Cyber Law (LML 647), Competition Law (LML 649), White Collar Crime (Code to be generated).

**III. Closing Remark**

- i) That, for the upcoming meetings the detailed syllabi of the other courses should be taken into consideration for updating the case list as well.

## BBA SCHEME OF STUDY 2024-2025

## Annexure 5

Semester	Semester Course Code, Course Name (L-T-P) Credits							Community Service	GP	Hrs. Per week			Contact Hours per Sem	Credits
1	BSL102 Principles of Management (2-1-0) 3	BSL103 Marketing Management (2-1-0) 3	CML101 Professional Accounting (2-0-2) 3	Fundamentals of Business Environment (2-1-0) 3	BSL105 Fundamentals of Organizational Behavior (2-1-0) 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	4	6	22*15=330	20
2	BSL104 Human Resource Management (2-1-0) 3	CML107 Introduction to Banking (2-1-0) 3	Financial Management (3-1-0) 4	Managerial Economics (3-0-0) 3	CHL100 Environmental Studies (3-0-0) 3 <span style="color: red;">MOOC</span>	CLL130 Effective Comm-I (1-0-2) 2		BSS102 CS-II (140 Hrs)*  2 Credits	BSR102 GP-II  1 Credit	14	3	2	19*15=285	21
Summers	BST201 Internship I/ Vocational Course# OR BSD201 Minor Project				(0-0-8) 4								8	4
EXIT WITH UG CERTIFICATE IN BUSINESS ADMINISTRATION														
3	Business Statistics (2-0-2) 3	BSL201 Operations Management (2-1-0) 3	CML109 Business Laws (3-0-0) 3	BSL304 Investment Management (2-1-0) 3	ENL212 Corporate Governance & Sustainability (3-0-0) 3	CLL140 Effective Comm-II (1-0-2) 2	Program Elective I (2-0-2) 3	BSS201 CS-III	BSR201 GP-III  1 credit	15	2	6	23*15=345	21
4	Business Research Methods (2-0-2) 3	BSL209 Ecommerce (2-1-0) 3	BSV301 Creative thinking and Negotiation Skills (2-0-2) 3	Foreign Language Elective (1-2-0) 3	Open Elective-I (2-0-2) 3 <span style="color: red;">MOOC</span>	Programme Elective –II (2-0-2) 3		BSS202 CS-IV (140 Hrs)*  2 Credits	BSR202 GP-IV  1 credit	11	3	8	22*15=330	21
Summers	BST301 Summer Internship				(0-0-8) 4								8	4
EXIT WITH UG DILPOMA IN BUSINESS ADMINISTRATION														
5	BSL303 International Business (2-1-0) 3	BSL301 Business Policy & Strategy (2-1-0) 3	Programme Elective-III (2-0-2) 3	Programme Elective –IV (2-0-2) 3	Open Elective-II (2-0-2) 3 <span style="color: red;">MOOC</span>	Project Management (2-1-0) 3		BSS301 CS-V	BSR301 GP-V  1 credit	12	3	6	21*15=315	19
6	BSL101 Entrepreneurship (2-1-0) 3	Programme Elective –V (2-0-2) 3	Programme Elective –VI (2-0-2) 3 <span style="color: red;">MOOC</span>	Open Elective-III (2-0-2) 3 <span style="color: red;">MOOC</span>	BSD302 Major Project (0-0-12) 6			BSS302 CS-VI (140 Hrs) 2 Credit	BSR302 GP-VI 1 credit	8	1	6	15*15=225	21
														131
EXIT WITH UG DEGREE IN BUSINESS ADMINISTRATION														

7	Technical Writing (3-1-0) 4	Advanced Data Analysis Tools (3-1-0) 4	AI in Business (2-0-2) 3	Program Elective VII (2-0-2) 3 MOOC	Dissertation- I* (0-0-12) 6					10	2	4	16*15=240	20
8	Fintech (2-0-2) 3	Business Analytics & Data Mining Modelling using R (2-0-2) 3	Program Elective VIII (2-0-2) 3 MOOC	Open Elective IV (2-0-2) 3 MOOC	Dissertation-II* (0-0-16) 8					8	0	8	16*15=240	20
<b>TOTAL</b>														171

**EXIT WITH UG DEGREE (HONOURS) WITH RESEARCH IN BUSINESS ADMINISTRATION**

NOTE: -Students shall utilize the internship period (6-8 weeks) to complete 140 hours of serving the community.  
 -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. Student also complete work based vocational course/internship/project of 4 credits during the summer vacation of the first semester. Student who opts to exit after completion of first year and have earned a minimum of 42 credits at university, will be awarded UG certificate.  
 -The formation of Year IV class is based on a minimum student strength of 20.  
 - Students with minimum 75% marks in their UG Degree will be eligible to pursue UG Degree (Honours) with Research.  
 - All courses will be offered in Full MOOC if there are less than 20 students in the batch.  
 \*/\*\* In case a student wishes to pursue UG Degree 4 years (Honours) in Business Administration, he will have to pursue any 5 courses in Full MOOC in lieu of Dissertation I & II. The list of courses is –

- a. Leadership for India Inc: Practical Concepts and Constructs
- b. Online Communication in the Digital Age
- c. Psychology Of Stress, Health and Well-Being
- d. United Nations Sustainable Development Goals (UN SDGs)
- e. Soft Skills
- f. Innovation in Marketing and Marketing of Innovation

In this case student will earn 172 credits in total.

**BACHELOR OF BUSINESS ADMINISTRATION**

**OVERALL CREDIT STRUCTURE**

Category	Credits
Major (Core)	55
Ability Enhancement Course (SCE)	10
Major Project	06
Skill Enhancement	08
General Proficiency	06
Minor Stream	22
Multidisciplinary	09
Community Service	06
Value Added Course	05
Summer Internship	04
<b>Total Credits</b>	<b>131</b>

**Programme Core**

**L-T-P C**

BSL102	Principles of Management	2-1-0	3
BSL103	Marketing Management	2-1-0	3
CML101	Professional Accounting	2-0-2	3
	Fundamentals Business Environment	2-1-0	3
BSL105	Fundamentals of Organizational Behavior	2-1-0	3
	Managerial Economics	3-0-0	3
	Financial Management	3-1-0	4
BSL104	Human Resource Management	2-1-0	3
BSL201	Operations Management	2-1-0	3
CML107	Introduction to Banking	2-1-0	3
	Business Statistics	2-0-2	3
CML109	Business Laws	3-0-0	3
	Business Research Methods	2-0-2	3
BSL209	E-Commerce	2-1-0	3
BSL303	International Business	2-1-0	3
BSL301	Business Policy & Strategy	2-1-0	3
BSL304	Investment Management	2-1-0	3
	Project Management	2-1-0	3

**General Proficiency**

**C**

<b>BSR101</b>	GP-I	01 Credit
<b>BSR102</b>	GP-II	01 Credit
<b>BSR201</b>	GP-III	01 Credit
<b>BSR202</b>	GP-IV	01 Credit
<b>BSR301</b>	GP-V	01 Credit
<b>BSR302</b>	GP-VI	01 Credit

**Community Service**

**C**

BSS101	Community Service (CS-I)	
<b>BSS102</b>	Community Service (CS-II)	02 Credit
<b>BSS201</b>	Community Service (CS-III)	02 Credit
<b>BSS202</b>	Community Service (CS-IV)	
<b>BSS301</b>	Community Service (CS-V)	02 Credit
<b>BSS302</b>	Community Service (CS-VI)	

**Skill Enhancement Courses**

**L-T-P C**

CSV100	Basic Computer Skills for Professionals	0-0-4	2
BSV301	Creative thinking and Negotiation Skills	2-0-2	3
BSL101	Entrepreneurship	2-1-0	3

**Ability Enhancement Courses**

**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
	Foreign Language Elective	1-2-0	3

**Value Added Courses**

**L-T-P C**

CLL120	Human Values & Professional Ethics	2-0-0	2
ENL212	Corporate Governance and Sustainability	3-0-0	3

**PROGRAMME ELECTIVES**

**L-T-P C**

*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
BSL338	Marketing in Digital Era	2-0-2	3
BSL381	Product and Brand Management	2-0-2	3
BSL337	Fundamentals of Strategic Marketing	2-0-2	3
BSL382	Marketing Communication	2-0-2	3
BSL204	Fundamentals of Consumer Behavior	2-0-2	3

**HRM**

BSL339	Recruitment and Selection	2-0-2	3
BSL340	Performance and Competency Management	2-0-2	3
BSL341	Employee Training and Development	2-0-2	3
BSL342	Industrial Relations and Indian Labour Laws	2-0-2	3
BSL343	Compensation and Reward Management	2-0-2	3
BSL344	Organization Change and Development	2-0-2	3
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
BSL302	Leadership	2-0-2	3

**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
BSL352	Microfinance in India	2-0-2	3
BSL353	Cost and Management Accounting	2-0-2	3
CML355	Project Appraisal & Finance	2-0-2	3
ENL210	Fundamentals of Spreadsheet Modelling	2-0-2	3
CML354	International Finance	2-0-2	3
CML206	Security & Investment Management	2-0-2	3
	Management of Financial Services	2-0-2	3

**Minor Stream****Project Presentation and Training**

		<b>L-T-P</b>	<b>C</b>
<b>BSD201</b>	Minor Project	0-0-8	4
<b>BST301</b>	Summer Internship	0-0-8	4
<b>BSD302</b>	Major Project	0-0-12	6

**Multidisciplinary Courses**

		<b>L-T-P</b>	<b>C</b>
	Open Elective – I	2-0-2	3
	Open Elective – II	2-0-2	3
	Open Elective-III	2-0-2	3

**Addition of New Courses**

Subject Code	Name of Course	L-T-P	Credits	Semester
ENL212	Corporate governance and sustainability	3-0-0	3	3
	Financial Management	3-1-0	4	2
	Managerial Economics	3-0-0	3	2
	Fundamentals of Business Environment	2-1-0	3	1
	Business Statistics	2-0-2	3	3
	Business Research Methods	2-0-2	3	4
	Project Management	2-1-0	3	5
BSL302	Leadership	2-0-2	3	PE
	Management of Financial Services	2-0-2	3	PE
	Consumer Behavior	2-0-2	3	PE

**Addition of New Courses for 4<sup>th</sup> Year**

Subject Code	Name of Course	L-T-P	Credits	Semester
	Technical Writing	3-1-0	4	7
	Advanced Data Analysis Tools	3-1-0	4	7
	AI in Business	2-0-2	3	7
	Program Elective-VII	2-0-2	3	7
	Dissertation-I	0-0-12	6	7
	Fintech	2-0-2	3	8
	Business Analytics & Data Mining Modelling	2-0-2	3	8
	Program Elective-VIII	2-0-2	3	8
	Open Elective -IV	2-0-2	3	8
	Dissertation-II	0-0-16	8	8

**Deletion of Courses**

Subject Code	Name of Course	L-T-P	Credits	Semester
ENL101	Statistics & Research Methodology-I	2-0-2	3	2
ENL102	Principles of Economics	2-0-2	3	2
ENL204	Statistics & Research Methodology-II	2-0-2	3	3
CML108	Financial Management-I	2-0-2	3	2
CML208	Financial Management-II	2-0-2	3	3
CML110	Communication & Documentation in Business	2-0-2	3	3
BSL206	Basics of Leadership	2-0-2	3	4

**L-T-P Change of following Courses**

Code	Course Title	Old L-T-P	New L-T-P
BSL102	Principles of Management	2-0-2	2-1-0
BSL103	Marketing Management	2-0-2	2-1-0
BSL105	Fundamentals of Organizational Behavior	2-0-2	2-1-0
BSL104	Human Resource Management	2-0-2	2-1-0
BSL201	Operations Management	2-0-2	2-1-0
CML107	Introduction to Banking	2-0-2	2-1-0
BSL209	E-Commerce	2-0-2	2-1-0
BSL303	International Business	2-0-2	2-1-0
BSL301	Business Policy & Strategy	2-0-2	2-1-0
BSL304	Investment Management	2-0-2	2-1-0
	Project Management	2-0-2	2-1-0
BSL101	Entrepreneurship	2-0-2	2-1-0

**Code/ Nomenclature changed**

NEW		OLD	
Subject Code	Name of Course	Subject Code	Name of Course
BSL201	Operations Management	BSL201	Fundamentals of Operations Management
	Creative Thinking and Negotiation Skills	BSV301	Creative Thinking and Negotiation Skills
BSL103	Marketing Management	BSL103	Fundamentals of Marketing Management
BSL104	Human Resource Management	BSL104	Introduction to Human Resource Management
BSL201	Operations Management	BSL201	Fundamentals of Operations Management

**Shifting of Courses from one Semester to another**

Course Code	Course Name	Old	New
CML109	Business Laws	1	3
BSL101	Entrepreneurship	3	6
BSL204	Fundamentals of Consumer Behaviour	3	PE
CML107	Introduction to Banking	4	2
BSV301	Creative thinking and Negotiation Skills	5	4
BSL304	Investment Management	6	3
ENL210	Fundamentals of Spreadsheet Modelling	5	PE

<b>OVERALL CREDIT STRUCTURE- BBA</b>		
<b>Category</b>	<b>Credits</b>	<b>Credits</b>
	<b>New</b>	<b>Old</b>
Programme Core	55	60
Ability Enhancement	10	15
Project Presentation & Training	14	14
Skill Enhancement	8	8
General Proficiency	6	6
Program Electives	18	18
Open Electives	9	9
Community Service	6	6
Value Added Course	5	
<b>Total Credits</b>	<b>131</b>	<b>136</b>

<b>Broad Category of Course Minimum Credit</b>						
<b>S. No.</b>	<b>Requirement</b>	<b>3-year UG</b>		<b>4-Year UG</b>		<b>Description</b>
		<b>UGC BBA</b>	<b>NCU BBA</b>	<b>UGC BBA</b>	<b>NCU BBA</b>	
1	Major (Core)	60	55	80	72	Core courses
2	Minor Stream	24	22	32	28	PEs & Minor project
3	Multidisciplinary	9	9	9	12	Open Electives
4	Ability Enhancement Courses (AEC)	8	10	8	10	Eff. Comm I & Eff. Comm. II, Foreign Lang., EVS
5	Skill Enhancement Courses (SEC)	9	8	9	8	Creativity & Negotiation Skills, Computer Applications, Entrepreneurship
6	Value Added Courses common for all UG	06-08	5	06-08	5	HVPE, Corporate Governance & Sustainability
7	Summer Internship	02-04	4	02-04	4	
8	Major Project		6		6	
9	CS & GP		12		12	
10	Research Project / Dissertation	-	-	12	14	
	<b>Total</b>	<b>120</b>	<b>131</b>	<b>160</b>	<b>171</b>	

## **DETAILED COURSE DESCRIPTIONS FOR BBA PROGRAMME**

### **BSL101 Entrepreneurship**

#### **3 Credits (2-1-0)**

This course gives students an overview of -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, Idea 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 (2-1-0)**

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 Marketing Management**

#### **3 Credits (2-1-0)**

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 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.

### **BSL104 Human Resource Management**

#### **3 Credits (2-1-0)**

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 (2-1-0)**

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. 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.

### **BSL201 Fundamentals of Operations Management**

#### **3 Credits (2-1-0)**

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)**

This course will include 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.

### **BSL302 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 (2-1-0)**

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 intra-organizational. 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 (2-1-0)**

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 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 (2-1-0)**

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 (2-1-0)**

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 concepts concerning fixed-income 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 customer loyalty, media allocation, distribution channels and 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 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 management: segmentation, conjoint 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 in-depth 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 Retail 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 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 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).

### **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 Test, Personality 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 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. 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 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 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, and contemplates the future of the industry. Topics include Non-Banking Financial Services, Insurance Services, Merchant Banking, Credit Rating Services, Factoring and Forfeiting, 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 a 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, 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.

### **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 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 the 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 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 and 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, and critique the implications of stereotyping, prejudice and workplace discrimination; assess workplace 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; 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.

### **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 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.

### **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).

### **CML107 Introduction to Banking**

#### **3 Credits (2-1-0)**

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.

### **CML109 Business Laws**

#### **3 Credits (3-0-0)**

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. A legal background is 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.

### **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.

### **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 add-ins, perform sensitivity analyses of the solutions, and study their economic interpretations.

### **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 of financial information, Different investment alternatives, Approaches of bond valuation, Introduction to fundamental analysis. Technical analysis and efficient market hypothesis. Introduction to mutual funds and their risk evaluation and Role of SEBI.

### **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 foreign exchange risks and risk 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 Project 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.

### **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 insider trading, 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.

### **Financial Management**

**(2-0-2) 4 Credits**

This course aims to equip the students with the fundamental principles & techniques of financial management concern with acquisition & use of funds by a business firm. 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.

### **Business Statistics**

#### **3 credits (2-0-2)**

Measures of Central tendency, Dispersion (variation) and kurtosis their measures, their characteristics (merits and demerits) and application. 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, 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.

### **Management of Financial Services**

#### **3 credits (2-0-2)**

The course will delve deeper into the intricacies of overseeing financial institutions and services. Covering topics such as leasing, factoring, forfeiting, venture capital financing, securitization, mutual funds, discounting and dynamics of derivatives, this course equips students with the skills and knowledge necessary to navigate the complex landscape of financial services. Through case studies and real-world applications, students learn to analyse market trends, develop innovative solutions, and optimize operational efficiency within the financial services industry. With a focus on ethical practices and emerging technologies, this course prepares students for leadership roles in banking, insurance, investment, and other financial sectors.

### **Fundamentals of Business Environment**

#### **3 credits (2-1-0)**

This course provides a comprehensive understanding of the multifaceted dynamics shaping modern business operations. Divided into five units, it delves into various dimensions crucial for business success in today's globalized landscape.

Students will grasp the foundational concepts of the business environment, including its components, interactions, and significance for organizational strategy and decision-making. The course includes exploring the economic factors influencing businesses, students analyze market structures, macroeconomic indicators, fiscal and monetary policies, trade dynamics, and global economic trends. Also, the course will help students to examine how societal norms, cultural values, demographics, and lifestyle patterns impact consumer behavior, marketing strategies, and organizational practices. Students will evaluate the influence of

governmental policies, regulations, political stability, and international relations on business operations, risk management, and strategic planning.

It also addresses green initiatives, emerging technologies, digital transformation, and their implications for businesses.

Through case studies, discussions, and practical applications, students gain insights into navigating the complexities of the business environment to drive innovation, growth, and sustainable development.

### **Managerial Economics** **3 credits (3-0-0)**

This course explores the economic theories and concepts essential for understanding how firms make strategic choices in a competitive environment. Through case studies, practical examples, and analytical frameworks, students will develop critical thinking skills to address real-world business challenges. Topics covered include demand analysis, production and cost theory, market structures, pricing strategies, game theory, risk analysis, and decision-making under uncertainty.

### **Technical Writing**

Technical Writing is a comprehensive course designed to enhance students' proficiency in scholarly writing. Through a blend of theoretical concepts and practical exercises, participants will develop critical skills in research, analysis, and effective communication. Topics include thesis development, citation techniques, structuring arguments, and clarity in expression. Students will engage in hands-on activities to refine their ability to craft coherent essays, reports, and research papers, adhering to academic conventions and standards. Emphasis is placed on clarity, coherence, and precision in writing, empowering learners to excel in various academic disciplines and prepare for success in higher education and professional endeavors.

### **Ethical Issues in Research**

This course delves into foundational principles such as informed consent, confidentiality, and integrity in data collection and analysis. Through case studies and discussions, students examine the ethical implications of various research methodologies, including human and animal subjects research, genetic studies, and emerging technologies. Emphasis is placed on ethical decision-making frameworks and the importance of upholding ethical standards in the pursuit of knowledge. Students gain critical thinking skills necessary to navigate ethical challenges in research, fostering responsible and principled conduct in scientific endeavors.

### **Advanced Research Methods**

"Advanced Research Methods" is a dynamic course designed to equip students with sophisticated techniques for conducting empirical investigations across diverse fields. Building upon foundational research skills, this course delves into advanced methodologies such as experimental design, longitudinal studies, mixed methods approaches, and complex statistical analyses. Through hands-on projects and critical evaluation of scholarly literature, students develop proficiency in designing rigorous research studies, collecting, and analyzing data, and interpreting findings. Emphasis is placed on methodological rigor, validity, and reliability, preparing students to address complex research questions and contribute meaningfully to their respective fields.

### **Dissertation-1**

#### **6 credits (0-0-4)**

The Dissertation Project Work course is designed to provide graduate students with the opportunity to undertake independent research and produce substantial scholarly work in their chosen field of study. Students will work closely with a faculty advisor or mentor to develop a research proposal, conduct a thorough literature review, design a research methodology, collect and analyze data, and interpret findings within the context of existing scholarship. Emphasis will be placed on critical thinking, problem-solving, and scholarly communication skills necessary for producing a high-quality dissertation.

### **Dissertation-2**

#### **8 credits (0-0-4)**

This course serves as the culmination of the students' academic journey, allowing them to apply the knowledge, skills, and methodologies acquired throughout their graduate studies to an original research project. By the end of the course, students will be expected to produce a polished dissertation manuscript that demonstrates their ability to conduct rigorous research, contribute new knowledge to their field, and communicate their findings effectively. This course prepares students for the rigors of academic research and serves as a foundational step towards future scholarly endeavors or professional pursuits.

### **AI In Business**

#### **(2-0-2) 3 Credits**

This course explores the intersection of artificial intelligence (AI) and business, focusing on how AI technologies are revolutionizing various aspects of modern organizations. Participants will gain a comprehensive understanding of the fundamentals of AI and its applications within different business contexts. The course begins with an overview of AI concepts, including machine learning, natural language processing, computer vision, and deep learning. Through case studies and real-world examples, students will examine how AI technologies are transforming industries such as finance, healthcare, marketing, and supply chain management.

### **FinTech**

#### **(2-0-2) 3 Credits**

This course offers an introductory exploration of Financial Technology (FinTech), which revolutionizes the traditional financial services industry through innovative digital solutions. Students will gain insights into the intersection of finance and technology, understanding how FinTech disrupts and transforms various sectors such as banking, payments, lending, insurance, and wealth management. Topics include blockchain technology, cryptocurrencies, peer-to-peer lending, robo-advisors, regulatory challenges, and the outlook of FinTech.

### **Business Analytics & Data Mining Modelling using R**

#### **(2-0-2) 3credits**

Objective of this course is to impart knowledge on the use of data mining techniques for deriving business intelligence to achieve organizational goals. Use of R to build, assess, and compare models based on real datasets and cases with an easy-to-follow learning curve.

Collecting, analyzing, and extracting valuable information from a large amount of data requires easily accessible, robust, computational and analytical tools. Data Mining and Business Analytics with R utilizes the open source software R for the analysis, exploration, and simplification of large high-dimensional data sets. As a result, readers are provided with the needed guidance to model and interpret complicated data and become adept at building powerful models for prediction and classification.

### **Advanced Data Analysis Tools**

#### **(3-1-0) 4credits**

This advanced data analysis tools course delves into cutting-edge methodologies and technologies for extracting insights from complex datasets. Through hands-on projects and theoretical exploration, students will master advanced statistical techniques, machine learning algorithms, and data visualization tools. Topics include deep learning, natural language processing, ensemble methods, and big data analytics, equipping participants with the skills to tackle real-world data challenges and drive informed decision-making in various industries.

### **Business Statistics**

#### **(2-0-2) 3Credits**

This course attempts at inculcating in students the knowledge in the area of statistics. The main topics covered are various measures of central tendency and measures of dispersion, probability theory, probability distributions, correlation and regression analysis, introduction to sampling theory and sampling distributions.

### **Business Research Methods**

#### **(2-0-2) 3Credits**

The course focuses on the analysis of business problems and the use of scientific research as a problem solving tool. This 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.

### **Leadership for India Inc: Practical Concepts and Constructs**

#### **(3-0-0) 3 Credits**

The 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.

## **Online Communication in the Digital Age**

### **(3-0-0) 3 Credits**

Communication as the fundamental nature of human existence suggests a harmonious blend of personal expression, social interaction, and mass dissemination. The evolving landscape of technology and its impact on how we communicate necessitates an integrated approach that should acknowledge these interconnections and must provide a more comprehensive understanding of contemporary facets of communication in the digital age. To explore such interventions, the present course encompasses various aspects of technical communication, workplace communication, CMC, artificial intelligence, digital humanities, gender dynamics, digital rhetoric and literacy, networking, advertising, and marketing strategies, and online support in creating and sustaining a digital presence in the online communities through blogging and microblogging. This course will also help the participants to get familiar with the concepts like online deception, ethical dimensions of digital communication and behavior, learn more about transformative potential of future technologies such as augmented reality, virtual reality, avatars and beyond. The course, therefore, aims to foster critical thinking, instill awareness of ethical engagement, and empower students to combat future challenges. By the end of the course, students will have a comprehensive grasp of the principles and applications of digital communication, equipping the skills to navigate, contribute, and evaluate communication in the digital world by bringing people, society, and the world closer and share, grow collectively.

## **Psychology of Stress, Health and Well-being**

### **(3-0-0) 3 Credits**

In today's world, mental distress and disorders are common and accounting for a significant burden of disability within nations. However, at the same time, there has been a growing interest in understanding and enhancing positive mental health and wellbeing particularly in the field of psychology. Overall, this course systematically addresses the issues of health, adjustment and well-being. It reviews the topics of stress and health while adding happiness and well-being theory and research to enrich our understanding of both negative and positive side of human behavior. Overall, this course will attempt to provide insights from the field of psychology to make your life more satisfying and meaningful.

## **United Nations Sustainable Development Goals (UN SDGs)**

### **(3-0-0) 3 Credits**

UN SDGs are a roadmap for a paradigm shift in the prevalent economic model. The course tries to establish the underlying understanding behind this UN-led initiative, the value of sustainable development, how it touches our lives, and the efforts required to achieve them. The course intends to elaborate on the evolution of scope under the dynamic concept of sustainability and UN SDGs-led cohesive societal framework to evolve a resilient community worldwide. The course elaborates on seventeen UN SDGs, mapping their systemic perspectives and the need for tomorrow. It talks about the interconnectedness of the planet, products, processes wrt SDGs. It touches on the Paris agreement on climate change, India's participation in it, and its commitment to SDGs. It also shows a glimpse of innovation-led design processes to undertake challenges in its path. The course uses case studies from India and international examples to better understand issues, approaches, and solutions. The newly developed course is framed using state-of-the-art studies, policy documents, reports, and research works.

## **Soft Skills**

### **(3-0-0) 3 Credits**

Soft Skills, a buzz word today has attracted the attention of students, professionals and entrepreneurs all over the world. Employability, being the major concern today, every individual aims at getting coveted jobs. Employability today is commensurate with proving multiple skills in varied situations in a fast changing world. Hence, everyone aspiring for jobs today has to prove one's mettle in various situations where one requires to be armed with different skills, which, collectively come under Soft Skills. One may be armed with good competence of one's subject but one cannot compete with his peer groups unless one has the potential of performance. Performance can be ensured with the demonstration of certain abilities that can help a professional communicate, corroborate, convince, evaluate and look into the continuing as well as the upcoming trends of the corporate world from time to time. The course aims at creating awareness among the stock holders of the corporate world in which the role of individuals as team players and also as responsible leaders materializes to a great extent. The course, with its interactive and need based modules, will address various challenges of communication as well as behavioural skills faced by individuals at workplace and organizations in bridging the gaps through effective skills of interviews, group discussions, meeting management, presentations and nuances of drafting various business documents for sustainability in today's global world.

## **Innovation in Marketing and Marketing of Innovation**

### **(3-0-0) 3 Credits**

This course brings together the fields of marketing and innovation in an integrated subject that enables students, executives, entrepreneurs and all others who are inquisitive about innovation in marketing and marketing of innovation to develop an insight and to practically use it. It is curated to provide conceptual as well as practical knowledge of both 'innovation in marketing' and 'marketing innovation'. The idea is to unfold the intricacies of innovation in the light of marketing and intricacies of marketing in the light of innovation.

## **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, 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 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 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.

## BBA ENTREPRENEURSHIP AND FAMILY BUSINESS SCHEME 2024-2025

Semester	Semester Course Code, Course Name (L-T-P) Credits							Community Service	GP	Hrs. Per week			Contact Hours per Sem	Credits
1	BSL102 Principles of Management (2-1-0) 3	BSL103 Marketing Management (2-1-0) 3	CML101 Professional Accounting (2-0-2) 3	Fundamentals of Business Environment (2-1-0) 3	BSL105 Fundamentals of Organizational Behavior (2-1-0) 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	BSL104 Human Resource Management (2-1-0) 3	CML107 Introduction to Banking (2-1-0) 3	Financial Management (3-1-0) 4	Managerial Economics (3-0-0) 3	CHL100 Environmental Studies (3-0-0) 3 <span style="color: red;">MOOC</span>	CLL130 Effective Comm-I (1-0-2) 2		BSS102 CS-II (140 Hrs)* 2 Credits	BSR102 GP-II 1 Credit	12	0	10	22*15=330	21
Summers	BST201 Internship I/ Vocational Course# OR BSD201 Minor Project				(0-0-8) 4								8	4
EXIT WITH UG CERTIFICATE IN BUSINESS ADMINISTRATION														
3	Business Statistics (2-0-2) 3	BSL201 Operations Management (2-1-0) 3	CML109 Business Laws (3-0-0) 3	BSL304 Investment Management (2-1-0) 3	ENL212 Corporate Governance & Sustainability (3-0-0) 3	CLL140 Effective Comm-II (1-0-2) 2	Program Elective I (2-0-2) 3	BSS201 CS-III	BSR201 GP-III 1 credit	14		12	26*15=390	21
4	Business Research Methods (2-0-2) 3	BSL209 Ecommerce (2-1-0) 3	BSV301 Creative thinking and Negotiation Skills (2-0-2) 3	Foreign Language Elective (1-2-0) 3	Open Elective-I (2-0-2) 3 <span style="color: red;">MOOC</span>	Programme Elective –II (2-0-2) 3		BSS202 CS-IV (140 Hrs)* 2 Credits	BSR202 GP-IV 1 credit	11	2	10	21*15=315	21
Summers	BST301 Summer Internship				(0-0-8) 4								8	4
EXIT WITH UG DILPOMA IN BUSINESS ADMINISTRATION														
5	BSL303 International Business (2-1-0) 3	BSL301 Business Policy & Strategy (2-1-0) 3	Programme Elective-III (2-0-2) 3	Programme Elective –IV (2-0-2) 3	Open Elective-II (2-0-2) 3 <span style="color: red;">MOOC</span>	Project Management (2-1-0) 3		BSS301 CS-V	BSR301 GP-V 1 credit	12	0	12	24*15=360	19
6	BSL101 Entrepreneurship (2-1-0) 3	Programme Elective –V (2-0-2) 3	Programme Elective –VI (2-0-2) 3 <span style="color: red;">MOOC</span>	Open Elective-III (2-0-2) 3 <span style="color: red;">MOOC</span>	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
														131

### EXIT WITH UG DEGREE IN BUSINESS ADMINISTRATION

- NOTE: -Students shall utilize the internship period (6-8 weeks) to complete 140 hours of serving the community.
- 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. Student also complete work based vocational course/internship/project of 4 credits during the summer vacation of the first semester. Student who opts to exit after completion of first year and have earned a minimum of 42 credits at university, will be awarded UG certificate.
  - The student will be awarded Specialization Certificate in Entrepreneurship and Family Business at the end of 3 years upon completion of the required number of credits and program electives.

**BBA-EFB  
OVERALL CREDIT STRUCTURE**

Category	Credits
Major Core	55
Ability Enhancement	10
Major Project	6
Skill Enhancement	8
General Proficiency	6
Minor Stream	22
Multidisciplinary	9
Community Service	6
Value Added Courses	5
Summer Internship	4
<b>Total Credits</b>	<b>131</b>

Major Core		L-T-P	C
BSL102	Principles of Management	2-1-0	3
BSL103	Marketing Management	2-1-0	3
CML101	Professional Accounting	2-0-2	3
	Fundamentals of Business Environment	2-1-0	3
BSL105	Fundamentals of Organizational Behavior	2-1-0	3
BSL104	Human Resource Management	2-1-0	3
CML107	Introduction to Banking	2-1-0	3
CML108	Financial Management	3-1-0	4
	Managerial Economics	3-0-0	3
	Business Statistics	2-0-2	3
BSL201	Operations Management	2-1-0	3
CML109	Business Laws	3-0-0	3
BSL304	Investment Management	2-1-0	3
	Business Research Methods	2-0-2	3
BSL 209	E-commerce	2-1-0	3
BSL303	International Business	2-1-0	3
BSL301	Business Policy & Strategy	2-1-0	3
	Project Management	2-1-0	3

<b>General Proficiency</b>		
<b>Code</b>	<b>Name</b>	<b>Credit</b>
<b>BSR101</b>	GP-I	1
<b>BSR102</b>	GP-II	1
<b>BSR201</b>	GP-III	1
<b>BSR202</b>	GP-IV	1
<b>BSR301</b>	GP-V	1
<b>BSR302</b>	GP-VI	1

<b>Community Service</b>		
<b>Code</b>	<b>Name</b>	<b>Credit</b>
<b>BSS101</b>	Community Service (CS-I)	2
<b>BSS102</b>	Community Service (CS-II)	
<b>BSS201</b>	Community Service (CS-III)	2
<b>BSS202</b>	Community Service (CS-IV)	
<b>BSS301</b>	Community Service (CS-V)	2
<b>BSS302</b>	Community Service (CS-VI)	

<b>Skill Enhancement Courses</b>			
<b>Code</b>	<b>Name</b>	<b>L-T-P</b>	<b>Credit</b>
<b>CSV100</b>	Basic Computer Skills for Professions	0-0-4	2
<b>BSL 101</b>	Entrepreneurship	2-1-0	3
<b>BSV301</b>	Creative thinking and Negotiation Skills	2-0-2	3

<b>Ability Enhancement</b>			
<b>Code</b>	<b>Name</b>	<b>L-T-P</b>	<b>Credit</b>
<b>CHL100</b>	Environmental Studies	3-0-0	3
<b>CLL130</b>	Effective Communication I	1-0-2	2
<b>CLL140</b>	Effective Communication II	1-0-2	2
	<b>Foreign Language Elective</b>	1-2-0	3

**MINOR STREAM  
PROGRAMME ELECTIVES**

<b>ENTREPRENEURSHIP &amp; FAMILY BUSINESS</b>			
	<b>Programme Electives</b>	<b>L-T-P</b>	<b>Credit</b>
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
BSL384	Human Resource Management in Family Business	2-0-2	3
BSL385	Business Plan	2-0-2	3
BSL383	B2B Marketing	2-0-2	3
BSL204	Consumer Behavior	2-0-2	3
BSL366	Design Thinking and Innovation	2-0-2	3
BSL331	Customer Relationship Management	2-0-2	3

**Project Presentation & Training**

<b>Code</b>	<b>Name</b>	<b>L-T-P</b>	<b>Credit</b>
BSD201	Minor Project	0-0-8	4
BST301	Summer Internship	0-0-8	4
BSD302	Major Project	0-0-12	6

<b>Multidisciplinary</b>	<b>L-T-P</b>	<b>Credit</b>
Open Elective – I	2-0-2	3
Open Elective – II	2-0-2	3
Open Elective – III	2-0-2	3

<b>Value Added Courses</b>			
<b>Code</b>	<b>Name</b>	<b>L-T-P</b>	<b>Credit</b>
CLL 120	Human Values & Professional Ethics	2-0-0	2
ENL 212	Corporate Governance & Sustainability	3-0-0	3

## Major Changes in BBA- EFB 2024 (AGENDA POINTS)

### Addition of New Courses

Subject Code	Name of Course	L-T-P	Credits	Semester
	Fundamentals of Business Environment	2-1-0	3	1
	Financial Management	3-1-0	4	2
	Managerial Economics	3-0-0	3	2
	Business Statistics	2-0-2	3	3
ENL 212	Corporate Governance & Sustainability	3-0-0	3	4
	Business Research Methods	2-0-2	3	4
	Project Management	2-1-0	3	5
BSL204	Consumer Behavior	2-0-2	3	PE
BSL366	Design Thinking and Innovation	2-0-2	3	PE
BSL331	Customer Relationship Management	2-0-2	3	PE
2 PE 's	2 additional Program Electives making total 4+2=6 PE's ( I PE Sem 3 & II PE Sem 4)	2-0-2	3	3 & 4

### Deletion of Courses

Subject Code	Name of Course	L-T-P	Credits	Semester
CML110	Communication & Documentation in Business	2-0-2	3	3
ENL101	Statistics & Research Methodology-I	2-0-2	3	2
ENL204	Statistics & Research Methodology-II	2-0-2	3	3
CML108	Financial Management-I	2-0-2	3	2
CML208	Financial Management-II	2-0-2	3	3
BSL 204	Fundamentals of Consumer Behavior	2-0-2	3	4
BSL302	Leadership	2-0-2	3	4
ENL210	Fundamentals of Spreadsheet Modelling	2-0-2	3	4
BSL386	Corporate Governance and Ethics	2-0-2	3	PE

### Shifting of Courses from one Semester to another

Course Code	Course Name	Old	New
CML109	Business Laws	1	3
BSL101	Entrepreneurship	2	6
CML107	Introduction to Banking	2	3
BSV301	Creative thinking and Negotiation Skills	5	4
BSL301	Business Policy and Strategy	5	6
BSL 209	E-Commerce	3	4
BSL 207	Introduction to Marketing Management (New Nomenclature BSL 103 Marketing Management)	3	1
BSL 105	Fundamentals of Organization Behavior	4	1
BSL304	Investment Management	6	3

**CODE/ NOMENCLATURE CHANGED**

NEW		OLD	
Subject Code	Name of Course	Subject Code	Name of Course
BSL 103	Marketing Management	BSL 207	Introduction to Marketing Management
BSL104	Human Resource Management	BSL203	Human Resource Management
	Financial Management	BSL	Fundamentals of Financial Management
ENL102	Managerial Economics	ENL102	Principles of Economics
BSL201	Operations Management	BSL201	Fundamentals of Operations Management
BSL 105	Fundamentals of Organization Behavior	BSL 202	Introduction to Organization Behavior
BSL385	Business Plan	BSL385	Formulating Business Plan

**L-T-P / Credit Change**

Course Code	Course Name	Old	New
BSL102	Principles of Management	2-0-2	2-1-0
BSL103	Marketing Management (Earlier Introduction to Marketing Management)	2-0-2	2-1-0
BSL105	Fundamentals of Organizational Behavior	2-0-2	2-1-0
BSL104	Human Resource Management	2-0-2	2-1-0
CML107	Introduction to Banking	2-0-2	2-1-0
ENL102	Managerial Economics (Earlier Principles of Economics)	2-0-2	3-0-0
BSL201	Operations Management	2-0-2	2-1-0
CML109	Business Laws	2-0-2	3-0-0
BSL304	Investment Management	2-0-2	2-1-0
BSL209	E-commerce	2-0-2	2-1-0
BSL303	International Business	2-0-2	2-1-0
BSL301	Business Policy & Strategy	2-0-2	2-1-0
BSL101	Entrepreneurship	2-0-2	2-1-0

<b>OVERALL CREDIT STRUCTURE- BBA-EFB</b>		
<b>Category</b>	<b>Credits</b>	<b>Credits</b>
	<b>New</b>	<b>Old</b>
Programme Core	55	60
Ability Enhancement	10	15
Project Presentation & Training	14	14
Skill Enhancement	8	8
General Proficiency	6	6
Program Electives	18	12
Open Electives	9	9
Community Service	6	6
Value Added Courses	5	
<b>Total Credits</b>	<b>131</b>	<b>130</b>

## **COURSE DESCRIPTION- BBA ENTREPRENEURSHIP & FAMILY BUSINESS**

### **BSL204 Consumer Behavior**

#### **3 Credits (2-0-2)**

This course includes - 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.

### **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.

### **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 & strategies, pricing, branding, social marketing and scaling of venture for a sustainable entrepreneurship.

### **BSL385 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.

### **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.

### **BSL366 Design Thinking and Innovation**

#### **3 credits (2-0-2)**

Today innovation is everyone'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 problem-solving approach. We also look at several stories from different organizations that used design thinking to uncover compelling solutions.

### **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 customer loyalty, media allocation, distribution channels and 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 techniques using industry-standard software. Individual customer approach and the role of technology in CRM.

### **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 start up and development phase financial and management problems.

## BBA-BA SCHEME OF STUDY 2024-2025

Semester	Semester Course Code, Course Name (L-T-P) Credits							Community Service	GP	Hrs. Per week			Contact Hours per Sem	Credits
1	BSL102 Principles of Management (2-1-0) 3	BSL103 Marketing Management (2-1-0) 3	CML101 Professional Accounting (2-0-2) 3	Fundamentals of Business Environment (2-1-0) 3	BSL105 Fundamentals of Organizational Behavior (2-1-0) 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	BSL104 Human Resource Management (2-1-0) 3	CML107 Introduction to Banking (2-1-0) 3	Financial Management (3-1-0) 4	Managerial Economics (3-0-0) 3	CHL100 Environmental Studies (3-0-0) 3	CLL130 Effective Comm-I (1-0-2) 2		BSS102 CS-II (140 Hrs)*  2 Credits	BSR102 GP-II  1 Credit	12	0	10	22*15=330	21
Summers	BST201 Internship I/ Vocational Course# OR BSD201 Minor Project				(0-0-8) 4								8	4
<b>EXIT WITH UG CERTIFICATE IN BUSINESS ADMINISTRATION</b>														
3	Business Statistics (2-0-2) 3	BSL201 Operations Management (2-1-0) 3	CML109 Business Laws (3-0-0) 3	BSL304 Investment Management (2-1-0) 3	ENL212 Corporate Governance & Sustainability (3-0-0) 3	CLL140 Effective Comm-II (1-0-2) 2	Program Elective I (2-0-2) 3	BSS201 CS-III	BSR201 GP-III  1 credit	14		12	26*15=390	21
4	Business Research Methods (2-0-2) 3	BSL209 Ecommerce (2-1-0) 3	BSV301 Creative thinking and Negotiation Skills (2-0-2) 3	Foreign Language Elective (1-2-0) 3	Open Elective-I (2-0-2) 3 <span style="color: red;">MOOC</span>	Programme Elective –II (2-0-2) 3		BSS202 CS-IV (140 Hrs)*  2 Credits	BSR202 GP-IV  1 credit	11	2	10	21*15=315	21
Summers	BST301 Summer Internship				(0-0-8) 4								8	4
<b>EXIT WITH UG DILPOMA IN BUSINESS ADMINISTRATION</b>														
5	BSL303 International Business (2-1-0) 3	BSL301 Business Policy & Strategy (2-1-0) 3	Programme Elective-III (2-0-2) 3	Programme Elective –IV (2-0-2) 3	Open Elective-II (2-0-2) 3 <span style="color: red;">MOOC</span>	Project Management (2-1-0) 3		BSS301 CS-V	BSR301 GP-V  1 credit	12	0	12	24*15=360	19
6	BSL101 Entrepreneurship (2-1-0) 3	Programme Elective –V (2-0-2) 3	Programme Elective –VI (2-0-2) 3 <span style="color: red;">MOOC</span>	Open Elective-III (2-0-2) 3 <span style="color: red;">MOOC</span>	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
														131
<b>EXIT WITH UG DEGREE IN BUSINESS ADMINISTRATION</b>														

NOTE: -Students shall utilize the internship period (6-8 weeks) to complete 140 hours of serving the community.

-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. Student also complete work based vocational course/internship/project of 4 credits during the summer vacation of the first semester. Student who opts to exit after completion of first year and have earned a minimum of 42 credits at university, will be awarded UG certificate.

- The student will be awarded Specialization Certificate in Business Analytics at the end of 3 years upon completion of the required number of credits and program electives.

**BBA-BA  
OVERALL CREDIT STRUCTURE**

Category	Credits
Major Core	55
Ability Enhancement	10
Major Project	6
Skill Enhancement	8
General Proficiency	6
Minor Stream	22
Multidisciplinary	9
Community Service	6
Value Added Courses	5
Summer Internship	4
<b>Total Credits</b>	<b>131</b>

Major Core		L-T-P	C
BSL102	Principles of Management	2-1-0	3
BSL103	Marketing Management	2-1-0	3
CML101	Professional Accounting	2-0-2	3
	Fundamentals of Business Environment	2-1-0	3
BSL105	Fundamentals of Organizational Behavior	2-1-0	3
BSL104	Human Resource Management	2-1-0	3
CML107	Introduction to Banking	2-1-0	3
CML108	Financial Management	3-1-0	4
	Managerial Economics	3-0-0	3
	Business Statistics	2-0-2	3
BSL201	Operations Management	2-1-0	3
CML109	Business Laws	3-0-0	3
BSL304	Investment Management	2-1-0	3
	Business Research Methods	2-0-2	3
BSL 209	E-commerce	2-1-0	3
BSL303	International Business	2-1-0	3
BSL301	Business Policy & Strategy	2-1-0	3
	Project Management	2-1-0	3

<b>General Proficiency</b>		
<b>Code</b>	<b>Name</b>	<b>Credit</b>
<b>BSR101</b>	GP-I	1
<b>BSR102</b>	GP-II	1
<b>BSR201</b>	GP-III	1
<b>BSR202</b>	GP-IV	1
<b>BSR301</b>	GP-V	1
<b>BSR302</b>	GP-VI	1

<b>Community Service</b>		
<b>Code</b>	<b>Name</b>	<b>Credit</b>
<b>BSS101</b>	Community Service (CS-I)	2
<b>BSS102</b>	Community Service (CS-II)	
<b>BSS201</b>	Community Service (CS-III)	2
<b>BSS202</b>	Community Service (CS-IV)	
<b>BSS301</b>	Community Service (CS-V)	2
<b>BSS302</b>	Community Service (CS-VI)	

<b>Skill Enhancement Courses</b>			
<b>Code</b>	<b>Name</b>	<b>L-T-P</b>	<b>Credit</b>
<b>CSV100</b>	Basic Computer Skills for Professions	0-0-4	2
<b>BSL 101</b>	Entrepreneurship	2-1-0	3
<b>BSV301</b>	Creative thinking and Negotiation Skills	2-0-2	3

<b>Ability Enhancement</b>			
<b>Code</b>	<b>Name</b>	<b>L-T-P</b>	<b>Credit</b>
<b>CHL100</b>	Environmental Studies	3-0-0	3
<b>CLL130</b>	Effective Communication I	1-0-2	2
<b>CLL140</b>	Effective Communication II	1-0-2	2
	<b>Foreign Language Elective</b>	1-2-0	3

**MINOR STREAM  
PROGRAMME ELECTIVES**

<b>Business Analytics</b>		
<b>Programme Electives</b>	<b>L-T-P</b>	<b>Credit</b>
Fundamentals of Econometrics	2-0-2	3
Fundamentals of Predictive Modelling	2-0-2	3
Introduction to Statistical Programming using R	2-0-2	3
Fundamentals of data mining	2-0-2	3
Fundamentals of Big data analytics	2-0-2	3
Data visualization	2-0-2	3
Financial Analytics	2-0-2	3

**Project Presentation & Training**

<b>Code</b>	<b>Name</b>	<b>L-T-P</b>	<b>Credit</b>
BSD201	Minor Project	0-0-8	4
BST301	Summer Internship	0-0-8	4
BSD302	Major Project	0-0-12	6

<b>Multidisciplinary</b>	<b>L-T-P</b>	<b>Credit</b>
Open Elective – I	2-0-2	3
Open Elective – II	2-0-2	3
Open Elective – III	2-0-2	3

<b>Value Added Courses</b>			
<b>Code</b>	<b>Name</b>	<b>L-T-P</b>	<b>Credit</b>
CLL 120	Human Values & Professional Ethics	2-0-0	2
ENL 212	Corporate Governance & Sustainability	3-0-0	3

## Major Changes in BBA- BA 2024 (AGENDA POINTS)

### Addition of New Courses

Subject Code	Name of Course	L-T-P	Credits	Semester
	Fundamentals of Business Environment	2-1-0	3	1
	Financial Management	3-1-0	4	2
	Managerial Economics	3-0-0	3	2
	Business Statistics	2-0-2	3	3
ENL 212	Corporate Governance & Sustainability	3-0-0	3	4
	Business Research Methods	2-0-2	3	4
	Project Management	2-1-0	3	5
	Financial Analytics	2-0-2	3	3
ENL318	Introduction to Statistical Programming using R	2-0-2	3	4
2 PE 's	2 additional Program Electives making total 4+2=6 PE's ( I PE Sem 3 & II PE Sem 4)	2-0-2	3	3 & 4

### Deletion of Courses

Subject Code	Name of Course	L-T-P	Credits	Semester
CML110	Communication & Documentation in Business	2-0-2	3	3
ENL101	Statistics & Research Methodology-I	2-0-2	3	2
ENL204	Statistics & Research Methodology-II	2-0-2	3	3
CML108	Financial Management-I	2-0-2	3	2
CML208	Financial Management-II	2-0-2	3	3
BSL 204	Fundamentals of Consumer Behavior	2-0-2	3	4
BSL302	Leadership	2-0-2	3	4
ENL210	Fundamentals of Spreadsheet Modelling	2-0-2	3	4
BSL355	Consumer Behaviour and Analysis	2-0-2	3	PE
BSL356	Applications in Digital Marketing	2-0-2	3	PE
BSL216	Digital Businesses	2-0-2	3	PE
BSL358	Multi-criteria decision making	2-0-2	3	PE
BSL360	Supply Chain Analytics	2-0-2	3	PE
BSL361	Fundamentals of Time Series Analysis	2-0-2	3	PE
BSL362	Social Media and Web Analytics	2-0-2	3	PE

**Shifting of Courses from one Semester to another**

Course Code	Course Name	Old	New
CML109	Business Laws	1	3
BSL101	Entrepreneurship	2	6
CML107	Introduction to Banking	2	3
BSV301	Creative thinking and Negotiation Skills	5	4
BSL301	Business Policy and Strategy	5	6
BSL 209	E-Commerce	3	4
BSL 207	Introduction to Marketing Management (New Nomenclature BSL 103 Marketing Management)	3	1
BSL 105	Fundamentals of Organization Behavior	4	1
BSL304	Investment Management	6	3

**CODE/ NOMENCLATURE CHANGED**

NEW		OLD	
Subject Code	Name of Course	Subject Code	Name of Course
BSL 103	Marketing Management	BSL 207	Introduction to Marketing Management
BSL104	Human Resource Management	BSL203	Human Resource Management
	Financial Management	BSL	Fundamentals of Financial Management
ENL102	Managerial Economics	ENL102	Principles of Economics
BSL201	Operations Management	BSL201	Fundamentals of Operations Management
BSL 105	Fundamentals of Organization Behavior	BSL 202	Introduction to Organization Behavior
BSL385	Business Plan	BSL385	Formulating Business Plan

**L-T-P / Credit Change**

Course Code	Course Name	Old	New
BSL102	Principles of Management	2-0-2	2-1-0
BSL103	Marketing Management (Earlier Introduction to Marketing Management)	2-0-2	2-1-0
BSL105	Fundamentals of Organizational Behavior	2-0-2	2-1-0
BSL104	Human Resource Management	2-0-2	2-1-0
CML107	Introduction to Banking	2-0-2	2-1-0
ENL102	Managerial Economics (Earlier Principles of Economics)	2-0-2	3-0-0
BSL201	Operations Management	2-0-2	2-1-0
CML109	Business Laws	2-0-2	3-0-0
BSL304	Investment Management	2-0-2	2-1-0
BSL209	E-commerce	2-0-2	2-1-0
BSL303	International Business	2-0-2	2-1-0
BSL301	Business Policy & Strategy	2-0-2	2-1-0
BSL101	Entrepreneurship	2-0-2	2-1-0

<b>OVERALL CREDIT STRUCTURE- BBA-BA</b>		
<b>Category</b>	<b>Credits</b>	<b>Credits</b>
	<b>New</b>	<b>Old</b>
Programme Core	55	60
Ability Enhancement	10	15
Project Presentation & Training	14	14
Skill Enhancement	8	8
General Proficiency	6	6
Program Electives	18	12
Open Electives	9	9
Community Service	6	6
Value Added Courses	5	
<b>Total Credits</b>	<b>131</b>	<b>130</b>

<b>Broad Category of Course Minimum Credit</b>						
<b>S. No.</b>	<b>Requirement</b>	<b>3-year UG</b>		<b>4-Year UG</b>		<b>Description</b>
		<b>UGC BBA</b>	<b>NCU BBA</b>	<b>UGC BBA</b>	<b>NCU BBA</b>	
1	Major (Core)	60	48	80	65	Core courses
2	Minor Stream	24	22	32	28	PEs & Minor project
3	Multidisciplinary	9	9	9	12	Open Electives
4	Ability Enhancement Courses (AEC)	8	10	8	10	Eff. Comm I & Eff. Comm. II, Foreign Lang., EVS
5	Skill Enhancement Courses (SEC)	9	8	9	8	Creativity & Negotiation Skills, Computer Applications, Entrepreneurship
6	Value Added Courses common for all UG	06-08	5	06-08	5	HVPE, Corporate Governance & Sustainability
7	Summer Internship	02-04	4	02-04	4	
8	Major Project		6		6	
9	CS & GP		12		12	
10	Research Project / Dissertation	-	-	12	14	
	<b>Total</b>	<b>120</b>	<b>124</b>	<b>160</b>	<b>164</b>	

## **COURSE DESCRIPTION- BBA-BUSINESS ANALYTICS**

### **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.

### **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.

### **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.

### **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 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.

### **Financial Analytics**

#### **3 Credits (2-0-2)**

Financial Analytics explores the use of quantitative methods and data analysis techniques to interpret financial data, identify trends, and make informed decisions in the realm of finance. This course delves into various topics such as financial modeling, risk assessment, portfolio management, and predictive analytics. Students will learn to utilize statistical tools, programming languages, and software applications to analyze financial markets, evaluate investment opportunities, and optimize financial strategies. Through hands-on projects and case studies, participants develop proficiency in leveraging data-driven insights to navigate complex financial landscapes and enhance decision-making processes for individuals, corporations, and financial institutions

### **ENL 212 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 insider trading, 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.

### **Fundamentals of Financial Management**

#### **3 Credits (2-0-2)**

This course aims to equip the students with the fundamental principles & techniques of financial management concern with acquisition & use of funds by a business firm. 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.

### **Business Statistics**

#### **3 credits (2-0-2)**

Measures of Central tendency, Dispersion (variation) and kurtosis their measures, their characteristics (merits and demerits) and application. 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, 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.

### **Business Environment**

#### **3 credits (2-0-2)**

This course provides a comprehensive understanding of the multifaceted dynamics shaping modern business operations. Divided into five units, it delves into various dimensions crucial for business success in today's globalized landscape. Students will grasp the foundational concepts of the business environment, including its components, interactions, and significance for organizational strategy and decision-making. The course includes exploring the economic factors influencing businesses, students analyze market structures, macroeconomic indicators, fiscal and monetary policies, trade dynamics, and global economic trends. Also, the course will help students to examine how societal norms, cultural values, demographics, and lifestyle patterns impact consumer behavior, marketing strategies, and organizational practices. Students will evaluate the influence of governmental policies, regulations, political stability, and international relations on business operations, risk management, and strategic planning. It also addresses green initiatives, emerging technologies, digital transformation, and their implications for businesses. Through case studies, discussions, and practical applications, students gain insights into navigating the complexities of the business environment to drive innovation, growth, and sustainable development.

### **Managerial Economics**

#### **3 credits (2-0-2)**

This course explores the economic theories and concepts essential for understanding how firms make strategic choices in a competitive environment. Through case studies, practical examples, and analytical frameworks, students will develop critical thinking skills to address real-world business challenges. Topics covered include demand analysis, production and cost theory, market structures, pricing strategies, game theory, risk analysis, and decision-making under uncertainty.

## B.COM(H) SCHEME OF STUDY 2024-2025

Semester	Semester Course Code, Course Name(L-T-P) Credits							COMMUNITY SERVICE	GP	Hrs. Per week			Contact Hours per Semester	Credits	
										L	T	P			
1	BSL 102 Principles of Management (2-1-0) 3	Managerial Economics (3-0-0) 3	CML107 Introduction to Banking (2-1-0) 3	CML101 Professional Accounting (2-0-2) 3	CML109 Business Laws (3-0-0) 3	CHL100 Environmental Studies (3-0-0) 3		CMS101 CS-I	CMR101 GP-I 1 Credit	15	2	2	19*15=285	18+1=19	
2	BSL 103 Marketing Management (2-1-0) 3	BSL 105 Fundamentals of Organizational Behaviour (2-1-0) 3	ENL104 Business Mathematics (2-0-2) 3	CLL120 Human Values & Professional Ethics (2-0-0) 2	CSV100 Basic Computer Skills for Professionals (0-0-4) 2	CML302 Management Accounting (2-0-2) 3	CLL130 Effective Comm - I (1-0-2) 2	CMS102 CS-II (140 HRS) 2 Credit	CMR102 GP-II 1 Credit	11	2	10	23*15 =345	18+3=21	
Summers	CMD201 Minor Project (0-0-8) 4														4
EXIT WITH UG CERTIFICATE IN COMMERCE															
3	Financial Management (3-1-0) 4	Statistics & Research Methodology (2-0-2) 3	CML203 Fundamentals of Auditing (2-0-2) 3	BSL209 Ecommerce (2-1-0) 3	Program Elective I (2-0-2) 3	CLL140 Effective Comm-II (1-0-2) 2		CMS201 CS-III	CMR201 GP-III 1 Credit	12	2	8	22*15=330	18+1=19	
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	Foreign Language Elective (1-2-0) 3	BSL204 Human Resource Management (2-1-0) 3	Program Elective II (2-0-2) 3		CMS202 CS-IV (140 HRS) 2 Credit	CMR202 GP-IV 1 Credit	12	3	6	21*15=315	18+3=21	
Summers	CMT301 Summer Internship (0-0-8) 4														4
EXIT WITH UG DIPLOMA IN COMMERCE															
5	CML301 Cost Accounting (2-0-2) 3	CML303 Indirect Taxation (GST) (2-0-2) 3	BSL301 Business Policy & Strategy (2-1-0) 3	BSV301 Creative Thinking & Negotiation Skills (2-0-2) 3	Program Elective III (2-0-2) 3	Program Elective IV (2-0-2) 3	Open Elective I (2-0-2) 3 MOOC	CMS301 CS-V	CMR301 GP-V 1 Credit	14	1	12	27*15=405	21+1=22	
6	BSL101 Entrepreneurship (2-1-0) 3	CML304 Micro Finance (2-1-0) 3	Program Elective V (2-0-2) 3	Program Elective VI (2-0-2) 3 MOOC	Open Elective II (2-0-2) 3 MOOC	CMD 302 Major Project (0-0-12) 6		CMS302 CS-VI (140 HRS) 2 Credit	CMR302 GP-VI 1 Credit	10	2	6	18*15=270	21+3=24	
														Total 134 Credits	
EXIT WITH UG DEGREE HONS. IN COMMERCE															

\* Students shall complete the required 140 community service hours across the

**B****OVERALL CREDIT STRUCTURE**

<b>Category</b>	<b>Credits</b>
Major (Core)	61
Minor Stream (PE +Minor Project)	22
Multidisciplinary Courses	06
Skill Enhancement Course (ACE)	08
Ability Enhancement Course (SCE)	10
Value Added Course	05
Summer Internship	04
Major Project	06
GP & CS	12
<b>Total Credits</b>	<b>134</b>

**Programme Core****L-T-P C**

BSL102	Principles of Management	2-1-0	3
	Managerial Economics	3-0-0	3
CML101	Professional Accounting	2-0-2	3
CML107	Introduction to Banking	2-1-0	3
CML109	Business Laws	3-0-0	3
BSL103	Marketing Management	2-1-0	3
BSL105	Fundamentals to Organizational Behavior	2-1-0	3
ENL104	Business Mathematics	2-0-2	3
CML302	Management Accounting	2-0-2	3
	Financial Management	3-1-0	4
	Statistics & Research Methodology	2-0-2	3
CML203	Fundamentals of Auditing	2-0-2	3
BSL209	E-Commerce	2-1-0	3
CML202	Income Tax & Practice	2-0-2	3
CML204	Corporate Accounting	2-0-2	3
BSL204	Human Resource Management	2-1-0	3

CML301	Cost Accounting	2-0-2	3
CML303	Indirect Taxation (GST)	2-0-2	3
BSL301	Business Policy & Strategy	2-1-0	3
CML304	Micro Finance	2-1-0	3

### General Proficiency

**C**

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

### Community Service

**C**

CMS101	Community Service (CS-I)	
CMS102	Community Service (CS-II)	02 Credit
CMS201	Community Service (CS-III)	02 Credit
CMS202	Community Service (CS-IV)	
CMS301	Community Service (CS-V)	02 Credit
CMS302	Community Service (CS-VI)	

### Skill Enhancement Courses

**L-T-P C**

CSV100	Basic Computer Skills for Professionals	0-0-4	2
BSV301	Creativity and Negotiation Skills	2-0-2	3
BSL101	Entrepreneurship	2-1-0	3

### Ability Enhancement Courses

**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
	Foreign Language Elective	1-2-0	3

### Value Added Courses

**L-T-P C**

CLL120	Human Values & Professional Ethics	2-0-0	2
ENL212	Corporate Governance and Sustainability	3-0-0	3

### Minor Stream

**L-T-P C**

Program Electives – I, II, III, IV, V, VI (06)	2-0-2	18
CMD201 Minor Project	0-0-8	4

### Multidisciplinary Courses

**L-T-P C**

Open Elective – I	2-0-2	3
Open Elective – II	2-0-2	3

### Project Presentation & Training

**L-T-P C**

CMT301	Summer Internship	0-0-8	4
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CMD302	Major Project	0-0-12	6
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**PROGRAMME ELECTIVES**

**L-T-P C**

**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
BSL381	Product and Brand Management	2-0-2	3
BSL382	Marketing Communication	2-0-2	3
BSL204	Fundamentals of Consumer Behavior	2-0-2	3

**HRM**

BSL339	Recruitment and Selection	2-0-2	3
BSL340	Performance and Competency Management	2-0-2	3
BSL341	Employee Training and Development	2-0-2	3
BSL342	Industrial Relations and Indian Labour Laws	2-0-2	3
BSL343	Compensation and Reward Management	2-0-2	3
BSL344	Organization Change and Development	2-0-2	3
BSL345	Cross Culture HRM	2-0-2	3
BSL346	Fundamentals of Strategic HRM	2-0-2	3
BSL390	HR Audit	2-0-2	3
BSL392	Workplace Diversity and Inclusion	2-0-2	3
BSL302	Leadership	2-0-2	3

**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
BSL303	International Business	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
	Management of Financial Services	2-0-2	3

**Minor Stream**

**L-T-P C**

Program Electives – I, II, III, IV, V, VI (06)	2-0-2	18
CMD201 Minor Project (for BCom (H))	0-0-8	4

### Multidisciplinary Courses

**L-T-P C**

Open Elective – I	2-0-2	3
Open Elective – II	2-0-2	3

### Project Presentation & Training

**L-T-P C**

CMT301 Summer Internship (for BCom (H))	0-0-8	4
CMD302 Major Project (for BCom (H))	0-0-12	6

## BACHELOR OF COMMERCE(H)

### Addition of New Courses

Subject Code	Name of Course	L-T-P	Credits	Semester
BSL 105	Fundamentals of Organizational behaviour	2-0-2	3	II
	Financial Management	3-1-0	4	III
	Statistics & Research Methodology	2-0-2	3	III
	Programme Elective V	2-0-2	3	V
	Programme Elective VI	2-0-2	3	VI

### Deletion of Courses

Subject Code	Name of Course	L-T-P	Credits	Semester
CML110	Communication & Documentation in Business	2-0-2	3	I
CML 108	Financial Management -I	2-0-2	3	II
CML 208	Financial Management -II	2-0-2	3	III
ENL101	Statistics and Research Methodology-I	2-0-2	3	I
ENL 204	Statistics and Research Methodology-II	2-0-2	3	III

### Shifting of Courses from One Semester to Another

<b>Course Code</b>	<b>Course Name</b>	<b>Old</b>	<b>New</b>
CML 302	Management Accounting	6	2
BSL 203	HRM	3	4
ENL 104	Business Mathematics	3	2
BSL 101	Entrepreneurship	2	6
BSL 207	Introduction to Marketing Management	4	2
CML 109	Business Laws	2	1
	Program Elective I	5	3
	Program Elective II	5	4
	Program Elective III	6	5
	Program Elective IV	6	5

### Change in LTP

Course Code	Course Name	LTP (Old)	LTP (New)
BSL102	Principles of Management	2-0-2	2-1-0
CML107	Introduction to Banking	2-0-2	2-1-0
CML109	Business Laws	2-0-2	3-0-0
BSL103	Marketing Management	2-0-2	2-1-0
BSL209	E-Commerce	2-0-2	2-1-0
BSL204	Human Resource Management	2-0-2	2-1-0
BSL301	Business Policy & Strategy	2-0-2	2-1-0
CML304	Micro Finance	2-0-2	2-1-0

### Change in Nomenclature of Subjects

New		Old	
Code	Subject	Code	Subject
	Principles of Economics		Managerial Economics
	Statistics & Research Methodology	ENL 101	Statistics & Research Methodology-I
	Financial Management		Financial Management- I & II

<b>OVERALL CREDIT STRUCTURE- BCom Hons</b>	
Category	Credits
<b>Major (Core)</b>	61
<b>Minor Stream (PE +Minor Project)</b>	22
<b>Multidisciplinary Courses</b>	06
<b>Skill Enhancement Course (ACE)</b>	08
<b>Ability Enhancement Course (SCE)</b>	10
<b>Value Added Course</b>	05
<b>Summer Internship</b>	04
<b>Major Project</b>	06
<b>GP &amp; CS</b>	12
<b>Total Credits</b>	<b>134</b>

<b>Broad Category of Course Minimum Credit</b>				
<b>S. No.</b>	<b>Requirement</b>	<b>3-year UG</b>	<b>BCOM HONS</b>	<b>Description</b>
1	Major (Core)	60	61	Core courses
2	Minor Stream	24	22	6 PEs & Minor Project
3	Multidisciplinary	9	6	Open Elective (3)
4	Ability Enhancement Courses (AEC)	8	10	Eff. Comm I (2) & Eff. Comm. II (2), Foreign Lang (3), EVS (3)
5	Skill Enhancement Courses (SEC)	9	8	Creativity & Negotiation Skills (3), Computer Applications (2), Entrepreneurship (3)
6	Value Added Courses common for all UG	06-08	5	HVPE (2), Corporate Governance & Sustainability (3)
7	Summer Internship	02-04	4	
8	Major Project		6	
9	CS & GP		12	
10	Research Project / Dissertation	-	-	
	<b>Total</b>	<b>120</b>	<b>134</b>	

<b>For BCOM</b>			
<b>S. No.</b>	<b>Semester</b>	<b>No. of Courses to be offered in Blended / Full MOOC Mode</b>	<b>Remarks</b>
1	V	Open Elective – I	MOOC
2	VI	Open Elective – II	MOOC
3	VI	Program Elective VI	MOOC

## **Course Descriptions**

### **CHL 100 Environmental Studies**

#### **3 credits (3-0-0)**

1)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.

2)To apply the concepts learnt in maintaining balance in natural ecosystems and it covers all aspects of life and contributes in constructive decision-making keeping environment in view.

3)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.

4)To apply the concepts learnt in earning resources for their organizations by using green technologies.

5) It encapsulates sound theoretical base of all the environmental aspects coupled with practical and projects.

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.

### **BSL102 Principles of Management**

#### **3 Credits (2-1-0)**

1)Improvement in the ability to examine managerial issues and problems and to develop feasible alternatives that can result in better decision-making.

2)Knowledge of traditional and contemporary concepts in management.

3)Understanding the importance of effective leadership and communication as a supervisor.

4)Ability to stimulate individual and group performance.

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.

### **Statistics & Research Methodology**

#### **2 Credits (2-0-2)**

##### **Course Outcomes**

1)Student would be able to use summary statistics to describe data.

2)Student would be able to use probability theory and probability distributions in decision making.

3)Student would be able to perform basic statistical analysis using the concepts of correlation and regression.

4)Student would have the understanding of the sampling theory and sampling distributions.

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. Students will develop a comprehensive understanding of statistical concepts such as probability, hypothesis testing, and regression analysis, empowering them to proficiently analyze data and draw meaningful conclusions in diverse research contexts.

### **CML 107 Introduction to Banking**

**3 Credits (2-1-0)**

#### **Course Outcomes**

Explain the fundamentals of Indian banking system.

Define and interpret the regulations of Banking Regulation Act 1949

Define and interpret the functioning of Indian banking system.

Explain the regulatory framework of RBI and Discuss the recent developments of Indian banking system.

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 form 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 Payments Systems, Remittances and Foreign Exchange. Introduction to Banking Regulation Act, 1949, Reserve Bank of India and Foreign Exchanges will enhance the student's knowledge about its birth.

### **CML101 Professional Accounting**

**3 Credits (2-0-2)**

#### **Course Outcomes**

1) Gain the conceptual knowledge of financial accounting and to understand the concept of business incomes and expenditures using applicable accounting principles.

2) To understand the nature and purpose of Generally Accepted Accounting Principles (GAAP) and Accounting Standards.

3) To get familiar with the procedure of preparing books of final accounts for different business entities.

4) To have an understanding of Capital and Revenue Incomes, Receipts and Expenditures, Depreciation and Issuance of Shares and Debentures.

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).

### **BSL 105 Introduction to Organisational Behaviour**

**3 Credits(2-1-0)**

- 1) **Comprehension of Organizational Dynamics:** Students will gain a deep understanding of the fundamental theories and concepts underlying individual, group, and organizational behavior within diverse workplace environments.
- 2) **Application of Behavioral Principles:** Learners will develop the ability to apply key principles of organizational behavior, such as motivation, communication, and leadership, to analyze and address real-world challenges and opportunities in organizational settings.
- 3) **Enhancement of Organizational Effectiveness:** Through critical thinking, case studies, and collaborative discussions, students will acquire skills to enhance organizational effectiveness by promoting positive work relationships, fostering teamwork, and cultivating a supportive organizational culture.

The course explains fundamental dynamics shaping human behavior within workplace contexts. This course delves into theories and concepts from psychology, sociology, and management to analyze individual, group, and organizational behavior. Students investigate topics such as motivation, communication, leadership, and organizational culture to understand how they influence productivity and effectiveness in various settings. Through case studies and interactive discussions, learners develop critical thinking skills to navigate real-world challenges, foster teamwork, and enhance organizational performance. Ultimately, the course aims to equip students with insights and strategies to thrive within diverse organizational environments by leveraging the principles of organizational behavior.

**CSV100 Basic Computer Skills for Professionals**  
**2 credits (0-0-4)**

- 1) Understand the concept of IT and e-governance
- 2) Ability to work on Ms-Word
- 3) Skills to analyze the data on Excel
- 4) Knowledge of E-Commerce
- 5) Understand the electronic payment systems
- 6) Awareness about the dynamics of digital economy

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

**CLL130 Effective Communication -1**  
**2 Credits (1-0-2)**

- 1) Demonstrate the use of basic and advanced writing techniques using enriched vocabulary and grammar in various forms of writing.
- 2) Exhibit excellence in writing effectively.
- 3) Communicate effectively by overcoming the different barriers to communication.
- 4) Apply generic conventions and formats to memoranda, notices and business correspondence
- 5) Display confidence in conversational skills.

The broad topics include-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.

## **BSL101 Entrepreneurship**

### **3 Credits (2-1-0)**

- 1) Understand the importance/contribution of entrepreneurship for the society and economy.
- 2) Get motivated enough to think of entrepreneurship as an alternative career opportunity.
- 3) Understand the entrepreneurial process.
- 4) Comprehend the importance of identifying business opportunities.
- 5) Awareness of protecting one's intellectual property.
- 6) Get direction as to how to start a new enterprise & write a business plan.

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, Idea 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

## **Managerial Economics**

### **3 Credits (3-0-0)**

- 1) Understand the basic concepts of types of economics, central problems of economy, branches of economy, PPC, opportunity cost, Theory of demand, theory of supply, and elasticity of demand
- 2) Analyze the Utility, DMU, Consumer equilibrium, Law of equi marginal utility, Indifference curve, Production and laws of production.
- 3) Display an understanding of Revenue concepts, cost concepts, price determination, forms of market.
- 4) Understand the concept of National Income-Meaning, Methods of Measurement, Circular Flow of Income-Two, Three and Four Sector Economy
- 5) Ability to understand Fiscal Policy-Meaning, Objectives and Instruments; Monetary Policy-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)**

- 1) Demonstrate an ability to empathize/concern for societal issues.
- 2) Combine technical competence with the right approach to life, profession, and society.
- 3) Ability to handle professional and personal dilemmas effectively i.e. the right course of action in a given situation.
- 4) Applying professional values, ethics and attitude to complex work assignments and making decisions

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.

### **Financial Management**

#### **4 Credits (3-1-0)**

- 1) To acquaint the students of management with the basic knowledge of finance function in a corporate enterprise and to get familiar with the various sources of raising finance.
- 2) To create an understanding how a firm can create value through its financing decisions.
- 3) To understand how the profits are distributed to maximize the wealth of shareholders.
- 4) To understand the long term and short-term investment decisions taken in an enterprise

This course aims to equip the students with the fundamental principles & techniques of financial management concern with 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 Leverage: Introduction, Meaning of 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.

### **CLL140 Effective Communication II**

#### **2 credits (1-0-2)**

- 1) Communicate effectively in social and professional situations and convey the intended message with clarity and conciseness.
- 2) Compose concrete and correct formal correspondence texts viz. namely formal letters, business reports and proposals.
- 3) Effective participation using language & interpersonal skills during group discussions, debates, oral presentations and social conversations and make informed, ethical opinions on relevant global issues.
- 4) Enhanced acquisition of vocabulary & correct language structures for effective expression.
- 5) Ability to think logically and critically: use this skill in written & spoken expression.
- 6) An interest in reading of different kinds of works of renowned authors.

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)**

- 1) To understand the concept of Surds, indices and equations.
- 2) To understand the concept of Limit and Continuity of a function.
- 3) To understand the concept of differentiation and integration and its uses in business.
- 4) To understand the concept and application of determinant and matrices in business.
- 5) To understand the concept of series and sequences and their application in business

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.

### **CML203 Fundamentals of Auditing**

#### **3 Credits (2-0-2)**

- 1) To make the students understand how the audit is conducted and the objectives of auditing.
- 2) To provide an insight towards auditor's responsibilities in auditing.
- 3) To provide an insight towards various types of audit and to understand auditing through case studies.
- 4) To verify and value various assets and liabilities.

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: Qualifications and disqualifications, Appointment, Rotation, Removal, Remuneration, Rights and Duties; Auditor's Report- Contents and Types, Liabilities of Statutory Auditors under the Companies Act 2013. Special Areas of Audit: Cost audit, Tax audit and 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 (2-1-0)**

- 1) Knowledge of human resource functions, role of an HR expert and changing role of HRM.
- 2) Develop a basic understand of manpower planning and ability to apply the forecasting techniques for HRP.
- 3) Procure the knowledge of the recruitment practices followed by the companies and the mode of employee selection, designing training needs.
- 4) Understand the importance of Industrial Relations system in India. Effectively analyze the role of expatriate management, HRIS, HR Audit and other recent trends in HRM.

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 (2-1-0)**

- 1) 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
- 2) Customer relationship management
- 3) Launch successful e-business projects

Presents concepts and skills for the strategic use of e-commerce and related information technology from three perspectives: business to consumers, business-to-business, and intra-organizational. 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.

### **CML202 Income Tax and Practice**

#### **3 Credits (2-0-2)**

- 1)To know about various basic concepts used in Income tax Act
- 2)To acquaint the students with various sources of income tax
- 3)To understand the deductions, rebates and relief allowed under Income Tax Act
- 4)To make the students understand the machinery of income tax.

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. Income from Various 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 assessee'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)**

- 1) Understand the treatment of Share Capital and Debentures.
- 2) Understand the concept of Amalgamation and Internal Reconstruction.
- 3) Learn the role of Cash Flow statement.
- 4) Learn the treatments of Financial Statement

This course will introduce students with the different types of relationships amongst business entities and identify these relationships for financial reporting purposes. Helps in determining the 'reporting entities' for each inter-entity relationship and explain the appropriate accounting policy choices and 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 preparing consolidated financial statements). They could discuss the 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.

### **BSL 103 Marketing Management**

#### **3 Credits (2-1-0)**

- 1) Design marketing mix
- 2) Apply product related concepts like classification of products, product levels, product life cycle, new product development process for marketing a product.
- 3) Design model of service quality to improve service quality
- 4) Use integrated marketing communication mix.

Defining Marketing for the 21<sup>st</sup> 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.

### **ENL 212 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 insider trading, 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.

### **CML301 Cost Accounting**

#### **3 Credits (2-0-2)**

- 1) Gain understanding of basic cost and key components.
- 2) Gain understanding of various costing techniques i.e, Job costing and process costing and contract costing.
- 3) Comprehend information required for cost accumulation and assignment for calculation of work-in-progress.
- 4) Gain understanding of allocation of Labour cost and functional analysis of overheads.
- 5) Comprehend information required for cost audit.

Cost Accounting Methods and Systems: Meaning, objectives and advantages of cost accounting, Difference between cost 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)**

- 1) Understand the procedure of levy of various types of indirect taxes like, excise duty, customs duty (import and export), production linked tax, and Value Added Tax (VAT).
- 2) Enumerate sources of indirect taxes applicable in India.
- 3) Understand the concept of GST in India.

4) Understand the rules related to levy of goods and services taxes on various business entities 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)**

- 1) Make better decisions through critical thinking and creative problem solving
- 2) Learning the art of negotiation
- 3) Transform your creativity into practical business solutions.

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.

### **CML302 Management Accounting**

#### **3 Credits (2-0-2)**

- 1) Understand the role of management accounting in managerial decision making
- 2) Comprehend information required for cost accumulation and assignment for managerial planning and control.
- 3) Analyse information for decision making

Management accounting: Meaning, nature, scope and functions of 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). 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 (2-1-0)**

- 1) Understand the rationale of Micro Finance.
- 2) Understand the Financial & Operational Evaluation
- 3) Learn the trends and frontiers of Micro Finance.

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 (2-1-0)**

- 1) Identify the forces impacting on corporate and business strategies
- 2) Be critically aware of factors involved in strategy making
- 3) Assess the resources and constraints for strategy making in a business context
- 4) Specific knowledge of perspectives, frameworks and concepts within strategy formation, strategic change, and strategic innovation.

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 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.

# BBA -DIGITAL MARKETING SPECIALIZATION SCHEME OF STUDY 2024-2025

Semester	Semester Course Code, Course Name (L-T-P) Credits							Community Service	GP	Hrs. Per week			Contact Hours per Sem	Credits
1	BSL102 Principles of Management (2-1-0) 3	BSL103 Marketing Management (2-1-0) 3	CML101 Professional Accounting (2-0-2) 3	Fundamentals of Business Environment (2-1-0) 3	BSL105 Fundamentals of Organizational Behavior (2-1-0) 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	BSL104 Human Resource Management (2-1-0) 3	CML107 Introduction to Banking (2-1-0) 3	Financial Management (3-1-0) 4	Managerial Economics (3-0-0) 3	CHL100 Environmental Studies (3-0-0) 3	CLL130 Effective Comm-I (1-0-2) 2		BSS102 CS-II (140 Hrs)* 2 Credits	BSR102 GP-II 1 Credit	12	0	10	22*15=330	21
Summers	BST201 Internship I/ Vocational Course# OR BSD201 Minor Project				(0-0-8) 4								8	4
EXIT WITH UG CERTIFICATE IN BUSINESS ADMINISTRATION														
3	Business Statistics (2-0-2) 3	BSL201 Operations Management (2-1-0) 3	CML109 Business Laws (3-0-0) 3	BSL304 Investment Management (2-1-0) 3	ENL212 Corporate Governance & Sustainability (3-0-0) 3	CLL140 Effective Comm-II (1-0-2) 2	Program Elective I (2-0-2) 3	BSS201 CS-III	BSR201 GP-III 1 credit	14		12	26*15=390	21
4	Business Research Methods (2-0-2) 3	BSL209 Ecommerce (2-1-0) 3	BSV301 Creative thinking and Negotiation Skills (2-0-2) 3	Foreign Language Elective (1-2-0) 3	Open Elective-I (2-0-2) 3 <span style="color: red;">MOOC</span>	Programme Elective –II (2-0-2) 3		BSS202 CS-IV (140 Hrs)* 2 Credits	BSR202 GP-IV 1 credit	11	2	10	21*15=315	21
Summers	BST301 Summer Internship				(0-0-8) 4								8	4
EXIT WITH UG DILPOMA IN BUSINESS ADMINISTRATION														
5	BSL303 International Business (2-1-0) 3	BSL301 Business Policy & Strategy (2-1-0) 3	Programme Elective-III (2-0-2) 3	Programme Elective –IV (2-0-2) 3	Open Elective-II (2-0-2) 3 <span style="color: red;">MOOC</span>	Project Management (2-1-0) 3		BSS301 CS-V	BSR301 GP-V 1 credit	12	0	12	24*15=360	19
6	BSL101 Entrepreneurship (2-1-0) 3	Programme Elective –V (2-0-2) 3	Programme Elective –VI (2-0-2) 3 <span style="color: red;">MOOC</span>	Open Elective-III (2-0-2) 3 <span style="color: red;">MOOC</span>	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
														131
EXIT WITH UG DEGREE IN BUSINESS ADMINISTRATION														

NOTE: -Students shall utilize the internship period (6-8 weeks) to complete 140 hours of serving the community.

-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. Student also complete work based vocational course/internship/project of 4 credits during the summer vacation of the first semester. Student who opts to exit after completion of first year and have earned a minimum of 42 credits at university, will be awarded UG certificate.

- The student will be awarded Specialization Certificate in Digital Marketing at the end of 3 years upon completion of the required number of credits and program electives.

**BBA-DM  
OVERALL CREDIT STRUCTURE**

Category	Credits
Major Core	55
Ability Enhancement	10
Major Project	6
Skill Enhancement	8
General Proficiency	6
Minor Stream	22
Multidisciplinary	9
Community Service	6
Value Added Courses	5
Summer Internship	4
<b>Total Credits</b>	<b>131</b>

Major Core		L-T-P	C
BSL102	Principles of Management	2-1-0	3
BSL103	Marketing Management	2-1-0	3
CML101	Professional Accounting	2-0-2	3
	Fundamentals of Business Environment	2-1-0	3
BSL105	Fundamentals of Organizational Behavior	2-1-0	3
BSL104	Human Resource Management	2-1-0	3
CML107	Introduction to Banking	2-1-0	3
CML108	Financial Management	3-1-0	4
	Managerial Economics	3-0-0	3
	Business Statistics	2-0-2	3
BSL201	Operations Management	2-1-0	3
CML109	Business Laws	3-0-0	3
BSL304	Investment Management	2-1-0	3
	Business Research Methods	2-0-2	3
BSL 209	E-commerce	2-1-0	3
BSL303	International Business	2-1-0	3
BSL301	Business Policy & Strategy	2-1-0	3
	Project Management	2-1-0	3

<b>General Proficiency</b>		
<b>Code</b>	<b>Name</b>	<b>Credit</b>
<b>BSR101</b>	GP-I	1
<b>BSR102</b>	GP-II	1
<b>BSR201</b>	GP-III	1
<b>BSR202</b>	GP-IV	1
<b>BSR301</b>	GP-V	1
<b>BSR302</b>	GP-VI	1

<b>Community Service</b>		
<b>Code</b>	<b>Name</b>	<b>Credit</b>
<b>BSS101</b>	Community Service (CS-I)	2
<b>BSS102</b>	Community Service (CS-II)	
<b>BSS201</b>	Community Service (CS-III)	2
<b>BSS202</b>	Community Service (CS-IV)	
<b>BSS301</b>	Community Service (CS-V)	2
<b>BSS302</b>	Community Service (CS-VI)	

<b>Skill Enhancement Courses</b>			
<b>Code</b>	<b>Name</b>	<b>L-T-P</b>	<b>Credit</b>
<b>CSV100</b>	Basic Computer Skills for Professions	0-0-4	2
<b>BSL 101</b>	Entrepreneurship	2-1-0	3
<b>BSV301</b>	Creative thinking and Negotiation Skills	2-0-2	3

<b>Ability Enhancement</b>			
<b>Code</b>	<b>Name</b>	<b>L-T-P</b>	<b>Credit</b>
<b>CHL100</b>	Environmental Studies	3-0-0	3
<b>CLL130</b>	Effective Communication I	1-0-2	2
<b>CLL140</b>	Effective Communication II	1-0-2	2
	<b>Foreign Language Elective</b>	1-2-0	3

**MINOR STREAM  
PROGRAMME ELECTIVES**

<b>DIGITAL MARKETING</b>			
	<b>Programme Electives</b>	<b>L-T-P</b>	<b>Credit</b>
<b>BSL365</b>	Content Development and Marketing	2-0-2	3
<b>BSL367</b>	Digital Analytics and Campaign Planning	2-0-2	3
<b>BSL368</b>	Digital Futures	2-0-2	3
<b>BSL369</b>	Digital Media Planning and Management	2-0-2	3
<b>BSL373</b>	Mobile Marketing	2-0-2	3
<b>BSL309</b>	Digital Media Ethics and Laws	2-0-2	3
<b>BSL311</b>	Web Design & Development	2-0-2	3
<b>BSL362</b>	Social Media and Web Analytics	2-0-2	3

**Project Presentation & Training**

<b>Code</b>	<b>Name</b>	<b>L-T-P</b>	<b>Credit</b>
BSD201	Minor Project	0-0-8	4
BST301	Summer Internship	0-0-8	4
BSD302	Major Project	0-0-12	6

<b>Multidisciplinary</b>	<b>L-T-P</b>	<b>Credit</b>
Open Elective – I	2-0-2	3
Open Elective – II	2-0-2	3
Open Elective – III	2-0-2	3

<b>Value Added Courses</b>			
<b>Code</b>	<b>Name</b>	<b>L-T-P</b>	<b>Credit</b>
CLL 120	Human Values & Professional Ethics	2-0-0	2
ENL 212	Corporate Governance & Sustainability	3-0-0	3

## Major Changes in BBA- DM 2024 (AGENDA POINTS)

### Addition of New Courses

Subject Code	Name of Course	L-T-P	Credits	Semester
	Fundamentals of Business Environment	2-1-0	3	1
	Financial Management	3-1-0	4	2
	Managerial Economics	3-0-0	3	2
	Business Statistics	2-0-2	3	3
ENL 212	Corporate Governance & Sustainability	3-0-0	3	4
	Business Research Methods	2-0-2	3	4
	Project Management	2-1-0	3	5
BSL204	Consumer Behavior	2-0-2	3	PE
BSL366	Design Thinking and Innovation	2-0-2	3	PE
BSL331	Customer Relationship Management	2-0-2	3	PE
2 PE 's	2 additional Program Electives making total 4+2=6 PE's ( I PE Sem 3 & II PE Sem 4)	2-0-2	3	3 & 4

### Deletion of Courses

Subject Code	Name of Course	L-T-P	Credits	Semester
CML110	Communication & Documentation in Business	2-0-2	3	3
ENL101	Statistics & Research Methodology-I	2-0-2	3	2
ENL204	Statistics & Research Methodology-II	2-0-2	3	3
CML108	Financial Management-I	2-0-2	3	2
CML208	Financial Management-II	2-0-2	3	3
BSL 204	Fundamentals of Consumer Behavior	2-0-2	3	4
BSL302	Leadership	2-0-2	3	4
ENL210	Fundamentals of Spreadsheet Modelling	2-0-2	3	4
BSL370	E-CRM	2-0-2	3	PE
BSL371	Internet and Related Technologies	2-0-2	3	PE
BSL374	Search Engine Optimization	2-0-2	3	PE
BSL375	Strategic Digital Marketing	2-0-2	3	PE
BSL216	Digital Business	2-0-2	3	PE

### Shifting of Courses from one Semester to another

Course Code	Course Name	Old	New
CML109	Business Laws	1	3
BSL101	Entrepreneurship	2	6
CML107	Introduction to Banking	2	3
BSV301	Creative thinking and Negotiation Skills	5	4
BSL301	Business Policy and Strategy	5	6
BSL 209	E-Commerce	3	4
BSL 207	Introduction to Marketing Management (New Nomenclature BSL 103 Marketing Management)	3	1
BSL 105	Fundamentals of Organization Behavior	4	1
BSL304	Investment Management	6	3

### CODE/ NOMENCLATURE CHANGED

NEW		OLD	
Subject Code	Name of Course	Subject Code	Name of Course
BSL 103	Marketing Management	BSL 207	Introduction to Marketing Management
BSL104	Human Resource Management	BSL203	Human Resource Management
	Financial Management	BSL	Fundamentals of Financial Management
ENL102	Managerial Economics	ENL102	Principles of Economics
BSL201	Operations Management	BSL201	Fundamentals of Operations Management
BSL 105	Fundamentals of Organization Behavior	BSL 202	Introduction to Organization Behavior
BSL385	Business Plan	BSL385	Formulating Business Plan

## L-T-P / Credit Change

Course Code	Course Name	Old	New
BSL102	Principles of Management	2-0-2	2-1-0
BSL103	Marketing Management (Earlier Introduction to Marketing Management)	2-0-2	2-1-0
BSL105	Fundamentals of Organizational Behavior	2-0-2	2-1-0
BSL104	Human Resource Management	2-0-2	2-1-0
CML107	Introduction to Banking	2-0-2	2-1-0
ENL102	Managerial Economics (Earlier Principles of Economics)	2-0-2	3-0-0
BSL201	Operations Management	2-0-2	2-1-0
CML109	Business Laws	2-0-2	3-0-0
BSL304	Investment Management	2-0-2	2-1-0
BSL209	E-commerce	2-0-2	2-1-0
BSL303	International Business	2-0-2	2-1-0
BSL301	Business Policy & Strategy	2-0-2	2-1-0
BSL101	Entrepreneurship	2-0-2	2-1-0

<b>OVERALL CREDIT STRUCTURE- BBA-DM</b>		
<b>Category</b>	<b>Credits</b>	<b>Credits</b>
	<b>New</b>	<b>Old</b>
Programme Core	55	60
Ability Enhancement	10	15
Project Presentation & Training	14	14
Skill Enhancement	8	8
General Proficiency	6	6
Program Electives	18	12
Open Electives	9	9
Community Service	6	6
Value Added Courses	5	
<b>Total Credits</b>	<b>131</b>	<b>130</b>

## **DIGITAL MARKETING**

### **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 and praiseworthiness, deception, and role-related responsibilities. Students will also articulate standards and conventions to use in the development of Codes of Ethic.

### **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.

### **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 execute a successful content marketing plan.

### **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.

### **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.

## B.COM(H) Financial Markets- SCHEME OF STUDY 2024-2025

Semester	Semester Course Code, Course Name(L-T-P) Credits							COMMUNITY SERVICE	GP	Hrs. Per week			Contact Hours per Semester	Credits
										L	T	P		
1	BSL 102 Principles of Management (2-1-0) 3	Managerial Economics (3-0-0) 3	CML107 Introduction to Banking (2-1-0) 3	CML101 Professional Accounting (2-0-2) 3	CML109 Business Laws (3-0-0) 3	CHL100 Environmental Studies (3-0-0) 3		CMS101 CS-I	CMR101 GP-I 1 Credit	15	2	2	19*15=285	18+1=19
2	BSL 103 Marketing Management (2-1-0) 3	BSL 105 Fundamentals of Organizational Behaviour (2-1-0) 3	ENL104 Business Mathematics (2-0-2)3	CLL120 Human Values & Professional Ethics (2-0-0)2	CSV100 Basic Computer Skills for Professionals (0-0-4) 2	CML302 Management Accounting (2-0-2) 3	CLL130 Effective Comm - I (1-0-2)2	CMS102 CS-II (140 HRS) 2 Credit	CMR102 GP-II 1 Credit	11	2	10	23*15 =345	18+3=21
Summer	CMD201 Minor Project (0-0-8) 4													4
EXIT WITH UG CERTIFICATE IN COMMERCE														
3	Financial Management (3-1-0) 4	Statistics & Research Methodology (2-0-2)3	CML203 Fundamentals of Auditing (2-0-2)3	BSL209 Ecommerce (2-1-0) 3	Program Elective I (2-0-2)3	CLL140 Effective Comm-II (1-0-2) 2		CMS201 CS-III	CMR201 GP-III 1 Credit	12	2	8	22*15=330	18+1=19
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	Foreign Language Elective (1-2-0)3	BSL204 Human Resource Management (2-1-0) 3	Program Elective II (2-0-2) 3		CMS202 CS-IV (140 HRS) 2 Credit	CMR202 GP-IV 1 Credit	12	3	6	21*15=315	18+3=21
Summer	CMT301 Summer Internship (0-0-8) 4													4
EXIT WITH UG DIPLOMA IN COMMERCE														
5	CML301 Cost Accounting (2-0-2) 3	CML303 Indirect Taxation (GST) (2-0-2) 3	BSL301 Business Policy & Strategy (2-1-0) 3	BSV301 Creative Thinking & Negotiation Skills (2-0-2) 3	Program Elective III (2-0-2) 3	Program Elective IV (2-0-2) 3	Open Elective I (2-0-2)3 MOOC	CMS301 CS-V	CMR301 GP-V 1 Credit	14	1	12	27*15=405	21+1=22
6	BSL101 Entrepreneurship (2-1-0) 3	CML304 Micro Finance (2-1-0)3	Program Elective V (2-0-2) 3	Program Elective VI (2-0-2) 3 MOOC	Open Elective II (2-0-2)3 MOOC	CMD 302 Major Project (0-0-12) 6		CMS302 CS-VI (140 HRS) 2 Credit	CMR302 GP-VI 1 Credit	10	2	6	18*15=270	21+3=24
													Total 134 Credits	
EXIT WITH UG DEGREE HONS. IN COMMERCE														

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

# BACHELOR OF COMMERCE(H)- Financial Markets

## OVERALL CREDIT STRUCTURE

Category	Credits
Major (Core)	61
Minor Stream (PE +Minor Project)	22
Multidisciplinary Courses	06
Skill Enhancement Course (ACE)	08
Ability Enhancement Course (SCE)	10
Value Added Course	05
Summer Internship	04
Major Project	06
GP & CS	12
<b>Total Credits</b>	<b>134</b>

CML301	Cost Accounting	2-0-2	3
CML303	Indirect Taxation (GST)	2-0-2	3
BSL301	Business Policy & Strategy	2-1-0	3
CML304	Micro Finance	2-1-0	3

### General Proficiency

**C**

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

### Community Service

**C**

CMS101	Community Service (CS-I)	
CMS102	Community Service (CS-II)	02 Credit
CMS201	Community Service (CS-III)	02 Credit
CMS202	Community Service (CS-IV)	
CMS301	Community Service (CS-V)	02 Credit
CMS302	Community Service (CS-VI)	

### Skill Enhancement Courses

**L-T-P C**

CSV100	Basic Computer Skills for Professionals	0-0-4	2
BSV301	Creativity and Negotiation Skills	2-0-2	3
BSL101	Entrepreneurship	2-1-0	3

### Programme Core

**L-T-P C**

BSL102	Principles of Management	2-1-0	3
	Managerial Economics	3-0-0	3
CML101	Professional Accounting	2-0-2	3
CML107	Introduction to Banking	2-1-0	3
CML109	Business Laws	3-0-0	3
BSL103	Marketing Management	2-1-0	3
BSL105	Fundamentals to Organizational Behavior	2-1-0	3
ENL104	Business Mathematics	2-0-2	3
CML302	Management Accounting	2-0-2	3
	Financial Management	3-1-0	4
	Statistics & Research Methodology	2-0-2	3
CML203	Fundamentals of Auditing	2-0-2	3
BSL209	E-Commerce	2-1-0	3
CML202	Income Tax & Practice	2-0-2	3
CML204	Corporate Accounting	2-0-2	3
BSL204	Human Resource Management	2-1-0	3

### Ability Enhancement Courses

**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
	Foreign Language Elective	1-2-0	3

### Value Added Courses

**L-T-P C**

CLL120	Human Values & Professional Ethics	2-0-0	2
ENL212	Corporate Governance and Sustainability	3-0-0	3

### Minor Stream

**L-T-P C**

Program Electives – I, II, III, IV, V, VI (06)		2-0-2	18
CMD201	Minor Project	0-0-8	4

### Multidisciplinary Courses

**L-T-P C**

Open Elective – I		2-0-2	3
Open Elective – II		2-0-2	3

**L-T-P C**

**Project Presentation & Training**

CMT301	Summer Internship	0-0-8	4
CMD302	Major Project	0-0-12	6

**PROGRAMME ELECTIVES****L-T-P C****Financial Markets**

BSL 351	Introduction to Portfolio Management	2-0-2	3
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CML 206	Security & Investment Management	2-0-2	3
CML 305	Securities Operations and Risk Management	2-0-2	3
CML 306	Mutual Fund Distribution Certification	2-0-2	3
CML 307	Fundamental & Technical Analysis	2-0-2	3
CML 308	Equity Derivatives Certification	2-0-2	3
CML 309	Behavioral Finance	2-0-2	3

**BACHELOR OF COMMERCE(H)-Financial Markets****Addition of New Courses**

Subject Code	Name of Course	L-T-P	Credits	Semester
BSL 105	Fundamentals of Organizational behaviour	2-0-2	3	II
	Financial Management	3-1-0	4	III
	Programme Elective V	2-0-2	3	V
	Programme Elective VI	2-0-2	3	VI
	Statistics & Research Methodology	2-0-2	3	III

**Deletion of Courses**

Subject Code	Name of Course	L-T-P	Credits	Semester
CML110	Communication & Documentation in Business	2-0-2	3	I
CML 108	Financial Management -I	2-0-2	3	II
CML 208	Financial Management -II	2-0-2	3	III
ENL 101	Statistics and Research Methodology-I	2-0-2	3	I
ENL 204	Statistics and Research Methodology-II	2-0-2	3	III

**Shifting of Courses from One Semester to Another**

Course Code	Course Name	Old	New
CML 302	Management Accounting	6	2
BSL 203	HRM	3	4
ENL 104	Business Mathematics	3	2
BSL 101	Entrepreneurship	2	6
BSL 207	Introduction to Marketing Management	4	3
CML 109	Business Laws	2	1

	Program Elective I	5	3
	Program Elective II	5	4
	Program Elective III	6	5
	Program Elective IV	6	5

### Change in Nomenclature of Subjects

New		Old	
Code	Subject	Code	Subject
	Principles of Economics		Managerial Economics
	Statistics & Research Methodology	ENL 101	Statistics & Research Methodology-I
	Financial Management		Financial Management I & II

### Change in LTP

Code	Subjects	LTP (OLD)	LTP (New)
BSL102	Principles of Management	2-0-2	2-1-0
CML107	Introduction to Banking	2-0-2	2-1-0
CML109	Business Laws	2-0-2	3-0-0
BSL103	Marketing Management	2-0-2	2-1-0
BSL209	E-Commerce	2-0-2	2-1-0
BSL204	Human Resource Management	2-0-2	2-1-0
BSL301	Business Policy & Strategy	2-0-2	2-1-0
CML304	Micro Finance	2-0-2	2-1-0

### **OVERALL CREDIT STRUCTURE- BCom Hons-Financial Markets**

Category	Credits
Major (Core)	61
Minor Stream (PE +Minor Project)	22
Multidisciplinary Courses	06
Skill Enhancement Course (ACE)	08
Ability Enhancement Course (SCE)	10
Value Added Course	05
Summer Internship	04
Major Project	06
GP & CS	12
<b>Total Credits</b>	<b>134</b>

<b>Broad Category of Course Minimum Credit</b>				
<b>S. No.</b>	<b>Requirement</b>	<b>3-year UG</b>	<b>BCOM HONS</b>	<b>Description</b>
1	Major (Core)	60	61	Core courses
2	Minor Stream	24	22	6 PEs & Minor Project
3	Multidisciplinary	9	6	Open Elective (3)
4	Ability Enhancement Courses (AEC)	8	10	Eff. Comm I (2) & Eff. Comm. II (2), Foreign Lang (3), EVS (3)
5	Skill Enhancement Courses (SEC)	9	8	Creativity & Negotiation Skills (3), Computer Applications (2), Entrepreneurship (3)
6	Value Added Courses common for all UG	06-08	5	HVPE (2), Corporate Governance & Sustainability (3)
7	Summer Internship	02-04	4	
8	Major Project		6	
9	CS & GP		12	
10	Research Project / Dissertation	-	-	
	<b>Total</b>	<b>120</b>	<b>134</b>	

<b>For BCOM</b>			
<b>S. No.</b>	<b>Semester</b>	<b>No. of Courses to be offered in Blended / Full MOOC Mode</b>	<b>Remarks</b>
1	V	Open Elective – I	MOOC
2	VI	Open Elective – II	MOOC
3	VI	Program Elective VI	MOOC

## **Course Descriptions**

### **CHL 100 Environmental Studies**

#### **3 credits (3-0-0)**

1)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.

2)To apply the concepts learnt in maintaining balance in natural ecosystems and it covers all aspects of life and contributes in constructive decision-making keeping environment in view.

3)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.

4)To apply the concepts learnt in earning resources for their organizations by using green technologies.

5) It encapsulates sound theoretical base of all the environmental aspects coupled with practical and projects.

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.

### **BSL102 Principles of Management**

#### **3 Credits (2-1-0)**

1)Improvement in the ability to examine managerial issues and problems and to develop feasible alternatives that can result in better decision-making.

2)Knowledge of traditional and contemporary concepts in management.

3)Understanding the importance of effective leadership and communication as a supervisor.

4)Ability to stimulate individual and group performance.

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.

### **Statistics & Research Methodology**

#### **2 Credits (2-0-2)**

##### **Course Outcomes**

1)Student would be able to use summary statistics to describe data.

2)Student would be able to use probability theory and probability distributions in decision making.

3)Student would be able to perform basic statistical analysis using the concepts of correlation and regression.

4)Student would have the understanding of the sampling theory and sampling distributions.

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. Students will develop a comprehensive understanding of statistical concepts such as probability, hypothesis testing, and

regression analysis, empowering them to proficiently analyze data and draw meaningful conclusions in diverse research contexts.

### **CML 107 Introduction to Banking**

**3 Credits (2-1-0)**

#### **Course Outcomes**

Explain the fundamentals of Indian banking system.

Define and interpret the regulations of Banking Regulation Act 1949

Define and interpret the functioning of Indian banking system.

Explain the regulatory framework of RBI and Discuss the recent developments of Indian banking system.

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 form 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 Payments Systems, Remittances and 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)**

#### **Course Outcomes**

1) Gain the conceptual knowledge of financial accounting and to understand the concept of business incomes and expenditures using applicable accounting principles.

2) To understand the nature and purpose of Generally Accepted Accounting Principles (GAAP) and Accounting Standards.

3) To get familiar with the procedure of preparing books of final accounts for different business entities.

4) To have an understanding of Capital and Revenue Incomes, Receipts and Expenditures, Depreciation and Issuance of Shares and Debentures.

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).

### **BSL 105 Introduction to Organisational Behaviour**

**3 Credits(2-1-0)**

#### **Course Outcomes**

1) Comprehension of Organizational Dynamics: Students will gain a deep understanding of the fundamental theories and concepts underlying individual, group, and organizational behavior within diverse workplace environments.

- 2) Application of Behavioral Principles: Learners will develop the ability to apply key principles of organizational behavior, such as motivation, communication, and leadership, to analyze and address real-world challenges and opportunities in organizational settings.
- 3) Enhancement of Organizational Effectiveness: Through critical thinking, case studies, and collaborative discussions, students will acquire skills to enhance organizational effectiveness by promoting positive work relationships, fostering teamwork, and cultivating a supportive organizational culture.

The course explains fundamental dynamics shaping human behavior within workplace contexts. This course delves into theories and concepts from psychology, sociology, and management to analyze individual, group, and organizational behavior. Students investigate topics such as motivation, communication, leadership, and organizational culture to understand how they influence productivity and effectiveness in various settings. Through case studies and interactive discussions, learners develop critical thinking skills to navigate real-world challenges, foster teamwork, and enhance organizational performance. Ultimately, the course aims to equip students with insights and strategies to thrive within diverse organizational environments by leveraging the principles of organizational behavior.

### **CSV100 Basic Computer Skills for Professionals**

#### **2 credits (0-0-4)**

- 1) Understand the concept of IT and e-governance
- 2) Ability to work on Ms-Word
- 3) Skills to analyze the data on Excel
- 4) Knowledge of E-Commerce
- 5) Understand the electronic payment systems
- 6) Awareness about the dynamics of digital economy

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

### **CLL130 Effective Communication -1**

#### **2 Credits (1-0-2)**

- 1) Demonstrate the use of basic and advanced writing techniques using enriched vocabulary and grammar in various forms of writing.
- 2) Exhibit excellence in writing effectively.
- 3) Communicate effectively by overcoming the different barriers to communication.
- 4) Apply generic conventions and formats to memoranda, notices and business correspondence
- 5) Display confidence in conversational skills.

The broad topics include-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.

### **BSL101 Entrepreneurship**

#### **3 Credits (2-1-0)**

- 1) Understand the importance/contribution of entrepreneurship for the society and economy.
- 2) Get motivated enough to think of entrepreneurship as an alternative career opportunity.

- 3) Understand the entrepreneurial process.
- 4) Comprehend the importance of identifying business opportunities.
- 5) Awareness of protecting one's intellectual property.
- 6) Get direction as to how to start a new enterprise & write a business plan.

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, Idea 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

## **Managerial Economics**

### **3 Credits (3-0-0)**

- 1) Understand the basic concepts of types of economics, central problems of economy, branches of economy, PPC, opportunity cost, Theory of demand, theory of supply, and elasticity of demand
- 2) Analyze the Utility, DMU, Consumer equilibrium, Law of equi marginal utility, Indifference curve, Production and laws of production.
- 3) Display an understanding of Revenue concepts, cost concepts, price determination, forms of market.
- 4) Understand the concept of National Income-Meaning, Methods of Measurement, Circular Flow of Income-Two, Three and Four Sector Economy
- 5) Ability to understand Fiscal Policy-Meaning, Objectives and Instruments; Monetary Policy-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)**

- 1) Demonstrate an ability to empathize/concern for societal issues.
  - 2) Combine technical competence with the right approach to life, profession, and society.
  - 3) Ability to handle professional and personal dilemmas effectively i.e. the right course of action in a given situation.
  - 4) Applying professional values, ethics and attitude to complex work assignments and making decisions
- 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.

## **Financial Management**

### **4 Credits (3-1-0)**

- 1) To acquaint the students of management with the basic knowledge of finance function in a corporate enterprise and to get familiar with the various sources of raising finance.
- 2) To create an understanding how a firm can create value through its financing decisions.
- 3) To understand how the profits are distributed to maximize the wealth of shareholders.
- 4) To understand the long term and short-term investment decisions taken in an enterprise

This course aims to equip the students with the fundamental principles & techniques of financial management concern with 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 Leverage: Introduction, Meaning of 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.

## **CLL140 Effective Communication II**

### **2 credits (1-0-2)**

- 1) Communicate effectively in social and professional situations and convey the intended message with clarity and conciseness.
- 2) Compose concrete and correct formal correspondence texts viz. namely formal letters, business reports and proposals.
- 3) Effective participation using language & interpersonal skills during group discussions, debates, oral presentations and social conversations and make informed, ethical opinions on relevant global issues.
- 4) Enhanced acquisition of vocabulary & correct language structures for effective expression.
- 5) Ability to think logically and critically: use this skill in written & spoken expression.
- 6) An interest in reading of different kinds of works of renowned authors.

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)**

- 1) To understand the concept of Surds, indices and equations.
- 2) To understand the concept of Limit and Continuity of a function.
- 3) To understand the concept of differentiation and integration and its uses in business.

4) To understand the concept and application of determinant and matrices in business.

5) To understand the concept of series and sequences and their application in business

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.

### **CML203 Fundamentals of Auditing**

#### **3 Credits (2-0-2)**

1) To make the students understand how the audit is conducted and the objectives of auditing.

2) To provide an insight towards auditor's responsibilities in auditing.

3) To provide an insight towards various types of audit and to understand auditing through case studies.

4) To verify and value various assets and liabilities.

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: Qualifications and disqualifications, Appointment, Rotation, Removal, Remuneration, Rights and Duties; Auditor's Report- Contents and Types, Liabilities of Statutory Auditors under the Companies Act 2013. Special Areas of Audit: Cost audit, Tax audit and 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 (2-1-0)**

1) Knowledge of human resource functions, role of an HR expert and changing role of HRM.

2) Develop a basic understand of manpower planning and ability to apply the forecasting techniques for HRP.

3) Procure the knowledge of the recruitment practices followed by the companies and the mode of employee selection, designing training needs.

4) Understand the importance of Industrial Relations system in India. Effectively analyze the role of expatriate management, HRIS, HR Audit and other recent trends in HRM.

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 (2-1-0)**

- 1) 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
- 2) Customer relationship management
- 3) Launch successful e-business projects

Presents concepts and skills for the strategic use of e-commerce and related information technology from three perspectives: business to consumers, business-to-business, and intra-organizational. 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.

## **CML202 Income Tax and Practice**

### **3 Credits (2-0-2)**

- 1) To know about various basic concepts used in Income tax Act
- 2) To acquaint the students with various sources of income tax
- 3) To understand the deductions, rebates and relief allowed under Income Tax Act
- 4) To make the students understand the machinery of income tax.

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. Income from Various 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 assessee'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)**

- 1) Understand the treatment of Share Capital and Debentures.
- 2) Understand the concept of Amalgamation and Internal Reconstruction.
- 3) Learn the role of Cash Flow statement.
- 4) Learn the treatments of Financial Statement

This course will introduce students with the different types of relationships amongst business entities and identify these relationships for financial reporting purposes. Helps in determining the 'reporting entities' for each inter-entity relationship and explain the appropriate accounting policy choices and 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 preparing consolidated financial statements). They could discuss the 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.

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## **BSL 103 Marketing Management**

### **3 Credits (2-1-0)**

- 1) Design marketing mix
- 2) Apply product related concepts like classification of products, product levels, product life cycle, new product development process for marketing a product.
- 3) Design model of service quality to improve service quality
- 4) Use integrated marketing communication mix.

Defining Marketing for the 21<sup>st</sup> 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.

## **ENL 212 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 insider trading, 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.

## **CML301 Cost Accounting**

### **3 Credits (2-0-2)**

- 1) Gain understanding of basic cost and key components.
- 2) Gain understanding of various costing techniques i.e, Job costing and process costing and contract costing.
- 3) Comprehend information required for cost accumulation and assignment for calculation of work-in-progress.
- 4) Gain understanding of allocation of Labour cost and functional analysis of overheads.
- 5) Comprehend information required for cost audit.

Cost Accounting Methods and Systems: Meaning, objectives and advantages of cost accounting, Difference between cost 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 effective 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)**

- 1) Understand the procedure of levy of various types of indirect taxes like, excise duty, customs duty (import and export), production linked tax, and Value Added Tax (VAT).
- 2) Enumerate sources of indirect taxes applicable in India.
- 3) Understand the concept of GST in India.
- 4) Understand the rules related to levy of goods and services taxes on various business entities

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)**

- 1) Make better decisions through critical thinking and creative problem solving
- 2) Learning the art of negotiation
- 3) Transform your creativity into practical business solutions.

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.

### **CML302 Management Accounting**

#### **3 Credits (2-0-2)**

- 1) Understand the role of management accounting in managerial decision making
- 2) Comprehend information required for cost accumulation and assignment for managerial planning and control.
- 3) Analyse information for decision making

Management accounting: Meaning, nature, scope and functions of 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). 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 (2-1-0)**

- 1) Understand the rationale of Micro Finance.
- 2) Understand the Financial & Operational Evaluation
- 3) Learn the trends and frontiers of Micro Finance.

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 (2-1-0)**

- 1) Identify the forces impacting on corporate and business strategies
- 2) Be critically aware of factors involved in strategy making
- 3) Assess the resources and constraints for strategy making in a business context
- 4) Specific knowledge of perspectives, frameworks and concepts within strategy formation, strategic change, and strategic innovation.

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 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.

## **Finance Electives**

### **CML206 Security and Investment management**

**3 credits (2-0-2)**

- 1) Understand the fundamentals of Indian financial system.
- 2) Acquire knowledge regarding various investment alternatives and their assessment
- 3) Understand the benefit of diversification of holding a portfolio of assets, and the importance played by the market portfolio
- 4) To apply different valuation models to evaluate fixed income securities and stocks.

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 of financial information, Different investment alternatives, Approaches of bond valuation, Introduction to fundamental analysis. Technical analysis and 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)**

- 1) Understand the fundamentals of Indian financial system.
- 2) Acquire knowledge regarding various strategies of Bond management
- 3) Understand the risk and return associated with portfolio investment.
- 4) Understand the benefit of diversification of holding a portfolio of assets, and the importance played by the market portfolio

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)**

- 1) To understand the basics of the Indian securities market AND the role of the Securities Exchange Board of India.
- 2) Explain the functioning of members and the steps and participants involved in the trade life cycle.
- 3) Discuss the risk management practices in a securities broking firm and analyze the clearing and settlement process.
- 4) Analyze the process of investor grievances redressal.

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)**

- 1) Understand the basics of mutual funds, their role and structure, different kinds of mutual fund schemes and their features.
- 2) Explain how mutual funds are distributed in the market-place, how schemes are to be evaluated, and how suitable products and services can be recommended to investors and prospective investors in the market.
- 3) Discuss the legalities, accounting, valuation and taxation aspects underlying mutual funds and their distribution.
- 4) Evaluate the financial planning as an approach to investing in mutual funds, as an aid for mutual fund distributors to develop long term relationships with their clients.

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)**

- 1)To sensitize the student to the principles underlying Fundamental Analysis.
- 2)To enable the student to recognize and comprehend Fundamental analysis concepts, procedures and uses.
- 3)To enable the student to recognize and comprehend a broad range of technical analysis concepts, procedures and uses.
- 4)To have the student begins to develop a repertoire of technical tools, concepts, and procedures which are best suited to their particular investment/money management goals.

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)**

- 1) Understand the basics of the Indian equity derivatives market.
- 2) Explain the various trading strategies that can be built using futures and options on both stocks and stock indices.
- 3) Discuss the clearing, settlement and risk management as well as the operational mechanism related to equity derivatives markets.
- 4) Evaluate the regulatory environment in which the equity derivatives markets operate in India.

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.

### **CML 309 Behavioral Finance**

#### **3 Credits (2-0-2)**

- 1) Understand and analyze some psychological biases which lead to various anomalies in the stock market.
- 2) Understand and analyze investors' behavior in secondary markets.
- 3) Evaluate the implications of endowment, disposition, etc.in stock market.
- 4) Analyze & evaluate the impact of emotions on the financial decision making.

The objective of this paper 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.

**BA (H) ECONOMICS SCHEME OF STUDY 2023-2026**

Semester	Semester Course Code, Course Name (L-T-P) Credits							Community Service	GP	Hrs. Per week			Contact Hours per Sem	Credits
	L	T	P											
1	ENL103 History of Economic Thoughts (3-1-0)4	ENL102 Principles of Economics (3-1-0)4	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	CHL100 Environmental Studies (3-0-0)3		ENS101 CS-I	ENR101 GP-I 1 Credit	13	02	8	21*15=315	19+1=20
2	BSL101 Entrepreneurship (2-0-2)3	ENL104 Business Mathematics (2-0-2)3	ENL106 Intermediate Microeconomics (3-1-0)4	BSV 301 Creative Thinking & Negotiation Skills (2-0-2)3	CLL 130 Effective Comm. I (1-0-2)	CLL120 Human Values & Professional Ethics (2-0-0)2		ENS102 CS-II (140 Hrs) * 2 Credit	ENR102 GP-II 1 Credit	12	01	8	20*15=300	17+3=20
Summers	END201 Minor Project (0-0-8)4									0	0	8		4
Entry Exit Option after completion of first year on earning a minimum of <b>44 credits</b> at university, will be awarded UG CERTIFICATE IN ECONOMICS														
TOTAL														40+4
3	ENL213 Mathematical Economics (2-0-2)3	ENL209 Behavioural Economics (3-0-0)3	ENL216 Intermediate Macroeconomics (3-1-0)4	Programme Elective –I (2-0-2)3	CLL 140 Effective Comm II (1-0-2)2	Open Elective 1 (2-0-2)3		ENS201 CS-II	ENR201 GP-III 1 Credit	14	02	6	20*15=300	18+1=19
4	ENL212 Corporate Governance & Sustainability (3-0-0)3	ENL204 Statistics and Research Methodology-II (2-0-2)3	ENL208 Environmental Economics (2-0-2)3	ENL210 Fundamentals of Spread Sheet Modelling (2-0-2)3	Programme Elective –II (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	02	10	24*15=360	21+3=24
Summers	END301 Summer Internship (0-0-8) 4									0	0	8		4
Student who opt to exist after completion of second year and have earned a minimum of <b>91 credits</b> at university, will be awarded UG DIPLOMA IN ECONOMICS														
TOTAL														87+4
5	ENL206 Introduction to Econometrics (2-0-2)3	ENL337 Financial Economics (2-0-2)3	ENL304 Indian Economy (3-1-0)4	Programme Elective –III (2-0-2)3	Programme Elective-IV (2-0-2)3	Open Elective 3 (2-0-2)3		ENS301 CS-V	ENR301 GP-V 1 Credit	13	01	10	23*15=345	19+1=20
6	ENL202 International Trade (3-1-0)4	ENL342 Advanced Econometrics (2-0-2)3	ENL306 Economics of Growth & Development (2-0-2)3	Programme Elective-V (2-0-2)3	Programme Elective –VI (2-0-2)3	END302 Major Project (0-0-12)6		ENS302 CS-VI (140 Hrs) * 2 Credit	ENR302 GP-VI 1 Credit	11	01	8	19*15=285	22+3=25
Total														Total Credit = 136
EXIT with UG DEGREE HONS. IN ECONOMICS														

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

# BACHELOR OF ARTS (HONS) ECONOMICS

## OVERALL CREDIT STRUCTURE

	NEW	OLD	UG
CATEGORY	CREDITS	CREDITS	CREDITS
	66	72	64
Ability Enhancement	12	12	10
Project Presentation & Training	14	14	4+6
Skill Enhancement	5	5	8
General Proficiency	6	6	6
Program Electives	18	6	16
Open electives	9	12	9
Community Service	6	9	6
<b>Total Credits</b>	<b>136</b>	<b>136</b>	<b>129</b>

### Ability Enhancement

L-T-P C

Environmental Studies	3-0-0	3
Effective Communication-I	1-0-2	2
Effective Communication-II	1-0-2	2
Human Values & Professional Ethics	2-0-0	2
Foreign Language Elective - I	1-2-0	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

### Skill Enhancement Courses

L-T-P C

CSV100	Basic Computer skills for Professionals	0-0-4	2
	Creative Thinking	2-0-2	3

### General Proficiency

C

GP-I	01 Credit
GP-II	01 Credit
GP-III	01 Credit
GP-IV	01 Credit
GP-V	01 Credit
GP-VI	01 Credit
<b>Community Service</b>	<b>C</b>
Community Service (CS-I)	02 Credit
Community Service (CS-II)	
Community Service (CS-III)	02 Credit
Community Service (CS-IV)	
Community Service (CS-V)	02 Credit
Community Service (CS-VI)	

### List of Electives

1	ENL211	Fundamentals of Money & Banking	2-0-2	3
2	ENL215	Public Finance	2-0-2	3
3	ENL331	Industrial Economics	2-0-2	3
4	ENL332	Comparative Economic Development	2-0-2	3
5	ENL334	Economics of Health & Education	2-0-2	3
6	ENL341	Global economic monetary system	2-0-2	3
7	ENL338	Introduction to Statistical Programming with R	2-0-2	3
8	BSL308	Fundamentals of Data Visualization	2-0-2	3

### Details for Full MOOC & Blended MOOC

I	CHL100	Environmental Studies	(0-0-4)2	Blended
II	BSL101	Entrepreneurship	(2-0-2)3	Full MOOC
III	ENL216	Intermediate Macroeconomics	(3-1-0)4	Blended
IV	ENL211	Fundamentals of Money & Banking (PE)	(2-0-2)	Full MOOC
V	ENL304	Indian Economy	(3-1-0)4	Blended
V		Industrial Economics (PE)	(2-0-2)	Full MOOC
VI	ENL306	Economics of Growth & Development	(3-1-0)4	Blended
VI	ENL332	Comparative Economic Development (PE)	(2-0-2)	Full MOOC

### Major Changes B.A. (Hons) Economics, Scheme 2023-24 (AGENDA POINTS)

#### Highlights (Objectives of Change) of the Scheme

1. Changes in L\_T\_P of few courses
2. Changes in course template of ENL216- Intermediate Macroeconomics

#### Addition of New Courses

Subject Code	Name of the Course	L-T-P	Credits	Semester
BSV301	Creative Thinking & Negotiation Skills	(2-0-2)	3	II

#### Shifting of Courses from one Semester to another

Subject Code	Name of the Course	L-T-P	Credits	Earlier Semester	New Semester
ENL211	Fundamentals of Money & Banking	2-0-2	3	III	Programme Elective
ENL215	Public Finance	2-0-2	3	III	Programme Elective
ENL216	Intermediate Macroeconomics	3-1-0	4	IV	III

## B.COM(H) ACCA- SCHEME OF STUDY 2024-2025

Semester	Semester Course Code, Course Name(L-T-P) Credits							COMMUNITY SERVICE	GP	Hrs. Per week			Contact Hours per Semester	Credits	
										L	T	P			
1	<b>BSL 102</b> Principles of Management (2-1-0) 3	<b>Managerial Economics</b> (3-0-0) 3	<b>CML107</b> Introduction to Banking (2-1-0) 3	<b>CML101</b> Professional Accounting (2-0-2) 3	<b>CML109</b> Business Laws (3-0-0) 3	<b>CHL100</b> Environmental Studies (3-0-0) 3		<b>CMS101</b> CS-I	<b>CMR101</b> GP-I 1 Credit	15	2	2	19*15=285	18+1=19	
2	<b>BSL 103</b> Marketing Management (2-1-0) 3	<b>BSL 105</b> Fundamentals of Organizational Behaviour (2-1-0) 3	<b>ENL104</b> Business Mathematics (2-0-2)3	<b>CLL120</b> Human Values & Professional Ethics (2-0-0)2	<b>CSV100</b> Basic Computer Skills for Professionals (0-0-4) 2	<b>CML302</b> Management Accounting (2-0-2) 3	<b>CLL130</b> Effective Comm - I (1-0-2)2	<b>CMS102</b> CS-II (140 HRS) 2 Credit	<b>CMR102</b> GP-II 1 Credit	11	2	10	23*15 =345	18+3=21	
Summer	<b>CMD201 Minor Project (0-0-8) 4</b>													4	
<b>EXIT WITH UG CERTIFICATE IN COMMERCE</b>															
3	<b>Financial Management</b> (3-1-0) 4	<b>Statistics &amp; Research Methodology</b> (2-0-2)3	<b>CML203</b> Fundamentals of Auditing (2-0-2)3	<b>BSL209</b> Ecommerce (2-1-0) 3	Program Elective I (2-0-2)3	<b>CLL140</b> Effective Comm-II (1-0-2) 2		<b>CMS201</b> CS-III	<b>CMR201</b> GP-III 1 Credit	12	2	8	22*15=330	18+1=19	
4	<b>CML202</b> Income Tax & Practice (2-0-2) 3	<b>CML204</b> Corporate Accounting (2-0-2) 3	<b>ENL 212</b> Corporate Governance & Sustainability (3-0-0) 3	Foreign Language Elective (1-2-0)3	<b>BSL204</b> Human Resource Management (2-1-0) 3	Program Elective II (2-0-2) 3		<b>CMS202</b> CS-IV (140 HRS) 2 Credit	<b>CMR202</b> GP-IV 1 Credit	12	3	6	21*15=315	18+3=21	
Summer	<b>CMT301 Summer Internship (0-0-8) 4</b>														4
<b>EXIT WITH UG DIPLOMA IN COMMERCE</b>															
5	<b>CML301</b> Cost Accounting (2-0-2) 3	<b>CML303</b> Indirect Taxation (GST) (2-0-2) 3	<b>BSL301</b> Business Policy & Strategy (2-1-0) 3	<b>BSV301</b> Creative Thinking & Negotiation Skills (2-0-2) 3	Program Elective III (2-0-2) 3	Program Elective IV (2-0-2) 3	Open Elective I (2-0-2)3 MOOC	<b>CMS301</b> CS-V	<b>CMR301</b> GP-V 1 Credit	14	1	12	27*15=405	21+1=22	
6	<b>BSL101</b> Entrepreneurship (2-1-0) 3	<b>CML304</b> Micro Finance (2-1-0)3	Program Elective V (2-0-2) 3	Program Elective VI (2-0-2) 3	Open Elective II (2-0-2)3 MOOC	<b>CMD 302</b> Major Project (0-0-12) 6		<b>CMS302</b> CS-VI (140 HRS) 2 Credit	<b>CMR302</b> GP-VI 1 Credit	10	2	6	18*15=270	21+3=24	
<b>Total 134 Credits</b>															
<b>EXIT WITH UG DEGREE HONS. IN COMMERCE</b>															

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

# BACHELOR OF COMMERCE(H)- ACCA

## OVERALL CREDIT STRUCTURE

Category	Credits
Major (Core)	61
Minor Stream (PE +Minor Project)	22
Multidisciplinary Courses	06
Skill Enhancement Course (ACE)	08
Ability Enhancement Course (SCE)	10
Value Added Course	05
Summer Internship	04
Major Project	06
GP & CS	12
<b>Total Credits</b>	<b>134</b>

CML301	Cost Accounting	2-0-2	3
CML303	Indirect Taxation (GST)	2-0-2	3
BSL301	Business Policy & Strategy	2-1-0	3
CML304	Micro Finance	2-1-0	3

### General Proficiency

**C**

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

### Community Service

**C**

CMS101	Community Service (CS-I)	
CMS102	Community Service (CS-II)	02 Credit
CMS201	Community Service (CS-III)	02 Credit
CMS202	Community Service (CS-IV)	02 Credit
CMS301	Community Service (CS-V)	02 Credit
CMS302	Community Service (CS-VI)	02 Credit

### Skill Enhancement Courses

**L-T-P C**

CSV100	Basic Computer Skills for Professionals	0-0-4	2
BSV301	Creativity and Negotiation Skills	2-0-2	3
BSL101	Entrepreneurship	2-1-0	3

### Programme Core

**L-T-P C**

BSL102	Principles of Management	2-1-0	3
	Managerial Economics	3-0-0	3
CML101	Professional Accounting	2-0-2	3
CML107	Introduction to Banking	2-1-0	3
CML109	Business Laws	3-0-0	3
BSL103	Marketing Management	2-1-0	3
BSL105	Fundamentals to Organizational Behavior	2-1-0	3
ENL104	Business Mathematics	2-0-2	3
CML302	Management Accounting	2-0-2	3
	Financial Management	3-1-0	4
	Statistics & Research Methodology	2-0-2	3
CML203	Fundamentals of Auditing	2-0-2	3
BSL209	E-Commerce	2-1-0	3
CML202	Income Tax & Practice	2-0-2	3
CML204	Corporate Accounting	2-0-2	3
BSL204	Human Resource Management	2-1-0	3

### Ability Enhancement Courses

**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
	Foreign Language Elective	1-2-0	3

### Value Added Courses

**L-T-P C**

CLL120	Human Values & Professional Ethics	2-0-0	2
ENL212	Corporate Governance and Sustainability	3-0-0	3

### Minor Stream

**L-T-P C**

Program Electives – I, II, III, IV, V, VI (06)		2-0-2	18
CMD201	Minor Project	0-0-8	4

### Multidisciplinary Courses

**L-T-P C**

Open Elective – I		2-0-2	3
Open Elective – II		2-0-2	3

<b>Project Presentation &amp; Training</b>		<b>L-T-P C</b>	
CMT301	Summer Internship	0-0-8	4
CMD302	Major Project	0-0-12	6

**PROGRAMME ELECTIVES** **L-T-P C**  
**ACCA**

BSL303	International Business	2-0-2	3
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
CML206	Security & Investment Management	2-0-2	3
CML352	Financial Econometrics	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
ENL210	Fundamentals of Spreadsheet Modelling	2-0-2	3
	Management of Financial Services	2-0-2	3
	Strategic Business Leader (SBL)	2-0-2	3
	Strategic Business Reporting (SBR)	2-0-2	3
	Advanced Financial Management (AFM)	2-0-2	3
	Advanced Audit and Assurance (AAA)	2-0-2	3

<b>OVERALL CREDIT STRUCTURE- BCom Hons with ACCA</b>	
<b>Category</b>	<b>Credits</b>
<b>Major (Core)</b>	61
<b>Minor Stream (PE +Minor Project)</b>	22
<b>Multidisciplinary Courses</b>	06
<b>Skill Enhancement Course (ACE)</b>	08
<b>Ability Enhancement Course (SCE)</b>	10
<b>Value Added Course</b>	05
<b>Summer Internship</b>	04
<b>Major Project</b>	06
<b>GP &amp; CS</b>	12
<b>Total Credits</b>	<b>134</b>

**Change in Nomenclature of Subjects**

New		Old	
Code	Subject	Code	Subject
	Principles of Economics		Managerial Economics
	Statistics & Research Methodology	ENL 101	Statistics & Research Methodology-I

## **Course Descriptions**

### **CHL 100 Environmental Studies**

#### **3 credits (3-0-0)**

1)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.

2)To apply the concepts learnt in maintaining balance in natural ecosystems and it covers all aspects of life and contributes in constructive decision-making keeping environment in view.

3)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.

4)To apply the concepts learnt in earning resources for their organizations by using green technologies.

5) It encapsulates sound theoretical base of all the environmental aspects coupled with practical and projects.

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.

### **BSL102 Principles of Management**

#### **3 Credits (2-0-2)**

1)Improvement in the ability to examine managerial issues and problems and to develop feasible alternatives that can result in better decision-making.

2)Knowledge of traditional and contemporary concepts in management.

3)Understanding the importance of effective leadership and communication as a supervisor.

4)Ability to stimulate individual and group performance.

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.

### **Statistics & Research Methodology**

#### **2 Credits (2-0-2)**

1)Student would be able to use summary statistics to describe data.

2)Student would be able to use probability theory and probability distributions in decision making.

3)Student would be able to perform basic statistical analysis using the concepts of correlation and regression.

4)Student would have the understanding of the sampling theory and sampling distributions.

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. Students will develop a comprehensive understanding of statistical concepts such as probability, hypothesis testing, and regression analysis, empowering them to proficiently analyze data and draw meaningful conclusions in diverse research contexts.

### **CML 107 Introduction to Banking**

#### **3 Credits(2-0-2)**

- 1) Explain the fundamentals of Indian banking system.
- 2) Define and interpret the regulations of Banking Regulation Act 1949
- 3) Define and interpret the functioning of Indian banking system.
- 4) Explain the regulatory framework of RBI and Discuss the recent developments of Indian banking system.

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 form 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 Payments Systems, Remittances and Foreign Exchange. Introduction to Banking Regulation Act, 1949, Reserve Bank of India and Foreign Exchanges will enhance the student's knowledge about its birth.

### **CML101 Professional Accounting**

#### **3 Credits (2-0-2)**

- 1) Gain the conceptual knowledge of financial accounting and to understand the concept of business incomes and expenditures using applicable accounting principles.
- 2) To understand the nature and purpose of Generally Accepted Accounting Principles (GAAP) and Accounting Standards.
- 3) To get familiar with the procedure of preparing books of final accounts for different business entities.
- 4) To have an understanding of Capital and Revenue Incomes, Receipts and Expenditures, Depreciation and Issuance of Shares and Debentures.

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).

### **BSL 105 Introduction to Organisational Behaviour**

#### **3 Credits (2-0-2)**

- 1) Comprehension of Organizational Dynamics: Students will gain a deep understanding of the fundamental theories and concepts underlying individual, group, and organizational behavior within diverse workplace environments.

- 2) Application of Behavioral Principles: Learners will develop the ability to apply key principles of organizational behavior, such as motivation, communication, and leadership, to analyze and address real-world challenges and opportunities in organizational settings.
- 3) Enhancement of Organizational Effectiveness: Through critical thinking, case studies, and collaborative discussions, students will acquire skills to enhance organizational effectiveness by promoting positive work relationships, fostering teamwork, and cultivating a supportive organizational culture.

The course explains fundamental dynamics shaping human behavior within workplace contexts. This course delves into theories and concepts from psychology, sociology, and management to analyze individual, group, and organizational behavior. Students investigate topics such as motivation, communication, leadership, and organizational culture to understand how they influence productivity and effectiveness in various settings. Through case studies and interactive discussions, learners develop critical thinking skills to navigate real-world challenges, foster teamwork, and enhance organizational performance. Ultimately, the course aims to equip students with insights and strategies to thrive within diverse organizational environments by leveraging the principles of organizational behavior.

### **CSV100 Basic Computer Skills for Professionals**

**2 credits (0-0-4)**

- 1) Understand the concept of IT and e-governance
- 2) Ability to work on Ms-Word
- 3) Skills to analyze the data on Excel
- 4) Knowledge of E-Commerce
- 5) Understand the electronic payment systems
- 6) Awareness about the dynamics of digital economy

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

### **CLL130 Effective Communication -1**

**2 Credits (1-0-2)**

- 1) Demonstrate the use of basic and advanced writing techniques using enriched vocabulary and grammar in various forms of writing.
- 2) Exhibit excellence in writing effectively.
- 3) Communicate effectively by overcoming the different barriers to communication.
- 4) Apply generic conventions and formats to memoranda, notices and business correspondence
- 5) Display confidence in conversational skills.

The broad topics include-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.

### **BSL101 Entrepreneurship**

**3 Credits (2-0-2)**

- 1) Understand the importance/contribution of entrepreneurship for the society and economy.
- 2) Get motivated enough to think of entrepreneurship as an alternative career opportunity.
- 3) Understand the entrepreneurial process.
- 4) Comprehend the importance of identifying business opportunities.
- 5) Awareness of protecting one's intellectual property.
- 6) Get direction as to how to start a new enterprise & write a business plan.

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, Idea 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

### **Managerial Economics**

#### **3 Credits (2-0-2)**

- 1) Understand the basic concepts of types of economics, central problems of economy, branches of economy, PPC, opportunity cost, Theory of demand, theory of supply, and elasticity of demand
- 2) Analyze the Utility, DMU, Consumer equilibrium, Law of equi marginal utility, Indifference curve, Production and laws of production.
- 3) Display an understanding of Revenue concepts, cost concepts, price determination, forms of market.
- 4) Understand the concept of National Income-Meaning, Methods of Measurement, Circular Flow of Income-Two, Three and Four Sector Economy
- 5) Ability to understand Fiscal Policy-Meaning, Objectives and Instruments; Monetary Policy-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)**

- 1) Demonstrate an ability to empathize/concern for societal issues.
- 2) Combine technical competence with the right approach to life, profession, and society.
- 3) Ability to handle professional and personal dilemmas effectively i.e. the right course of action in a given situation.
- 4) Applying professional values, ethics and attitude to complex work assignments and making decisions

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.

## **Financial Management**

### **4 Credits (3-1-0)**

- 1) To acquaint the students of management with the basic knowledge of finance function in a corporate enterprise and to get familiar with the various sources of raising finance.
- 2) To create an understanding how a firm can create value through its financing decisions.
- 3) To understand how the profits are distributed to maximize the wealth of shareholders.
- 4) To understand the long term and short term investment decisions taken in an enterprise

This course aims to equip the students with the fundamental principles & techniques of financial management concern with 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 Leverage: Introduction, Meaning of 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.

## **CLL140 Effective Communication II**

### **2 credits (1-0-2)**

- 1) Communicate effectively in social and professional situations and convey the intended message with clarity and conciseness.
- 2) Compose concrete and correct formal correspondence texts viz. namely formal letters, business reports and proposals.
- 3) Effective participation using language & interpersonal skills during group discussions, debates, oral presentations and social conversations and make informed, ethical opinions on relevant global issues.
- 4) Enhanced acquisition of vocabulary & correct language structures for effective expression.
- 5) Ability to think logically and critically: use this skill in written & spoken expression.
- 6) An interest in reading of different kinds of works of renowned authors.

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)**

- 1) To understand the concept of Surds, indices and equations.
- 2) To understand the concept of Limit and Continuity of a function.
- 3) To understand the concept of differentiation and integration and its uses in business.
- 4) To understand the concept and application of determinant and matrices in business.
- 5) To understand the concept of series and sequences and their application in business

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.

### **CML203 Fundamentals of Auditing**

#### **3 Credits (2-0-2)**

- 1) To make the students understand how the audit is conducted and the objectives of auditing.
- 2) To provide an insight towards auditor's responsibilities in auditing.
- 3) To provide an insight towards various types of audit and to understand auditing through case studies.
- 4) To verify and value various assets and liabilities.

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: Qualifications and disqualifications, Appointment, Rotation, Removal, Remuneration, Rights and Duties; Auditor's Report- Contents and Types, Liabilities of Statutory Auditors under the Companies Act 2013. Special Areas of Audit: Cost audit, Tax audit and 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)**

- 1) Knowledge of human resource functions, role of an HR expert and changing role of HRM.
- 2) Develop a basic understand of manpower planning and ability to apply the forecasting techniques for HRP.
- 3) Procure the knowledge of the recruitment practices followed by the companies and the mode of employee selection, designing training needs.
- 4) Understand the importance of Industrial Relations system in India. Effectively analyze the role of expatriate management, HRIS, HR Audit and other recent trends in HRM.

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)**

- 1) 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
- 2) Customer relationship management
- 3) Launch successful e-business projects

Presents concepts and skills for the strategic use of e-commerce and related information technology from three perspectives: business to consumers, business-to-business, and intra-organizational. 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.

### **CML202 Income Tax and Practice**

#### **3 Credits (2-0-2)**

- 1) To know about various basic concepts used in Income tax Act
- 2) To acquaint the students with various sources of income tax
- 3) To understand the deductions, rebates and relief allowed under Income Tax Act
- 4) To make the students understand the machinery of income tax.

The course includes the broad topics like Income, agricultural income, person, assessee, assessment year, previous year, gross total income, total income, maximum marginal rate of tax, Residential status. Income from Various 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 assessee'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)**

- 1) Understand the treatment of Share Capital and Debentures.
- 2) Understand the concept of Amalgamation and Internal Reconstruction.
- 3) Learn the role of Cash Flow statement.
- 4) Learn the treatments of Financial Statement

This course will introduce students with the different types of relationships amongst business entities and identify these relationships for financial reporting purposes. Helps in determining the 'reporting entities' for each inter-entity relationship, and explain the appropriate accounting policy choices and 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 preparing consolidated financial statements). They could discuss the 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.

### **BSL207 Introduction to Marketing Management**

#### **3 Credits (2-0-2)**

- 1) Design marketing mix
- 2) Apply product related concepts like classification of products, product levels, product life cycle, new product development process for marketing a product.
- 3) Design model of service quality to improve service quality
- 4) Use integrated marketing communication mix.

Defining Marketing for the 21<sup>st</sup> 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.

### **ENL 212 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 insider trading, 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.

### **CML301 Cost Accounting**

#### **3 Credits (2-0-2)**

- 1) Gain understanding of basic cost and key components.
- 2) Gain understanding of various costing techniques i.e, Job costing and process costing and contract costing.
- 3) Comprehend information required for cost accumulation and assignment for calculation of

work-in-progress.

- 4) Gain understanding of allocation of Labour cost and functional analysis of overheads.
- 5) Comprehend information required for cost audit.

Cost Accounting Methods and Systems: Meaning, objectives and advantages of cost accounting, Difference between cost 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)**

- 1) Understand the procedure of levy of various types of indirect taxes like, excise duty, customs duty (import and export), production linked tax, and Value Added Tax (VAT).
- 2) Enumerate sources of indirect taxes applicable in India.
- 3) Understand the concept of GST in India.

4) Understand the rules related to levy of goods and services taxes on various business entities  
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)**

- 1) Make better decisions through critical thinking and creative problem solving
- 2) Learning the art of negotiation
- 3) Transform your creativity into practical business solutions.

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.

### **CML302 Management Accounting**

### **3 Credits (2-0-2)**

- 1) Understand the role of management accounting in managerial decision making
- 2) Comprehend information required for cost accumulation and assignment for managerial planning and control.
- 3) Analyse information for decision making

Management accounting: Meaning, nature, scope and functions of 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). 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)**

- 1) Understand the rationale of Micro Finance.
- 2) Understand the Financial & Operational Evaluation
- 3) Learn the trends and frontiers of Micro Finance.

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)**

- 1) Identify the forces impacting on corporate and business strategies
- 2) Be critically aware of factors involved in strategy making
- 3) Assess the resources and constraints for strategy making in a business context
- 4) Specific knowledge of perspectives, frameworks and concepts within strategy formation, strategic change, and strategic innovation.

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 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.

## **ACCA Electives**

### **Strategic Business Leader**

#### **3 credits (2-0-2)**

Strategic Business Leader covers a blend of technical, ethical and professional skills. It tests the ability of the student to work in a stimulated real-life scenario. The syllabus brings together the core areas of Governance, Risk and Strategy, Leadership and Organisational control, change management as well as technical areas like data analytics. Course Outcomes include -

1. To understand the principles applicable to a business entity and recognize the ethical framework that managers need to adopt while discharging their duties.
2. Identifies the various professional skills that a professional manager needs to acquire and apply along with the application of the knowledge, skills and expertise required to assess the business strategies and their impact on business performance.
3. To equip students with the tools & techniques of assessing strategic position, develop strategic choices and implement the chosen strategy through change management.
4. Identify the technologies required for the business entity and use of data analytics for decision making.
5. Equip students with the tools & techniques of assessing strategic position, develop strategic choices and implement the chosen strategy through change management.

### **Strategic Business Reporting**

#### **3 Credits (2-0-2)**

1. Understand the importance of Conceptual Framework and discuss the importance of professional and ethical behaviour in corporate reporting
2. Generate report on the financial performance and position of entities in the context of various accounting issues discussed in IAS/IFRS
3. Preparing consolidated financial statements which involve transactions with foreign group entities
4. Examine the implications of current issues in the context of social, environmental, national and international corporate financial reporting.
5. Examine and interpret the implications of changes in accounting regulations on financial reporting

The module requires you to establish your ability to make strategic business reporting decisions. The aim of the syllabus is to evaluate, discuss and apply the concepts, principles and practices that support the preparation and interpretation of corporate reports in various contexts including the ethical assessment of management's stewardship and the information needs of a diverse group of stakeholders. The syllabus requires students to examine corporate reporting from a number of standpoints, not only from the point of view of the preparer of corporate reports but also from the perspective of a variety of different stakeholders such as investors and finance providers. The syllabus further requires the evaluation and assessment of the reporting decisions made by management and their implications for a range of stakeholders and any entities.

## **Advanced Financial Management**

### **3 Credits (2-0-2)**

1. Explain and evaluate the role and responsibility of the senior financial executive or advisor in meeting conflicting needs of stakeholders and recognise the role of international financial institutions in the financial management of multinationals
2. Evaluate potential investment decisions and assessing their financial and strategic consequences, both domestically and internationally
3. Assess and plan acquisitions and mergers as an alternative growth strategy
4. Evaluate and advise on alternative corporate re-organisation strategies
5. Apply and evaluate alternative advanced treasury and risk management

The aim of the syllabus is to apply relevant knowledge, skills and exercise professional judgment as expected of a senior financial executive or advisor, in taking or recommending decisions relating to the financial management of an organization in private and public sectors. This syllabus develops upon the core financial management knowledge and skills covered in the Financial Management syllabus and prepare candidates to advise management and/or clients on complex strategic financial management issues facing an organization.

### **Advanced Audit And Assurance**

#### **3 Credits (2-0-2)**

1. Demonstrate the ability to work effectively and efficiently on assurance and other service engagement within a professional and ethical framework and develop the knowledge, competence, skepticism and skills of an auditor
2. Assess and recommend appropriate quality control policies and procedures in practice management and recognise the auditor's position in relation to the acceptance and retention of professional appointments.
3. Identify and formulate the work required to meet the objectives of audit assignments; apply the International Standards on Auditing; evaluate findings and the results of work performed and draft suitable reports on assignments.
4. Identify and formulate the work required to meet the objectives of non-audit assignments.
5. Understand the current issues and developments relating to the provision of audit-related and assurance services.

The aim of Advanced Audit and Assurance is to analyze, evaluate and conclude on the assurance engagement and other audit and assurance issues in the context of best practice and current developments.

### **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 renewed interest 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 Forfeiting, Venture Capital, Plastic Money (Credit cards), Lease & Hire Purchasing, Housing Finance

### **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 of financial information, Different investment alternatives, Approaches of bond valuation, Introduction to fundamental analysis. Technical analysis and efficient market hypothesis. Introduction to mutual funds and their risk evaluation and Role of SEBI.

### **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.

### **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 Project 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



## **BOARD OF STUDIES**

# **DEPARTMENT OF PSYCHOLOGY (2024-25)**

Approved in BoS Dated 04.04.2024

## **B.A. (Hons.) Psychology 2024-25**

### **About the University**

The NorthCap University (NCU) is a progressive multidisciplinary university located in the city-centre of Gurugram, Haryana. The university's rich heritage of 25+ years, 11000+ alumni and robust academic infrastructure enables deep linkages with government, industry and research bodies. The university operates three schools in its state-of-the-art urban campus and hosts a diverse student body in the disciplines of engineering & technology, management, liberal arts, law, and applied sciences. NCU is a National Assessment and Accreditation Council (NAAC) Grade A accredited university that serves as a research and talent catalyst between students and industry. Guided by eminent academicians and industry leaders, it follows an immersive pedagogy to deliver undergraduate, postgraduate and doctoral programmes. The university is a comprehensive partner of Arizona State University (#1 university in the U.S. for innovation, outreach and stewardship). This strategic collaboration focuses on innovation, internationalisation and digitisation. NCU students enjoy summer immersion programme and accelerated master's programmes in the US given this partnership. NCU is recognised by the University Grants Commission (UGC) and the Bar Council of India (BCI). It is a member of the Association of Indian Universities (AIU), member of the Association of Commonwealth Universities (ACU) UK, a member of the American Society for Quality and is accredited by Accreditation Services for International Colleges (ASIC), UK. With a 5-Star QS Ranking for Teaching, Employability, Academic Development, Online Learning and Inclusiveness, NCU ranks among the Top 30 Best Performing Universities as per Atal Ranking of Institutions on Innovation Achievements (ARIIA) rankings.

### **About the Psychology Department**

The Psychology department at The NorthCap University facilitates students in transferring knowledge of psychology theory to innovative contexts and develops an operational understanding of psychology's content domains. The program offers students a unique liberal arts education that helps them in exploring different philosophies, cultures, and human experiences which will broaden their views and provide them with a valued perspective sought by today's global companies. The broad nature of elective courses in the program offered by the NCU ensures plenty of career options and confirms the applicability of psychological understanding in the areas of counseling, clinical research, organizational behavior, and applied psychology experiments. Being one of the top Management Colleges in Delhi NCR, India, the broad nature of elective courses in this BA Psychology program offered by The NorthCap University ensures plenty of career options. Also, confirms the applicability of psychological understanding in the areas of counseling, clinical research, organizational behavior and applied psychology experiments.

Programs offered:

- MA in Clinical Psychology
- MA in Applied Psychology
- MA in Organizational Behavior
- BA (Hons) in Psychology
- Ph.D. in Psychology

### **About the course**

The BA Psychology Hons course from The NorthCap University Gurgaon facilitates students in transferring knowledge of psychology theory to innovative contexts and develops an operational understanding of psychology's content domains. The program offers students a unique liberal arts education that helps them in exploring different philosophies, cultures, and human experiences which will broaden their views and provide them with a valued perspective sought by today's global companies. The broad nature of elective courses in the program offered by the NCU ensures plenty of career options and confirms the applicability of psychological understanding in counseling, clinical research, organizational behavior, and applied psychology experiments.

### **Eligibility**

10+2 (English Medium) examination conducted by the Central Board of Secondary Education or equivalent examination from a recognized board with an overall aggregate 50%. The candidates are additionally required to clear the personal interview conducted with faculty experts from the Department of Psychology.

As the B.A. (Hons.) The psychology program is compliant with the NEP 2020, there are provisions for multiple entry and exit. A student entering the NCU B.A. (Hons.) Psychology program in 2<sup>nd</sup> year needs to complete a minimum of 40 credits in the 1<sup>st</sup> year, out of which the student should secure 4 credits through work-based vocational courses offered during the summer term or internship / Apprenticeship, and 6 credits are from skill-based courses earned during the first and second semester. A student entering the NCU B.A. (Hons.) Psychology program in 3<sup>rd</sup> year needs to complete a minimum of 80 credits till 2<sup>nd</sup> year, and an additional 4 credits in skill-based vocational courses/summer internship/apprenticeship offered during the first year or second year summer term.

Approved in BoS Dated 04.04.2024

### ***Why Study Psychology At The NorthCap University?***

Students enrolled in Psychology program at NCU, reap the following range of personal and professional benefits:

- Professional Program Delivery: NCU is a systems-oriented institution, it guarantees professional program deliverance, and academic support systems for an excellent teaching learning process.
- Embedded in Liberal Education Philosophy: NCU offers a diverse set of programs with interdisciplinary learning opportunities leading to holistic all-round development of students.
- Industry Academia Interface: Program designed in consultation with experts from academia and industry with inputs from practitioners.
- Research based Real Life Projects: Research based learning with illustrative resolution of real-life social challenges through cases, projects and assignments. Learn to address national issues with global perspectives.
- Industrial Exposure and Experiential Learning: Students learn through industrial visits, guest lectures, value added courses, seminars and workshops.
- Mentor-Mentee System: At NCU, students are guided by their respective mentees, who not only help them academically, but also groom the students according to the current need of the industry.
- General Proficiency: Students are encouraged to opt for MOOC courses, Certification courses in order to upgrade their knowledge from time to time. They are also encouraged to take part in various activities conducted by the professional societies and clubs of the University.
- Community Service: The students are encouraged to participate in community welfare activities as a way of inculcating pro-social behavior and responsible citizenship.
- Campus Location: Located at the heart of Gurugram, connected with metro and other transport facilities.
- Our Curriculum: Is designed to provide an eclectic mix of core and contemporary courses to students which will help them both in person and professional developments.
- Highly Qualified Faculty: Highly qualified and competent, with expertise in their respective areas including clinical, children and adolescent, educational, counseling, industrial, cognitive psychology.

Approved in BoS Dated 04.04.2024

## USPs of Psychology Programme

- A well equipped psychology with latest Tools, Inventories, Scales, and Apparatus.
- Modern, fully-air conditioned classrooms, equipped with ICT facilities to enable an audio-visual experience for the students.
- The college campus offers multiple opportunities for our students to grow and learn. Students can participate in activities organized by over 60 clubs and societies at the University. The Psychology department has its own Manovriti - The Community Services and Mental Health Club, offering myriad avenues for the students to broaden their understanding of the discipline and hone their skills.
- Interdisciplinary and multidisciplinary exposure through diverse bucket of program electives, open electives and value-added courses.
- Regular updates in the curriculum to accommodate the transformations of the contemporary world. Students are prepared for a life beyond their classrooms
- Campus Corporate Connect through expert lectures, industrial visits, workshops, simulations and industrial projects
- Opportunities for international exposure through immersion and student- exchange programmes in reputed international universities
- Emphasis on the integral development of students with emphasis on soft skills and life skills training, involvement in various co-curricular and extra-curricular activities, such as: Incubation Center, Thought lab, etc.
- Internship and fieldwork opportunities to experience real-life work settings
- On-campus and off-campus placement opportunities
- A mentoring system that endorses personal and professional growth of each student at the university
- The faculty undergoes regular training under faculty development programmes. This contributes to a culture of regular learning

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## Guidelines for B.A. (Hons) Psychology Curriculum Revision

1. The number of theory courses per semester is 4/5/6.
2. Maximum contact hours shall be limited to 30 hrs. /week.

**Suggested Credit Structure for B.A. (Hons.) Psychology is as follows:**

NEP Curriculum Framework			NCU	Delhi University	O.P Jindal Global University	
S.No.	Broad Category of Course	Minimum Requirement	Credit	Credit Structure (2024)	Credit Structure (2022)	Credit Structure (2024)
1.	Major (Core)	60		60	72	76
2.	Minor Stream	24		15	8-16	32
3.	Multidisciplinary	09		12	16-24	12
4.	Ability Enhancement Courses (AEC)	08		14	8	-
5.	Skill Enhancement Courses (SEC)	09		12	4-8	22
6.	Value Added Courses common for all UG	06-08		12	8	-
7.	Summer Internship	02-04		8	2-8	10
8.	Research Project / Dissertation	-		10	12	-
	<b>Total</b>	<b>120</b>		<b>143</b>	<b>132</b>	<b>152</b>

**Table 1:** Comparison based on total credit structure

NCU				O.P Jindal Global University			
	Number of Subjects	Credit	Total Credits		Number of Subjects	Credit	Total Credits
CORE	15	04	60	CORE	19	04	76
PROGRAM ELECTIVE	06	03	15	PROGRAM ELECTIVE	08	04	32
OPEN ELECTIVE	03	03	12	OPEN ELECTIVE	03	03	12
ABILITY ENHANCEMENT COURSE	06	02/03	14	ABILITY ENHANCEMENT COURSE	-	-	-
SKILL ENHANCEMENT	05	02	12	SKILL ENHANCEMENT	11	02	22
GENERAL PROFICIENCY	06	01/02	6	GENERAL PROFICIENCY	-	-	-
COMMUNITY SERVICE	03	01/02	6	COMMUNITY SERVICE	-	-	-
TRAINING & PROJECT WORK	3	04/06	18	TRAINING & PROJECT WORK	05	02	10
<b>TOTAL</b>			<b>143</b>	<b>TOTAL</b>			<b>152</b>

**Table 2:** Comparison based on no. of subjects and credit structure

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## *B.A. (Hons) Psychology 2024-25 Scheme of Study*

**Following is the complete scheme of the B.A. (Hons) Psychology programme:**

### **OVERALL CREDIT STRUCTURE**

<b>Program Core (PC)</b>		<b>Program Elective (PE)</b>	
PC	60	Open Elective-1	3
		Open Elective-2	3
		Open Elective-3	3
		Open Elective-4	3
		PE-I	3
		PE-II	3
		PE-III	3
		PE-IV	3
		PE-V	3
<b>Total PC</b>	<b>60</b>	<b>Total PE</b>	<b>27</b>
<b>Total PC &amp; PE</b>			<b>87</b>
General Proficiency & Community Service		6+6=12	
Project Presentation & Training		18	
Ability Enhancement		14	
Skill Enhancement		12	
<b>Total Credit</b>			<b>143</b>

## Major Changes vis-a vis B.A. (Hons) Psychology Scheme 2023-24

### Highlights (Objectives of Change) of the B.A. (Hons.) Psychology (Revised) Scheme 2024-25

- The B.A. (Hons) Psychology Scheme 2024-25 is redesigned in compliance with the National Educational Policy (NEP)
- The program offers multiple exit and entry points with opportunities for a Certificate in Psychology (after 1 year), Diploma in Psychology (after 2 years), and a B.A. (Hons.) Psychology (after 3 years)
- The program offers a mix of core and contemporary courses, offering a strong foundational understanding of Psychology and creating awareness among students of modern-day local and global scenarios
- The practical courses, provision of project presentation, and training will lead to skill enhancement and better employment opportunities
- Mandatory summer internships provide students with avenues for applied and experiential learning

### Addition of New Courses

(A). Following new courses are recommended to be added to B.A. (Hons) Psychology Course Structure:

Sr. No.	Subjects	Nature/Objective of Change
<b>CORE COURSES</b>		
1	Methods of Psychological Enquiry Psychology	Students will be introduced to the types of research, sampling, types of assessments and Likert scales. They will learn about measures of central tendency and the normal curve distribution. They will also learn about the objectives, techniques, and designs in qualitative research. And insights into basic components of ethical practices.
2	Statistical Methods	This course offers an introduction to descriptive and inferential statistics. It furthers with preliminary concepts like random sampling, understanding about variables and constants and explains various scales of measurements. The course will introduce parametric tests and non-parametric tests
3	Qualitative Methods in Psychology	This course describes the philosophical foundations of empirical qualitative investigations. Students will learn to identify and discuss major traditions of qualitative research in psychology. Students will learn to develop and implement qualitative research design. The theoretical underpinning and basic techniques of qualitative methodology for psychological research are also covered in this course.
4	Applied Social and Community Psychology	Students will acquire an advanced understanding of relevant concepts, issues, and work methods in community psychology. This includes change processes at the community level, locally based intervention methods, and methods for evaluating implemented actions.

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5	Youth, Gender, and Identity	The main objectives of this course are to enable students to understand the concept of youth, gender, and identity; to elaborate on the issues concerning youth and sexuality; and to explain the relationship between youth, gender, and identity in the Indian context.
6	Contemporary Psychological Perspectives	Contemporary psychological perspectives is a cohort of introduction to four major streams of psychology i.e., sports, forensic, geriatric, and crisis management.
<b>PROGRAM ELECTIVES</b>		
1	Health and Well-being Psychology	The course aims to provide students with a comprehensive understanding of the psychological factors that influence individual well-being and contribute to a healthy lifestyle.
2	Art and Color Therapy	Through this course, the students will gain a solid understanding of the principles and practices of art therapy, including history, theories, and techniques.
3	Disability Studies	This interdisciplinary course introduces students to the growing and important field of disability studies. This course has a strong focus on the lived experience of disability and values the knowledge embodied in this experience.
5	Therapeutic Interventions	This course will cover a broad range of theory and practice related to mental health care.
6	Advertising and Media Psychology	This course offers an understanding of basic concepts, developments, issues and debates in advertising and media psychology.
7	Principles of Management	This course includes the basic mechanics business operations; manufacturing, marketing and maintaining financial focus in a rapidly changing and competitive market.
8	Introduction to Organizational Processes	This course is designed to build an understanding of how organizations behave and change by analyzing the workplace through different perspectives (or lenses). This course is organized around three different perspectives on organizations: the strategic design perspective, the cultural perspective, and the political perspective.
9	Self in a Changing World	In this course, students will develop a deeper understanding of their Self, including their values, beliefs, emotions, and behaviors, which can enhance their personal and professional growth.
10	Stress Management, Coping and Life Adjustment	Students will gain a comprehensive understanding of stress, including its causes, effects on health, and the different ways it can manifest in individuals. They will learn a variety of coping strategies for managing stress, including problem-focused coping, emotion-focused coping, and meaning-focused coping.

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11	Emotional Intelligence	This emotional intelligence course will help students better sense and respond to their own emotions and the emotions of others. This course focuses on the five core competencies of emotional intelligence: self-awareness, self-regulation, motivation empathy, and interpersonal skills.
<b>ABILITY ENHANCEMENT COURSES</b>		
1	Creative Thinking and Academic Writing	The Creative Thinking and Academic Writing course is designed to enhance undergraduate psychology students' ability to think critically, creatively, and expressively while developing their academic writing skills.
<b>SKILL ENHANCEMENT COURSES</b>		
1	Theory and Practice of Measurement I	Through this course, the students will be introduced to the psychology lab, apparatus, and tools utilized for experiments and psychometric assessments. Students will gain basic skills related to handling tools and apparatus, fundamentals of conducting psychological assessments, analyzing scores, and creating reports. The course will provide students with practical exposure to the theoretical learnings concerning their ongoing core courses in semester I.
2	Theory and Practice of Measurement II	This course is an advancement of the theory and practice of measurement I. It will give students practical exposure to the theoretical learnings concerning their ongoing core courses in semester II. The students will be exposed to apparatus like the Weight discrimination box and Koh's block design, and tools such as aggression.

The above courses must be read at the UG level as these will build the foundation for any PG degree in Psychology and related fields. These will offer students wider opportunities to explore their interests in different sub-fields in psychology. These subjects are connected with current societal concerns and will enable students to engage in multidisciplinary topics and connect and apply psychological concepts and principles to different areas.

### 1. Deletion of Old Courses

Sr. No	Subjects	Replaced With
1	PCL111 Understanding Individual Differences	Included as part of the program elective basket
2	PCL106 Positive Psychology	Included as part of the program elective basket
3	PCL107 Academic Reading and Writing	Creative Thinking and Academic Skills
4	PCL112 Statistical Methods and Psychological Research I	Methods of Psychological Enquiry
6	PCL213 Statistical Methods and Psychological Research II	Statistical Methods

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7	PCL204 Applied Social Psychology	Introduction to Social Psychology (Course template to be revised to include key topics of applied social psychology)
8	PCL201 Cultural Psychology	Included as part of the program elective basket
9	PCL302 Applied Clinical Psychology	Therapeutic Interventions (Included in PE basket)
10	BSV301 Creative Thinking and Negotiation Skills	Creative Thinking and Academic Skills
11	PCP302 Practical Qualitative Analysis	Qualitative Methods in Psychology

## 2. Nomenclature changed:

Sr. No	Code	Old	New	Reason	Change in L-T-P (if any)
1	PCP201	Psy Practical (Experiment) (2-0-2)3	Theory and Practice of Measurement (III) (0-0-4)2	To create uniformity in practicum nomenclature + To allow flexibility in course template design to include experiments related to courses taught in the corresponding semester	YES
2	PCL214	Psychopathology and Well-being (3-1-0)4	Introduction to Abnormal Psychology	To provide greater clarity for course content and align it with usual nomenclature as prevalent across different universities	NO
3	PCP202	Psy Practical (Testing) (2-0-2)3	Theory and Practice of Measurement (IV) (0-0-4)2	To create uniformity in practicum nomenclature + To allow flexibility in course template design to include experiments related to courses taught in the corresponding semester	YES
4	PCL202	Industrial and Organizational Psychology (3-1-0)4	Industrial and Organizational Behaviour	The new nomenclature allows for a broader scope of discussion of areas related to industrial psychology and organizational psychology and relate it to varied aspects of workplace behaviour	NO
5	PCP301	Psy Practical (Survey) (0-0-4)2	Theory and Practice of Measurement (V) (0-0-4)2	To create uniformity in practicum nomenclature + To allow flexibility in course template design to include experiments related to courses taught in the corresponding semester	NO

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### 3. Changes in Credits

L-T-P of the following courses has been revisited:

Sr. No	Code	Subjects	Old	New	Change in Nomenclature (if any)
1	PCL130	Introduction to Psychology	(4-0-0)4	(3-1-0)4	NO
2	PCL104	Introduction to Social Psychology	(2-2-0)4	(3-1-0)4	NO
3	PCP201	Psy Practical (Experiment)	(2-0-2)3	(0-0-4)2	Theory and Practice of Measurement III
4	PCP301	Psy Practical (Testing)	(2-0-2)3	(0-0-4)2	Theory and Practice of Measurement IV
5	PCL111	Understanding Individual Differences	(3-1-0)4	(2-0-2)3	NO
6	PCL106	Positive Psychology	(3-1-0)4	(2-0-2)3	NO

### 4. Shifting of Courses from one Semester to another

Sr. No	Code	Subjects	Old	New	Reason
1	PCL105	Evolution of Psychological Thought	Sem I	Sem II	To enable compliance with the NEP curriculum framework, allowing for multiple entry and exit points. The courses are placed keeping in mind the levels of course - as highlighted in UGC's guidelines for curriculum and credit framework
2	PCL108	Introduction to Physiological Psychology	Sem II	Sem III	
3	PCL104	Introduction to Social Psychology	Sem II	Sem I	
4	CHL100	Environmental Studies	Sem I	Sem III	
5	PCL212	Introduction to Cognitive Psychology	Sem IV	Sem III	
6	PCL211	Introduction to Developmental Psychology	Sem IV	Sem III	
7	PCD201	Minor Project	Sem III	Sem IV	

## 5. COMPARISON

Particulars	2023-24 (Old)	2024-25 (New)
Programme Core	77	60
Ability Enhancement	15	14
Project Presentation & Training	14	18
Skill Enhancement	2	12
General Proficiency	6	6
Program Electives	9	15
Open Electives	9	12
Community Service	6	6
Contact Hours	1995	2055
<b>TOTAL CREDITS</b>	<b>138</b>	<b>143</b>

\*As per the UGC's guidelines on curriculum and credit framework, the minimum credit requirement to award an honors degree is 120 (+15-20). The total credits for the revised B.A. (Hons.) Psychology program (2024-25) is 143.

**B.A. (Hons.) PSYCHOLOGY (REVISED) SCHEME OF STUDY 2024-25**

Semester	Semester Course Code, Course Name (L-T-P) Credits							Community Service	GP	Hrs. Per week			Contact Hours per Sem	Credits
	L	T	P											
1	<b>CLL120</b> Human Values & Professional Ethics (2-0-0)2	<b>PCL130</b> Introduction to Psychology (3-1-0)4	<b>PCL104</b> Introduction to Social Psychology (3-1-0)4	Theory and Practice of Measurement (I) (0-0-4)2	Methods of Psychological Enquiry (3-1-0)4	Programme Elective – I (2-0-2)3	<b>CHL100</b> Environmental Studies (3-0-0)3	<b>PCS101</b> CS-I	<b>PCR101</b> GP-I 1 Credit	16	3	6	25*15=375	23
2	<b>CLL130</b> Effective Comm-I (1-0-2)2	<b>PCL105</b> Evolution of Psychological Thought (3-1-0)4	Statistical Methods (3-1-0)4	Theory and Practice of Measurement (II) (0-0-4)2	Open Elective – I (2-0-2)3	<b>CSV100</b> Basic Computer Skills for Professionals (0-0-4)2		<b>PCS102</b> CS-II (140 Hrs)* 2 Credit	<b>PCR102</b> GP-II 1 Credit	9	2	12	19*15=285	20
<b>Summers</b>	<b>PCD</b>		<b>Summer Internship</b>				<b>(0-0-8)4</b>				<b>8</b>			<b>4</b>
<b>EXIT POINT: Certificate in Psychology on completion of 47 credits</b>														
3	<b>CLL140</b> Effective Comm-II (1-0-2)2	<b>PCL212</b> Introduction to Cognitive Psychology (3-1-0)4	<b>PCL108</b> Introduction to Physiological Psychology (3-1-0)4	Programme Elective – II (2-0-2)3	Qualitative Methods in Psychology (3-1-0)4	<b>PCP201</b> Theory and Practice of Measurement (III) (0-0-4)2	Creative Thinking and Academic Writing (1-0-2)2	<b>PCS201</b> CS-III	<b>PCR201</b> GP-III 1 credit	13	3	10	26*15=390	22
4	<b>PCL202</b> Industrial and Organizational Behaviour (3-1-0)4	<b>PCL214</b> Introduction to Abnormal Psychology (3-1-0)4	<b>PCL211</b> Introduction to Developmental Psychology (3-1-0)4	Open Elective – II (2-0-2)3	<b>PCP202</b> Theory and Practice of Measurement (IV) (0-0-4)2	PCD201 Minor Project (0-0-8)4	Foreign Language Elective (1-2-0)3	<b>PCS202</b> CS-IV (140 Hrs)* 2 Credit	<b>PCR202</b> GP-IV 1 credit	12	5	6	23*15=345	27
<b>Summers</b>	<b>PCT301</b>		<b>Summer Internship</b>				<b>(0-0-8)4</b>				<b>8</b>			<b>4</b>
<b>EXIT POINT: Diploma in Psychology on completion of 98 credits</b>														
5	Community Psychology (3-1-0)4	<b>PCL206</b> Counselling Psychology (3-1-0)4	Programme Elective-III (2-0-2)3	Programme Elective-IV (2-0-2)3	Open Elective-III (2-0-2)3	<b>PCP301</b> Theory and Practice of Measurement (V) (0-0-4)2		<b>PC301</b> CS-V	<b>PCR301</b> GP-V 1 credit	12	2	10	24*15=360	20
6	Youth, Gender and Identity (3-1-0)4	Contemporary Psychological Perspectives (3-1-0)4	Programme Elective-V (2-0-2)3	Open Elective-IV FULL MOOC (2-0-2)3		PCD302 Major Project (0-0-12)6		<b>PCS302</b> CS-VI (140 Hrs) 2 Credit	<b>PCR302</b> GP-VI 1 credit	10	2	4	16*15=240	23
<b>TOTAL</b>										<b>72</b>	<b>17</b>	<b>48</b>	<b>137*15=2055</b>	<b>143</b>
<b>EXIT POINT: B.A. (Hons.) Psychology after three years on completion of 143 credits</b>														

NOTE: i. The student has the option to exit after year 1 with a Certificate in Psychology on completion of 47 credits (inclusive of 5 credits of Summer Internship)

ii. The student has the option to exit after year 2 with a Diploma in Psychology on completion of 98 credits (inclusive of 5 credits for Summer Internship)

iii. The student will have a degree in B.A. (Hons.) Psychology after three years on completion of 143 credits

\* Students shall complete the required 140 Community Service Hours across the year

\*The student will be allotted a faculty mentor for a Research project in 6<sup>th</sup> semester

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## B.A. (Hons.) PSYCHOLOGY(OLD) SCHEME OF STUDY 2023-24

### B.A. (Hons.) PSYCHOLOGY SCHEME OF STUDY 2023-2024

Semester	Semester Course Code, Course Name (L-T-P) Credits							Community Service	GP	Hrs. Per week			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	PCD201					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	PCT301					Summer 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	BSV301 Creative thinking 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
<b>TOTAL</b>										<b>70</b>	<b>21</b>	<b>42</b>		<b>138</b>

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 (Revised) programme (2024-25):**

<b>OVERALL CREDIT STRUCTURE</b>	
<b>Category</b>	<b>Credits</b>
Programme Core	60
Ability Enhancement	14
Project Presentation & Training	18
Skill Enhancement	12
General Proficiency	6
Program Electives	15
Open Electives	12
Community Service	6
<b>Total Credits</b>	<b>143</b>

<b>Ability Enhancement</b>		<b>L-T-P</b>	<b>C</b>
CLL120	Human Values and Professional Ethics	(2-0-0)2	2
CLL130	Effective Comm-I	(1-0-2)2	2
CLL140	Effective Comm-II	(1-0-2)2	2
CHL100	Environmental Studies	(3-0-0)3	3
(code to be generated)	Foreign Language	(1-2-0)3	3
(code to be generated)	Creative Thinking and Academic Skills	(1-0-2)	2
<b>Programme Core</b>		<b>L-T-P</b>	<b>C</b>
PCL130	Introduction to Psychology	3-1-0	4
PCL104	Introduction to Social Psychology	3-1-0	4

(code to be generated)	Methods of Psychological Enquiry	3-1-0	4
PCL105	Evolution of Psychological Thought	3-1-0	4
(code to be generated)	Statistical Methods	3-1-0	4
PCL212	Introduction to Cognitive Psychology	3-1-0	4
PCL104	Introduction to Physiological Psychology	3-1-0	4
(code to be generated)	Qualitative Methods in Psychology	3-1-0	4
PCL214	Introduction to Abnormal Psychology	3-1-0	4
PCL211	Introduction to Developmental Psychology	3-1-0	4
PCL202	Industrial/Organizational Behaviour	3-1-0	4
(code to be generated)	Applied Social and Community Psychology	3-1-0	4
PCL206	Counselling Psychology	3-1-0	4
(code to be generated)	Youth, Gender, and Identity	3-1-0	4
(code to be generated)	Contemporary Psychological Perspectives	3-1-0	4

## PROGRAMME ELECTIVES

Programme Electives		L-T-P	C
PCL111	Understanding Individual Differences	2-0-2	3
PCL201	Cultural Psychology	2-0-2	3
(code to be generated)	Health and Well-being Psychology	2-0-2	3
(code to be generated)	Art and Colour Therapy	2-0-2	3
(code to be generated)	Disability Studies	2-0-2	3
(code to be generated)	Therapeutic Interventions	2-0-2	3
(code to be generated)	Principles of Management	2-0-2	3
BSL204	Consumer Behavior	2-0-2	3
PCL338	Advertising and Media Psychology	2-0-2	3
BSL203	Human Resource Management	2-0-2	3
(code to be generated)	Introduction to Organizational Processes	2-0-2	3
PCL334	Sustainability and Conservation Behavior	2-0-2	3
PCL106	Positive Psychology	2-0-2	3
(code to be generated)	Self in a Changing World	2-0-2	3
(code to be generated)	Stress Management, Coping, and Life Adjustment	2-0-2	3
(code to be generated)	Emotional Intelligence	2-0-2	3
PCL102	Psychology for Living	2-0-2	3
<b>General Proficiency</b>		<b>Credit</b>	
PCR101	GP-I	01 credit	
PCR102	GP-II	01 credit	
PCR201	GP-III	01 credit	
PCR202	GP-IV	01 credit	
PCR301	GP-V	01 credit	
PCR302	GP-VI	01 credit	
<b>Community Service</b>		<b>Credit</b>	
PCS101	Community Service (CS-I)	02 credits	
PCS102	Community Service (CS-II)		
PCS201	Community Service (CS-III)	02 credits	
PCS202	Community Service (CS-IV)		
PCS301	Community Service (CS-IV)	02 credits	
PCS302	Community Service (CS-VI)		

Skill Enhancement Courses		(L-T-P)	C
(code to be generated)	Theory and Practice of Measurement (I)	0-0-4	2
(code to be generated)	Theory and Practice of Measurement (II)	0-0-4	2
(code to be generated)	Theory and Practice of Measurement (III)	0-0-4	2

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(code to be generated)	Theory and Practice of Measurement (IV)	0-0-4	2
(code to be generated)	Theory and Practice of Measurement (V)	0-0-4	2
CSV100	Basic Computer Skills for Professionals	0-0-4	2

<b>Other Courses</b>	<b>(L-T-P)</b>	<b>C</b>
Open Elective - I	2-0-2	3
Open Elective - II	2-0-2	3
Open Elective - III	2-0-2	3
Open Elective - IV	2-0-2	3

<b>Project Presentation and Training</b>		<b>(L-T-P)</b>	<b>C</b>
PCP	Summer Internship (I)	0-0-8	4
PCD201	Minor Project	0-0-8	4
PCP	Summer Internship (II)	0-0-8	4
PCD302	Major Project	0-0-12	6

## **Course Description BA Psychology (Honours) (2024-2027)**

### **PROGRAMME CORE**

#### **PCL130 Introduction to Psychology**

##### **4 Credits (3-1-0)**

This course introduces students to the basic concepts 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.

#### **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.

#### **Methods of Psychological Enquiry**

##### **4 Credits (3-1-0)**

Through this course students will be introduced to the types of research, sampling, types of assessments and Likert scales. They will also learn about measures of central tendency- mean, median, mode and normal curve formation. They will learn about the objectives, techniques, and designs in qualitative research. They will also gain insights into basic components of ethical practices - competence, confidentiality, integrity, and credibility.

#### **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 about feminism and cultural paradigms.

#### **Statistical Methods**

##### **4 Credits (3-1-0)**

This course offers an introduction to descriptive and inferential statistics. It furthers with preliminary concepts like random sampling, understanding about variables and constants and explains various scales of measurements. The course will introduce parametric tests exploring the importance of t-test, z-score, f-score, and ANOVA. Students will also learn about non-parametric tests like Kruskal-Wallis and Mann-Whitney through this course.

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**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.

**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 behavior along with structure and functions of endocrine glands, brain and nervous system.

**Qualitative Methods in Psychology****4 Credits (3-1-0)**

This course describes the philosophical foundations of empirical qualitative investigations. Students will learn to identify and discuss major traditions of qualitative research in psychology. Students will learn to develop and implement qualitative research design. The theoretical underpinning and basic techniques of qualitative methodology for psychological research are covered in this course, which includes practical skills for conducting individual interviews and focus groups, grounded theory research and analysis, content analysis, domain analysis, as well as approaches for assimilating and presenting qualitative findings.

**PCL202 Industrial and Organizational Behaviour****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.

**PCL214 Introduction to Abnormal Psychology****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.

### **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.

### **Applied Social and Community Psychology**

#### **4 Credits (3-1-0)**

This course examines how social psychological theory and research can be applied to understand and address social issues that affect communities. These social issues include (but are not limited to) issues around psychological sense of community, cultural narratives, social identity, intersectionality, poverty, structural inequality, mental health, loss of community, intervention, evaluation, social change, empowerment, and advocacy, among other topics. In doing so the course bridges knowledge from the areas of social psychology and community psychology. Social psychology is the scientific study of how people think about, influence, and relate to one another. Community psychology is concerned with the application of psychological principles to understand and address the issues that affect communities.

### **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.

### **Youth, Gender and Identity**

#### **4 Credits (3-1-0)**

The main objectives of this course are to enable students to understand the concept of youth, gender and identity; to elaborate the issues concerning youth and sexuality; to explain the relationship between youth, gender and identity in Indian context; to critically analyse the role of culture in identity formation; to discuss the concept of multiple identities; to explain the important role of family, peer group, school and media in identity formation; to develop self-esteem and self-concept; to examine the risk behaviour among youth; to encourage positive youth development; to analyse the influence of globalization on gender and youth identity. To study coping mechanisms related to identity crisis due to faulty formation of self-concept.

### **Contemporary Psychological Perspectives**

#### **4 Credits (3-1-0)**

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Contemporary psychological perspectives is a cohort of introduction to four major streams of psychology i.e., sports, forensic, geriatric, and crisis management. Under the contemporary psychological purview of sports psychology, the students will gain insight about psychological and mental factors that influence and are influenced by participation in sports, exercise, and physical activity. Introduction to Forensic Psychology is multidimensional, demonstrating how to analyze psychological knowledge and research findings and apply these findings to the civil and criminal justice systems. This course will introduce students to research-based forensic practice and application which they will utilize to define and explore forensic psychology. Students will learn the meaning, scope, and significance of Geriatric care among the elderly along with the problems of the elderly- Physical, Psychological, Economic, Emotional & Social problems. Geriatric giants- immobility, instability, incontinence, and impaired intellect/memory. Impaired vision and hearing loss. Through crisis management in psychology the students will learn how people process information differently during a crisis, the mental states, and behaviours, that need to emerge in crisis.

## **PROGRAMME ELECTIVES**

### **PCL111 Understanding Individual Differences**

#### **3 Credits (2-0-2)3**

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.

### **PCL201 Cultural Psychology**

#### **3 Credits (2-0-2)3**

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.

### **Health and Wellbeing**

#### **3 Credits (2-0-2)3**

The course aims to provide students with a comprehensive understanding of the psychological factors that influence individual well-being and contribute to a healthy lifestyle. Through an exploration of various models, theories, and concepts related to health and well-being, students will gain insights into the intricate relationship between psychological processes and overall wellness. The course encompasses topics such as the bio-medical model, bio-psychosocial model, stress, coping strategies, health behaviors, addictive behaviors, and more. The course begins by examining the advantages and disadvantages of the bio-psychosocial model compared to the biomedical model. Students will gain an understanding of how these models shape our understanding of health and its determinants. Additionally, students will explore different models of healthy personality proposed by prominent psychologists such as Maslow, Fromm, Pearl, Vaillant, and Frankl. This exploration will deepen their comprehension of the principles and importance of holistic health.

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### **Art and Color Therapy**

#### **3 Credits (2-0-2)3**

Through this course, the students will gain a solid understanding of the principles and practices of art therapy, including history, theories, and techniques. They will learn about the psychological effects of different colors and how colors can be used to evoke emotions and promote healing. Students will also develop practical skills in using art and color as therapeutic tools, including techniques for facilitating artistic expression and interpreting artwork. The course will also focus on the cultural competence to develop an awareness about how art and color are used in different cultures and how cultural factors can influence the therapeutic process. The course will also include the ethical and professional considerations through which students will learn about the ethical guidelines and professional standards that govern the practice of art therapy, including issues related to confidentiality, boundaries, and cultural sensitivity.

### **Disability Studies**

#### **3 Credits (2-0-2)3**

This course will introduce students to different theoretical and methodological approaches to studying disability within the Humanities and Social Sciences, as well as to the prominent debates within the field. The study of disability within disciplines such as history, sociology, anthropology, English, political science, and geography has been of increasing interest to academic scholars. This course will provide an overview of the relatively new field of Disability Studies, enabling students to think critically about conventional conceptualizations of disability and normality of body and mind. Through the exploration of these perspectives, the students will be asked to engage with concepts such as subjectivity and theories of disability and issues related to childhood, care, gender and culture. It also places disability in exploring changes and continuities in the ways in which people have thought about concepts in law, and in policy.

### **Therapeutic Interventions**

#### **3 Credits (2-0-2)3**

This course will cover a broad range of theory and practice related to mental health care. The course will focus on Indian as well as western therapy techniques as well as the most commonly used theoretical approaches used. Clinical conceptualization, diagnosis, treatment planning, and issues/needs related to providing culturally sensitive, inclusive, and competent treatment will be covered. This course aims to achieve the goal like describing the major theoretical approaches to psychotherapy, identifying common counseling related problems/issues confronting the client, demonstrating competence in the assessment and clinical treatment of commonly encountered mental health issues.

### **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.

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### **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 Advertising and Media Psychology**

#### **3 Credits (2-0-2)**

This course offers an understanding of basic concepts, developments, issues and debates in the field of advertising and media psychology. This course will help students appreciate principal theories and processes of media use and its effects. The students will understand the effects of media on children and adolescence periods. The students will also learn to critically analyze the representation of different social groups in media. Also, help students understand the psychological effects of media and its violence.

### **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.

### **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.

### **Introduction to Organizational Processes**

#### **3 Credits (2-0-2)**

This course is designed to provide students with an understanding of the individual, group, and human behavior in organizations. The focus is on providing an understanding of how

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organizations can be managed more effectively and enhancing the quality of employees' work life. Topics will include Organizational Behaviors, Diversity, Attitudes and Job Satisfaction, Personality, and Values, Perceptions, Decision Making, Motivation Concepts, Group Behavior, Communication, Leadership, and Conflict and Negotiation. Concepts associated with continuous improvements in individual and group processes are discussed to support the understanding of management and organizational behavior.

### **PCL106 Positive Psychology**

#### **3 Credits (2-0-2)**

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 an opportunity to the students to explore the concepts of positive psychology constructs such as happiness, character strengths, self-efficacy, and creativity and introduce the ways positive psychology can be applied in real-world settings.

### **SKILL ENHANCEMENT COURSES**

#### **Theory and Practice of Measurement (I)**

##### **2 Credits (0-0-4)**

Through this course, the students will be introduced to the psychology lab, assessments, and tools utilized for psychometric assessments. This course will give students a practical exposure to the theoretical learnings concerning their ongoing core courses. Experiments like Müller-Lyer illusion, Koh's block, and Memory drum will be included in this level, along with psychometric assessments like Sentence Completion Test.

#### **Theory and Practice of Measurement (II)**

##### **2 Credits (0-0-4)**

This course is an advancement for theory and practice I, in which students have hands-on experience with apparatus like Weight discrimination box and Tachistoscope. Through this course students will also be taught psychometric assessments, and they will learn to conduct the tests like Social Intelligence test and Family Environment scale. Students will be able to integrate theoretical knowledge with practical applications in psychology and will be able to apply psychological theories and concepts to analyze and explain real-world phenomena and behavior.

#### **PCP201 Theory and Practice of Measurement (III)**

##### **2 Credits (0-0-4)**

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 Theory and Practice of Measurement (IV)**

##### **2 Credits (0-0-4)**

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.

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**PCP301 Theory and Practice of Measurement (V)****2 Credits (0-0-4)**

The present practical course will equip the students to conduct surveys for psychological inquiry and research methods.

**CSV100 Basic Computer Skills for Professionals**

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****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.

**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.

**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.

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## **CLL140 Effective Communication II**

### **2 Credits (1-0-2)**

Writing Memos, Circulars and Notices, Report Writing, Writing E-mail: Principles of E-mail; Email 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.

## **Creative Thinking and Academic Writing**

### **2 Credits (1-0-2)**

The Creative Thinking and Academic Writing course is designed to enhance undergraduate psychology students' ability to think critically, creatively, and expressively while developing their academic writing skills.

## **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 to produce oral and written texts about their immediate environment.

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## **PROJECT PRESENTATION AND TRAINING**

### **Summer Internship I & II**

#### **4 Credits each (0-0-8)**

The summer internship is designed to offer practical experience in the field of psychology, complementing their academic studies. Typically spanning 6 to 8 weeks during the summer break, this course provides students with the opportunity to apply theoretical knowledge to real-world situations, often in settings such as hospitals, clinics, research institutions, or community organizations.

### **PCD 201 Minor Project /PCD302 Major Project**

#### **4 Credits (0-0-8)/6 Credits (0-0-12)**

The minor and major research project courses allow students to delve into a specific area of interest within the field of psychology. It provides the students the opportunity to engage in the research process from conception to dissemination under the guidance of a faculty member or a mentor. Students begin by identifying a research question or hypothesis, conducting a literature review to ground their inquiry in existing knowledge, and designing a study to address their research question. This process involves selecting appropriate methodologies, such as experiments, surveys, or observational studies, and considering ethical implications. Following the design phase, students collect and analyze data, using statistical software or qualitative analysis techniques as appropriate to their study's focus. The culmination of the course is the presentation of their findings, typically in the form of a written research report or paper.



**BOARD OF STUDIES**  
**Department of Psychology (2024-2025)**

**M.A. Psychology 2024-25**

Approved in BoS Dated 04.04.2024

## **About the Programme**

MA Psychology is proposed to be offered as a two year full time programme and shall be covered in 4 semesters. A minimum of 82 credits are required to be earned by a student to complete the course.

The break-up of credits is as below-

Core = 32 credits

Programme Elective = 18 credits

Open Elective = 9 credits

Internship, Dissertation & Research Seminar = 18 credits

Community Service = 4 credits

Skill Enhancement = 4 credits

Sufficient choice for Programme Electives and Open Electives are provided in line with the Choice Based Credit System (CBCS) guidelines recommended by UGC for flexibility and uniformity in assessments.

## **Benefits of the Programme**

The M.A. in Psychology programme will provide students a platform to gain theoretical and practical knowledge so that they can specialize their career in various fields such as teaching, research, clinical practice, industry, policy making, etc. The programme will also provide students the opportunity to do internships and research so that they can integrate the knowledge obtained from theory and practice. The core objective of the programme is to prepare students rigorously to take an active part in social progress as Professors, Industry Experts, Clinical Practitioners, Scientists and other professions of repute and to become leaders in nation building. The programme will enable the students to extend the knowledge base to the practical world with the objective of promoting healthy interface between academics and real-world situations.

The Programme Structure is proposed as per the UGC norms and other Universities curriculum the total minimum credits must be 80 on completion of 2 years. Generic subjects added help in enhancement in knowledge and creating employability for the students. Flexibility in Programme Electives is offered to enable students to choose specialization in Master's (Clinical/ Organizational/ Applied).

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## **Unique Propositions of the Course**

The MA Psychology programme offered by the NorthCap University will provide the following propositions to benefit the students.

1. Research Orientation - Research Seminar, Dissertation, Summer Internship will orient the student to build a strong foundation for research that can contribute to the industries, academics and prepare the student for higher research degree such as PhD.
2. Flexibility - With Elective Choices from 1<sup>st</sup> semester, students also have an exit option after one year with a PG diploma in Psychology.
3. Community Service: As per UGC recommendations, the programme offers courses on community service. With this, the students will inculcate an attitude of concern towards the society and by which they can act towards benefitting the society and the nation at large.
4. Course in line with NEP – the course provides exit with PG Diploma after completing 40 credits in first year (NCU is offering completion of 44 credits for exit).
5. Psychology Lab- The Psychology Lab at NorthCap University is a cutting-edge facility fostering research, experimentation, and exploration in various domains of psychology.

## **Rationale**

The NorthCap University, Gurugram has been successfully running the B.A. (H) Psychology programme since 2019. Based on the verbal recommendations of the stakeholders and the experience of quality learning of the students at NorthCap University, the department of Psychology proposes to launch a Master's programme in Psychology as per the CBCS guidelines of the UGC. This would provide a good platform to the students who wish to pursue higher studies in Psychology and benefit their own career to lead a successful life and contribute to societal responsibilities and nation building at large with their knowledge.

## **Eligibility Criteria for Admission**

A 3-year Bachelor's Degree in Arts/Science/Allied Sciences/Nursing/Management recognized by UGC with a minimum of 50% marks or an equivalent CGPA. Candidates appearing in the final year of Graduation shall also be provisionally eligible. The candidates are additionally required to clear the personal interview conducted with faculty experts from the Department of Psychology.

As the MA Psychology program is compliant with NEP 2020, there is a provision of entry and exit. A student entering the NCU MA Psychology program in 2<sup>nd</sup> year needs to complete a minimum of 40 credits in 1<sup>st</sup> year. The student should secure 4 credits

through work based vocational courses offered during summer term or internship, and 6 credits are from skill based courses earned in the first year.

### Course Structure Comparison

Comparison of course structure of M.A. Psychology programme being proposed at the NorthCap University with UGC framework and M.A. Psychology programme of different University is given below-

	UGC (NEP)		NCU	OP JINDAL
	Course Work	Credits	Credits	Credits
CORE	First Year Second Year	40 20	32	48
PROGRAM ELECTIVE			18	14
OPEN ELECTIVE			9	0
COMMUNITY SERVICE			4	0
SKILL ENHANCEMENT COURSE			4	8
INTERNSHIP, SEMINAR, SYNOPSIS & DISSERTATION		20	18	26
TOTAL		80	85	96

### M. A. Psychology 2024 Scheme of Study:

<b>Total Number of Courses (Program Core – 8) + (Program Electives – 6) (Open Electives – 3) + (Skill Enhancement – 2) + (Seminar, Internship and Dissertation – 4) (Community Service – 2)</b>	<b>25</b>
Total Number of Core Courses (Theory)	<b>8</b>
Number of Courses on Skill Enhancement	<b>2</b>
Total number of Electives (Program Electives 6) + Open Electives(3)	<b>9</b>
Total Number of Community Service	<b>2</b>
Seminar, Internship, and Dissertation	<b>4</b>

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## Proposed Scheme of Study for MA (Psychology)

Sem	Semester Course Code, Course Name (L-T-P) Credits							Hrs. Per week			Credits
	L	T	P								
1	<b>Code to be generated</b> Paradigms in Psychology (3-1-0) 4	<b>Code to be generated</b> Tools and Techniques of Professional Psychology-I (0-0-4) 2	Programme Elective – I (2-0-2) 3	<b>Code to be generated</b> Advanced Research Methodology (3-1-0) 4	<b>Code to be generated</b> Behavioral Science and People Analytics (3-1-0) 4	Programme Elective – II (2-0-2) 3	<b>PCS501</b> Community Service (CS)	13	3	8	20
2	<b>Code to be generated</b> Culture and Psychology (3-1-0) 4	<b>Code to be generated</b> Tools and Techniques of Professional Psychology-II (0-0-4) 2	Open Elective- I (2-0-2) 3	Research Seminar 2 Credit	Programme Elective – III (2-0-2) 3	Workplace Communication (3-1-0)4	<b>PCS502</b> Community Service (CS) 140hrs** 2 Credits	10	2	8	20
<b>Summers</b>		<b>PCT601 Summer Internship (4 Credits) of minimum 6-8 weeks</b>									4
<b>Exit Option: PG Diploma in Psychology (Clinical/ Organizational/ Applied) shall be awarded after completion of Credits</b>											
3	<b>Code to be generated</b> Indian Knowledge Systems (3-1-0) 4	Programme Elective –IV (2-1-2) 3	Open Elective-II (2-0-2) 3	AI and Human Behaviour (3-1-0)4	Programme Elective – V (2-0-2) 3	Code to be generated Dissertation I (4 Credits)	<b>PCS601</b> Community Service (CS)	12	3	6	21
4	<b>Code to be generated</b> Cognitive Neuroscience (3-1-0) 4	Programme Elective – VI (2-0-2) 3	Open Elective III (2-0-2) 3			<b>PCD602</b> Dissertation II (8 Credits)	<b>PCS602</b> Community Service (CS) 140hrs** 2 Credits	7	1	4	20
<b>Total</b>								<b>42</b>	<b>9</b>	<b>26</b>	<b>85</b>

\* After completing 44 credits in the first year the student shall be eligible to exit with a PG Diploma in Psychology. If the student wishes to continue and finishes the remaining credits, the student shall be eligible for a Masters in Arts (Psychology).

\*\* Students completing 6 electives from a particular specialization (Clinical/ Organizational/ Applied), will be eligible for a award of specialization certificate on successful completion of 85 credits at the time of award of degree.

\*\*\*Student not choosing any specialization shall be awarded with regular MA Psychology degree on successful completion of 85 credits.

Approved in BoS Dated 04.04.2024

The following is the summary of student contact hours during the M.A. Psychology Programme:

	<i>SEM I</i>	<i>SEM II</i>	<i>SEM III</i>	<i>SEM IV</i>
<b>Number of courses per semester</b>	6	6	5	5
Number of credits per semester	20	20+4=24	18	23
Contact hours per week for all courses	24	20	17	16
Teaching weeks in a semester	15	15	15	15
<b>Total credits for programme</b>	<b>85</b>			

Following is the complete scheme of the M.A. Psychology Programme

#### Overall Credit Structure

<b>Programme Core (PC)</b>		<b>Programme Elective (PE)</b>		<b>Open Elective (OE)</b>	
PC	32	PE-I, PE-II, PE-III	9	OE I	3
		PE-IV, PE-V, PE-VI	9	OE II, OE-III	6
<b>Total Core Electives</b>	<b>32</b>	<b>Total Programme Electives</b>	<b>18</b>	<b>Total OpenElectives</b>	<b>9</b>
<b>Total PC &amp; PE &amp; OE Credits</b>			<b>59</b>		
Seminar + Internship + Dissertation			<b>18</b>		
Community Service			<b>4</b>		
Skill Enhancement (Practical)			<b>4</b>		
<b>Total Credits</b>			<b>85</b>		

### Programme Core

S.No.	Course Code	Course Name	L-T-P	Credit
1	Code to be generated	Paradigms in Psychology	3-1-0	4
2	Code to be generated	Advanced Research Methodology	3-1-0	4
3	Code to be generated	Behavioral Science and People Analytics	3-1-0	4
4	Code to be generated	Culture and Psychology	3-1-0	4
5	Code to be generated	Indian Knowledge Systems	3-1-0	4
6	Code to be generated	Workplace Communication	3-1-0	4
7	Code to be generated	AI and Human Behaviour	3-1-0	4
8	Code to be generated	Cognitive Neuroscience	3-1-0	4

### Skill Enhancement (Practical)

S.No.	Course Code	Course Name	L-T-P	Credit
1	Code to be generated	Tools and Techniques of Professional Psychology-I	0-0-4	2
2	Code to be generated	Tools and Techniques of Professional Psychology-II	0-0-4	2

Approved in BoS Dated 04.04.2024

### Community Service

Semester	Course Code	Course Name	Credit
1	PCS501	Community Service	0
2	PCS502	Community Service	2
3	PCS601	Community Service	0
4	PCS602	Community Service	2

### Program Electives\*

Clinical Psychology	Organizational Psychology	Applied Psychology
Human Growth and Development	Organizational Psychology: Know your Employees	Educational Psychology
Psychopathology	HR practices at Workplace	Health Psychology
Psychological Disorders in Contemporary World	Industrial Psychology and Employee Relations	Sports Psychology
Psychodiagnostics	New Age Leadership	Forensic Psychology
Clinical Psychology and Psychotherapies	Diversity, Inclusion and Equity	Positive Psychology
Community Rehabilitation	Deviant Behaviors at Workplace	Psychology in Disaster Management
Principles and Approaches of Counselling	Competency Mapping and Workplace Assessment	Psychology of Social Justice
Expressive Therapeutic Approaches	Employee Engagement and Job Satisfaction	Psychosocial Understanding of Gender
Skills and Professional Ethics in Clinical Practice		

\*PE will be offered as per the availability of resources/ Instructors and the minimum number of registrations. The right to decide on this will remain with the HOD of the department to run the course.

**Other Courses\***

<b>S.No.</b>	<b>Course</b>	<b>L-T-P</b>	<b>Credit</b>
1	Open Elective – I	2-0-2	3
2	Open Elective – II	2-0-2	3
3	Open Elective-III	2-0-2	3

\*Indian Knowledge Systems will be offered as OE; however MA Psychology students will not be eligible to opt for this paper as this course is offered to them as Core paper.

**Dissertation, Internship & Seminar**

<b>S.No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Credit</b>
1	PCT601	Summer Internship	4
2	PCC502	Research Seminar	1
3	Code to be generated	Dissertation-I	4
4	PCD602	Dissertation-II	8

## Course Descriptions:

Course Courses	Description
Paradigms in Psychology	Through this course the students will learn a set of theories across the different paradigms in psychology. The paradigms i.e., Individual Constructivism, Positivism, Post-colonial philosophical debates of psychology will be discussed in thorough detail. Kurt Danziger's analysis of the history of psychological research methodology will be studied in this course along with Danziger's account on social dynamics of psychological methodology.
Tools and Techniques of Professional Psychology I	This course is an interlink between theory and practice, in which students have hands-on experience with advanced psychometric assessments like TAT, Psychological Resilience Scale for Youth, Criminal Propensity Scale, and Organizational Culture Questionnaire. Students will be able to integrate theoretical knowledge with practical applications in psychology, and will be able to apply psychological theories and concepts to analyze and explain real-world phenomena and behavior.
Behavioral Science and People Analytics	This course is a cohort of theories and concepts of behavioural sciences and people analytics. Through this course the students will gain insights into the behavioural science approach concerning the impact of climatic changes and habit formations, adaptability, breaking the habitual patterns, decision making, concepts of self in the changing world; and people analytics approach through analytic cycle, data preparation, code development, textual data analysis, participatory action analysis, and talent acquisition. This course also includes behavioral aspects of substance and drug abuse.
Advanced Research Methodology	Through this course students will gain insights into the philosophy and ethics of psychological research. This course delves into the research settings and methods of data collection including observation and interview methods, questionnaire, survey research, and other non-experimental methods. This course furthers with experimental and Quasi-experimental methods consisting of independent groups designs.
Culture and Psychology	The course is aimed to develop students' competencies and interest in the culture and psychology field. After fulfilling the course, students will know basic approaches of modern cross-cultural psychology and their implementation in different areas of their everyday activity in multicultural settings. During the course students get acquainted with what cross-cultural psychology is, how it differs from other related spheres of psychology and how it can be applied to scientific and real-life situations. Students will learn how to measure and map different cultures and understand culture's impact on cognition, personality and communication. Students will study the factors and outcomes of successful acculturation and intercultural relations. Students will also train to create convincing presentations, write a theoretical review and work with some practical exercises.

Tools and Techniques of Professional Psychology II	This course is an advancement of Tools and Techniques of Professional Psychology II, in which students have hands-on experience with advanced psychometric assessments like Sentence Completion, Job Anxiety, Loneliness Inventory, Anxiety, Depression & Stress Scale. Students will be able to integrate theoretical knowledge with practical applications in psychology and will be able to apply psychological theories and concepts to analyze and explain real-world phenomena and behavior.
Indian Knowledge Systems	Through this course the students will embark on a journey through time and intellect as the hidden gems of Indian knowledge systems are unveiled. This course includes knowledge of Self in the Indian Ancient Scriptures including the Vedic Corpus- the Samhitas, the Brahmanas, the Aranyakas, and The Upanishads. The course furthers with units that will explore the different schools of thought into the world of self-exploration, actualization, and realizations through conventional methods (yoga, meditation) and Indian therapeutic techniques. This course aims to bridge the gaps between contributions of the Indian Knowledge system and the Western Psychological world.
Cognitive Neuroscience	The master's degree has been designed to bridge the gap between undergraduate study and research in cognitive neuroscience, experimental psychology, and imaging methods. Students will learn to design, analyse, and evaluate neuroimaging experiments that contribute to their understanding of the brain mechanisms underpinning aspects of cognition and behavior such as memory, attention, object recognition, neuro-degeneration, and brain trauma. Students will also get an in-depth training in cognitive neuroscience research, introducing the principles of neuroimaging.
AI and Human Behaviour	This course explores how the versatile artificial intelligence (AI) can contribute to human intelligence and modify human behaviours in all the settings such as clinical, applied, and organizational. It examines how AI technologies, such as machine learning algorithms and natural language processing, can enhance human cognitive abilities, decision-making processes, stress management, and learning outcomes. Additionally, it discusses the potential impact of AI on human behaviours, including changes in social interactions, work patterns, and ethical considerations. By analysing various research studies and expert opinions, this course provides insights into the transformative role of AI in shaping human intelligence and behaviours.
Workplace Communication	This course is intended to provide future psychologists with the communication skills necessary for professional success in a variety of organizational settings. The students will learn about workplace communication types, skills needed for effective communication, the impact communication can have on perception, and how it can help overcome challenges. This course focuses on practical strategies for effective interpersonal and group communication, such as conflict resolution, negotiation, and persuasive techniques. Students will investigate the psychological foundations of communication, such as emotional intelligence and social perception, which are critical in developing relationships and influencing others in the workplace.

## Programme Elective

### Specialization in Clinical Psychology

Human Growth and Development	The program offers an interdisciplinary approach to understand individual and family development across the lifespan by facilitating the students to have advanced theoretical knowledge, practical and research skills as well as to develop professional and entrepreneurial skills related to various fields of Human Development like Early childhood education, Children with special needs, Geriatric care, Assessment of Child Development and Problem behaviours, Guidance and Counseling services, Child and Family welfare programmes, so that students would be proficient enough to address issues and concerns of individual, family and community. A hallmark of the program is to provide students with hands-on opportunities to use the knowledge and skills gained in the classroom in professional work settings during the study period. The program also permits students to carry out the research studies so that students get to analyze and constructively address contemporary issues faced by diverse children, youth, families, and communities. As an applied subject, it is focused on family life, parenting, parent-child relationship, family stress, coping and adaptation, mental health across the life span help students how they can deal with sensitive situations and strengthen relationship and behaviours in their life.
Psychopathology	This course is designed to provide students an introduction to the latest edition of the Diagnostic and Statistical Manual of Mental Disorders to facilitate development of the basic mechanics of making psychological diagnoses. Additionally, this course will provide students an overview of presumed etiology and treatment of various psychological disorders. This information is crucial to helping clinicians recognize and appreciate how psychopathology may develop, is maintained, and responds to treatment. Recognizing variables associated with the onset and maintenance of psychological disorders may also help students differentiate amongst various psychological disorders such as Sexual Dysfunction Disorders, Feeding and Eating Disorders, Elimination Disorders, and Personality Disorders.
Psychological Disorders in Contemporary World	This course provides an extensive knowledge and insight into the new age psychological disorders that have been added, modified and classified in the DSM-5-TR. Through this course students will learn about new-age addictions and their respective interventions such as Prolonged grief disorder, premenstrual dysphoric disorder, OCD- Hoarding, Excoriation and Trichotillomania, Pyromania, Kleptomania, Intermittent Explosive Disorders, Gambling Disorder, and conditions and problems that may be a focus of clinical attention such as suicidal and non-suicidal behaviors, abuse and neglect, relationship problems etc.. The students provided a framework for assessing information about cultural features of an individual's mental health problem and how it relates to a social and cultural context and history.

Psychodiagnostics	Psychodiagnostics is a foundational course designed to equip students with the theoretical knowledge and practical skills necessary for the assessment and understanding of psychological functioning. This course provides a comprehensive overview of the principles, methods, and tools utilized in the assessment of individuals across various stages of life, from childhood to adulthood. Topics covered include the history and development of psychodiagnostics, assessment principles, psychometric properties, ethical considerations, and cultural factors influencing assessment practices. Students will learn about various assessment techniques, including interviews, observations, psychological tests, and self-report measures such as Halstead Reitan Neuropsychological battery, AIIMS Neuropsychological Battery, Luria Nebraka Neuropsychological Battery, Tests of Cognitive Functions and Projective Techniques.
Clinical Psychology and Psychotherapies	Clinical Psychology and Psychotherapies is an in-depth course designed to provide students with a comprehensive understanding of the theory, research, and practice of clinical psychology and psychotherapeutic interventions. This course integrates theoretical knowledge with practical skills to prepare students for professional roles in mental health settings. The course begins with an overview of the history and evolution of clinical psychology, including its theoretical foundations and contributions to the understanding and treatment of psychological disorders. Students will examine various theoretical orientations, including psychodynamic, cognitive-behavioral, humanistic-existential, and systemic approaches, and their applications in psychotherapy. Emphasis will be placed on developing proficiency in conducting individual and group therapy sessions, utilizing therapeutic techniques such as cognitive restructuring, behavioral interventions, mindfulness-based approaches, and interpersonal therapy. Students will also explore the role of the therapeutic relationship, cultural competence, and ethical considerations in psychotherapeutic practice.
Community Rehabilitation	Community Rehabilitation: Theory and Practice is a dynamic course designed to provide students with a comprehensive understanding of the principles, methods, and strategies involved in facilitating the rehabilitation and integration of individuals with disabilities into their communities. This course explores the multifaceted nature of rehabilitation within the context of diverse community settings and populations. The course begins by examining the conceptual frameworks and theoretical models that underpin community rehabilitation, including the International Classification of Functioning, Disability, and Health (ICF) and the social model of disability. Students will explore the impact of stigma, discrimination, and social barriers on individuals with disabilities, as well as the role of empowerment, advocacy, and social justice in promoting inclusion and equality. Topics covered include vocational rehabilitation, independent living skills training, assistive technology, accessibility modifications, community reintegration programs, and peer support

	initiatives. Emphasis will be placed on fostering collaboration among interdisciplinary teams, including rehabilitation counselors, occupational therapists, physical therapists, social workers, and community organizers.
Principles and Approaches of Counselling	Principles and Approaches of Counseling is a foundational course designed to provide students with a comprehensive understanding of the theoretical principles, techniques, and ethical considerations involved in the practice of counseling. This course serves as an introduction to the field of counseling and prepares students for further study and professional practice in various counseling settings. Students will examine the historical development of counseling, theoretical frameworks, and the role of the counselor in facilitating positive change and growth in clients.
Expressive Therapeutic Approaches	This course provides students with a comprehensive understanding of various expressive modalities and their application in promoting psychological healing, self-discovery, and personal growth. The course covers a range of expressive modalities, including Art Therapy: Students will explore the use of visual art mediums, such as drawing, painting, sculpture, and collage, as tools for self-expression, emotional processing, and symbolic communication. Music Therapy: Students will examine the therapeutic use of music, including listening, improvisation, songwriting, and lyric analysis, to promote relaxation, emotional release, and cognitive stimulation. Drama Therapy: Students will learn about the use of improvisation, role-playing, storytelling, and psychodrama techniques to explore emotions, enhance interpersonal skills, and rehearse new behaviors. Dance/Movement Therapy: Students will explore the therapeutic potential of movement, dance, and body awareness exercises to facilitate emotional expression, embodiment, and integration. Poetry Therapy: Students will examine the use of written and spoken word, poetry, journaling, and narrative techniques to explore personal experiences, foster self-reflection, and cultivate resilience.
Skills and Professional Ethics in Clinical Practice	Skills and Professional Ethics in Clinical Practice is a comprehensive course designed to equip students with the essential clinical competencies and ethical frameworks necessary for effective and ethical practice in the field of mental health. Through a blend of theoretical instruction, experiential exercises, case studies, and supervised practice, students will develop proficiency in core clinical skills and ethical decision-making processes. Topics covered include professional codes of ethics, informed consent, confidentiality, boundaries, cultural competence, and ethical decision-making. Emphasis is placed on integrating ethical principles into clinical practice, fostering cultural humility, and promoting client welfare and autonomy. By the end of the course, students will have acquired the knowledge, attitudes, and skills needed to navigate complex ethical dilemmas, establish therapeutic alliances, and provide competent and ethical care to diverse client populations in clinical settings.

## Specialization in Organizational Psychology

<p>Organizational Psychology: Know Your Employees</p>	<p>This course covers the theory, methods, findings, and applications of organisational psychology. This course covers the psychological foundations of work behaviour and organisational practices for aligning employees' characteristics with workplace demands. Topics will cover job analysis, personnel selection, placement, training, motivation, job satisfaction, leadership, teamwork, organisational culture, and work-life balance. Through a blend of theory and practical application, this course explores key psychological concepts and how they influence individual and group dynamics in an organizational setting. By the end of this course, attendees will be equipped with the tools and knowledge to create more effective, adaptive, and supportive workplaces.</p>
<p>HR Practices at Workplace</p>	<p>This course introduces students to the historical perspective of HR practices, roles and responsibilities of HR professionals, and foundational strategies for designing effective HR activities. This course covers a variety of HR functions, such as recruitment, training, performance appraisal, and employee welfare, with a focus on how psychological insights can improve these processes. Students will investigate the impact of organizational behavior on human resource strategies and learn how to create interventions that improve employee satisfaction and retention. By the end of the course, students will have the fundamental HR skills required to contribute effectively in dynamic work environments.</p>
<p>Industrial Psychology and Employee Relations</p>	<p>This Industrial Psychology and Employee Relations course will give students a thorough understanding of labour and industrial relations (IR). Industrial relations is concerned with the maintenance of the employment relationship, specifically how trade unions and management interact in an organisation. This course will help students in understanding the intricate relationship between industrial psychology theories and practical employee relations. This course delves deeply into how psychological principles can improve workplace environments, labor relations, and organizational effectiveness. Students will learn strategies to improve the relationship between the employer and employee.</p>
<p>New Age Leadership</p>	<p>This course outlines the theoretical foundations of the concept of leadership through a comprehensive review of leadership theories, allowing students to understand what it takes to influence and empower others. This course introduces students to contemporary leadership theories and practices, focusing on emotional intelligence, adaptability, and ethical decision-making. Students will look into how psychological insights can inform effective leadership styles that resonate with diverse, multicultural teams and align with changing organizational goals. This course will provide students with a nuanced understanding of what it means to be a leader today, as well as how to motivate and manage teams to achieve exceptional results.</p>

Diversity, Inclusion and Equity	This course aims to increase students' awareness, knowledge, and understanding of fundamental concepts such as race, class, gender, identity, difference, and intersectionality. It is designed to help students understand and cultivate inclusive environments within a variety of organisational structures. Students will be introduced to the fundamental concepts, frameworks, and theories that influence how leaders interpret diversity, equity, and inclusion personally and professionally, covering topics such as unconscious bias, cultural competence, and systemic inequalities. Students will learn how to promote equity and inclusion by applying evidence-based practices and psychological research to diverse workforce integration and conflict resolution.
Deviant Behaviors at the Workplace	This course is designed to help students investigate the positive and negative effects of conforming and divergent behavior and the complexities of atypical and potentially harmful behaviors in organizational settings. They will learn how marginalizing factors such as gender, ethnicity, and disability influence these behaviors. This course investigates the psychological causes and consequences of deviant workplace behaviors such as theft, harassment, aggression, and unethical practices. Students will engage with psychological theories to better understand the motivations for such behaviors and their impact on organizational culture and morale. The course will also cover preventive strategies and intervention techniques for effectively managing and mitigating deviant behaviors, using a combination of theoretical learning and case analysis.
Competency Mapping and Workplace Assessment	This course is designed to help students learn the tools and techniques needed to evaluate and improve workforce capabilities within organizations. This course takes a detailed look at identifying key competencies required for various roles and how to align them with organizational goals and strategies. The course focuses on the practical application of competency mapping and workplace assessment in real-world settings, giving students the ability to conduct thorough needs analyses, create competency frameworks, and implement effective talent management and development programs.
Employee Engagement and Job Satisfaction	This course is designed to help students understand the factors that influence employee motivation and satisfaction in the workplace. It will help students understand the relationship between employee engagement and job satisfaction. This course looks at the psychological factors that influence high levels of engagement and satisfaction, such as job design, organisational culture and practices, leadership styles. Students will investigate various theories and models of motivation, engagement, and job satisfaction, and apply these concepts to case studies and real-world organisational scenarios.

## Specialization in Applied Psychology

Educational Psychology	Educational Psychology focuses on the study of learning, instruction, and measurement across the life span. The learning and instruction emphasis applies the study of cognitive psychology to research on learning and instruction in applied settings like schools. The course of study provides a strong foundation in psychological theory, principles related to instructional applications, and quantitative methodology. The measurement emphasis applies cognitive psychology and theories of measurement to test design, instrument construction, scale analysis, and measurement theory. The Educational Psychology program emphasizes the use of rigorous quantitative methodology in the scientific study of learning, instruction, and measurement in applied settings.
Health Psychology	This course examines the relationships of social, biological, behavioural and cognitive variables to health. It covers those aspects of the social environment that influence health and illness outcomes including interactions among family members and between healthcare consumers and healthcare providers. Risk factors for health-compromising behaviours are also discussed including strategies for their modification. Students are also educated about interprofessional practice and collaboration. Students will learn to demonstrate understanding of the biological, behavioural, cognitive and social determinants of health, and risk factors for health-compromising behaviours and strategies for their modification, across the lifespan. They will also learn to demonstrate advanced knowledge of individual, group and community-based approaches to the prevention and management of major identifiable health conditions (acute and chronic).
Sports Psychology	This course is designed to develop knowledge and understanding of the principles and applications of sport psychology and their applications to vocational and professional practices. It will provide an opportunity to critically assess a broad range of theories, methodologies and research findings in sport psychology. Through this course students will learn to develop a critical understanding of how to apply theories, strategies and methodologies in appropriate ways. Students will also learn to develop the appreciation of inter-related scientific concepts that promote understanding of problems and issues in the study of sport psychology.
Forensic Psychology	The curriculum is structured in a way that would expose students to the modern developments in the application of scientific methods in forensic psychology. The course aims to acquaint students with the investigative processes of the criminal justice system, build an understanding of the elements involved in crime and thereby employ the skills of forensic investigation from the psychological point of view. Forensic psychology is an interdisciplinary field with its specialty in professional psychology and primarily intends to provide psychological expertise in the legal and judicial system.

Positive Psychology	This paper teaches practical skills in motivational interviewing, mindfulness, psychoeducation, and group facilitation and gives students the tools to deliver evidence-based positive psychology approaches to individuals, groups, organizations, and communities. Students will gain knowledge about building positive relationships, virtues, inner strength and strategies for finding happiness. This course provides glimpses into the roots of positive psychology.
Psychology in Disaster Management	In a technological and globalised world, traumatic events such as disasters, critical incidents and crises have become common occurrences with far-reaching stressful effects. These crisis events and related distresses have a great impact on economic, social, political and psychological stability of the affected countries and individuals. The main purpose of this course is to provide psychology students with an understanding of how people react, behave or are affected in a disaster, critical incident or crisis. It is necessary for a future psychologist to understand, help and manage people in crisis or who are victims of trauma.
Psychology of Social Justice	This course concerns four major topics i.e., Immigration and Refugees, Caste systems, Religion, and Race in the Social Justice context. It addresses issues concerning ethnic communities, gender, racism, migration, policy, cultural identity and international relations. Students will gain insights about immigration laws, both international and domestic. The psychology of social justice paper recognizes that injustice is a global phenomenon that commands a global lens to our theoretical and empirical work. Hence, the program provides a theoretical and methodological foundation for comprehending these issues within their legal, political, historical, and cultural contexts.
Psychosocial Understanding of Gender	The course provides an introduction to theories and research on sex and gender from a psychological perspective. The course covers a number of areas within psychology to show how sex and gender affects people in a number of areas during their lifetime. The course discusses societal debates in relation to the field. For example, the evolutionary versus socially constructed nature of sex/gender, binary versus fluid conceptualization of gender identity, and the influence of descriptive and normative gender stereotypes. The course has a social psychological orientation, but incorporates other psychological perspectives and gender theory (e.g., feminism and queer theory). The course provides knowledge of principles within scientific methods that contribute to theory and studies on sex and gender.

**MINUTES OF MEETING**  
**The Academic Council Sub-Committee-SOET**

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**Venue** : **Conference Room, NCU**  
**Date** : **25-April-2024 (Thursday)**  
**Time** : **03:00 PM**

**The following members were present in the meeting:**

1. Prof. Manoj Kumar Gopaliya : Dean Academic Affairs- Chairperson
2. Prof. Rita Chhikara : HoD CSE
3. Dr. Sharda Vashishth : HoD MDE
4. Prof. Hukum Singh : HoD APS

**Agenda items for the meeting held:**

The Academic Council Sub-Committee (ACS) reviewed the recommendations of the Board of Studies of the Department of **Multidisciplinary Engineering (MDE)**, Department of **Applied Science (APS)** and Department of **Computer Science & Engineering (CSE)**.

- *Review of recommendations of the Board of Studies of the **Department of Multidisciplinary Engineering (MDE)***
  - *Introduction of new specialization track under B. Tech. (CSE) Programme.*
  - *Amendments in the scheme of M. Tech. in ECE replacing existing specialization tracks with new tracks in "Semiconductor Technology" and "IoT & 5G".*
- *Review of Mathematics courses offered across programmes as core and/or elective courses-**Department of Applied Science**.*
- *Review of amendments in the scheme of B.Tech.-Computer Science & Engineering-**Department of CSE***

**MINUTES OF MEETING**  
**The Academic Council Sub-Committee-SOET**

S. No	Agenda Points	Action / Follow up by:	Remarks
1	<p><b>Department of MDE</b> presented the following two agenda points during the meeting, which were endorsed by their Board of Studies (BOS) on April 20, 2024 (refer to Annexure #1 for details).</p> <ul style="list-style-type: none"> <li>o <b><u>Introduction of a new specialization track under the B. Tech. (CSE) Programme:</u></b></li> </ul> <p>MDE proposed introducing a <b>new track</b> in "<b>Semiconductor Technology</b>" within the <b>B.Tech. (CSE) Programme</b>. The demand for this track, based on market surveys and government initiatives, was presented alongside a list of required streamed electives to earn this specialization.</p> <p>Key discussion points included:</p> <p>The following points emerged during the discussion:</p> <ol style="list-style-type: none"> <li>i. While the track aligns with contemporary trends and the national vision, the course lineup appears heavily skewed towards electronics rather than computer science and engineering (CSE).</li> <li>ii. Despite this imbalance, the committee advises proceeding with offering this track to the Admission Batch 2024 to maintain competitiveness in the higher education sector, particularly during the admissions season.</li> <li>iii. The MDE has verified that no additional investment is required for the launch of this track. Leveraging existing infrastructure and human resources, alongside collaborations with industry and academia partners, is deemed sufficient for ensuring the success of this track.</li> <li>iv. The sub-committee has also recommended that MDE thoroughly explore the feasibility of introducing a specialized B.Tech. Program in Semiconductor Technology. This should be proposed after careful consideration of market demands, feasibility studies, and other relevant factors.</li> </ol>	<ul style="list-style-type: none"> <li>• <b>MDE</b> to prepare the ppt as per the discussion points and keep it ready for presentation during the upcoming Academic Council Meeting.</li> <li>• <b>MDE</b> to finalize the preparation of course templates for first-year courses of M. Tech in ECE according to the proposed scheme before the Academic Council Meeting and ensure their readiness for reference during the meeting.</li> </ul>	<p><b>Annexure#1:</b></p> <ul style="list-style-type: none"> <li>• BoS Constitution/Data Approval</li> <li>• BoS Minutes in Meetings</li> <li>• Presentation slides</li> </ul> <p><b>Annexure#2:</b></p> <ul style="list-style-type: none"> <li>• Proposed Scheme for the "Semi-Conductor Technology" track under B. Tech. (CSE) Programme.</li> <li>• Amended Scheme of M. Tech.-ECE- with specialization in Semiconductor Technology and IOT &amp; 5G.</li> </ul>

**MINUTES OF MEETING**  
**The Academic Council Sub-Committee-SOET**

S. No	Agenda Points	Action / Follow up by:	Remarks
	<p>o <u>Amendments in M. Tech. in ECE replacing existing specialization tracks with new tracks in "Semiconductor Technology" and "IoT &amp; 5G":</u></p> <p>MDE presented amendments in the existing scheme of <b>M. Tech. in ECE</b>, proposing to replace the specializations of "<b>VLSI Design</b>" with "<b>Semiconductor Technology</b>" and "<b>Communication Engineering</b>" with "<b>IoT &amp; 5G</b>", alongside strengthening core courses in view of these new specializations, applicable from Academic Year 2024-25 onward.</p> <p>Key discussion points included:</p> <ol style="list-style-type: none"> <li>i. Both specializations are contemporary and aligned with the national vision.</li> <li>ii. MDE confirmed that the scheme complies with the NEP 2020 and NCU norms of M. Tech. Programmes in terms of mandatory requirements of common mandatory courses, CS &amp; project credits, etc.</li> <li>iii. The Committee suggested reducing the number of courses added to the elective bucket list, as there are only 5 programme elective slots during the entire programme duration.</li> </ol>		
	<ol style="list-style-type: none"> <li>iv. It was confirmed that any 4 courses from streamed elective bucket lists are required to earn a particular specialization certificate.</li> <li>v. Students completing any 5 Programme electives across two buckets not adhering to any specific bucket will receive only an M. Tech. ECE Degree without any specialization certificate.</li> <li>vi. Students exiting after the 1st Year will receive a PG Diploma in ECE without any specialization, subject to completing other requirements for the exit option as per NEP 2020.</li> </ol>		

**MINUTES OF MEETING**  
**The Academic Council Sub-Committee-SOET**

S. No	Agenda Points	Action / Follow up by:	Remarks
	<p>The Sub-Committee recommended that the introduction of the <i>new specialization track in "Semiconductor Technology" under the B.Tech. (CSE) Programme and the amended scheme of M. Tech. in ECE programme, replacing existing specialization tracks with new tracks in "Semiconductor Technology" and "IoT &amp; 5G", be considered for approval in the upcoming Academic Council Meeting, applicable to the Batch of 2024 &amp; onwards (refer to Annexure #2 for the finalized schemes).</i></p>		
2	<p><b>Department of APS</b> presented the amendments in the contents of Mathematics courses, namely <b>MAL151 Engineering Mathematics-I</b> and <b>MAL152 Engineering Mathematics-II</b>, offered to students of B. Tech. Programmes as core courses and <b>MAL252 Mathematical Reasoning &amp; Aptitude</b> offered across the university as open elective course.</p> <p>Additionally, a new course <b>Engineering Mathematics-III</b> (Code yet to be allotted) has been designed &amp; developed in consultation with Department of CSE which will be offered in place of <b>CSL223 Discrete Mathematics</b> course in the <b>B. Tech. CSE scheme</b> in their 3<sup>rd</sup> Semester.</p> <p>The <b>BOS of Department of APS</b> has <b>endorsed these changes</b> for implementation from AY 2024-25 onward <b>on 23 April 2024</b>. (Refer to <b>Annexure#3</b> for details.)</p> <p>The following were the highlights of the discussion:</p> <ul style="list-style-type: none"> <li>• The contents of <b>MAL151 Engineering Mathematics-I</b> and <b>MAL152 Engineering Mathematics-II</b> have been modified to remove overlap of contents from other courses, removing redundant topics and adding bridge contents, thereby optimizing the learning trajectory.</li> <li>• The contents of <b>MAL252 Mathematical Reasoning &amp; Aptitude</b> have been refined to align with the dynamic demands of the corporate landscape, bolstering students' readiness for</li> </ul>	<ul style="list-style-type: none"> <li>• <b>APS</b> should prepare the PowerPoint presentation according to the discussed points and have it ready for the upcoming Academic Council Meeting.</li> <li>• <b>APS</b> should finalize the preparation of course templates for mathematics courses in line with the amendments and ensure they are ready for reference during the meeting.</li> </ul>	<p><b>Annexure#3:</b></p> <ul style="list-style-type: none"> <li>• BoS Constitution/Data Approval</li> <li>• BoS Minutes in Meetings</li> <li>• Presentation slides</li> </ul> <p><b>Annexure#4:</b></p> <ul style="list-style-type: none"> <li>• Amended course templates.</li> </ul>

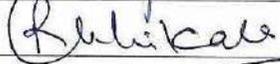
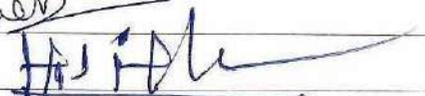
**MINUTES OF MEETING**  
**The Academic Council Sub-Committee-SOET**

S. No	Agenda Points	Action / Follow up by:	Remarks
	<p>professional placements. This involves the addition of two pertinent units and the removal of extraneous material.</p> <ul style="list-style-type: none"> <li>• Collaboration with the Department of CSE has resulted in the development of <b>Engineering Mathematics-III</b>, tailored specifically to meet the academic needs of B. Tech. CSE students. This course not only encompasses discrete mathematics but also integrates other essential mathematical concepts crucial to their field of study.</li> <li>• The sub-committee directed APS to update the course templates of these courses to ensure equitable distribution of instructional hours across units and comprehensive coverage of all teaching-learning components.</li> </ul> <p><b>The Sub-Committee recommended that the updated course templates of MAL151 Engineering Mathematics-I, MAL152 Engineering Mathematics-II and MAL252 Mathematical Reasoning &amp; Aptitude along with a newly designed course template of Engineering Mathematics-III (Code yet to be allotted) be recommended for approval in the upcoming Academic Council Meeting. (Refer to Annexure#4 to details.)</b></p>		
3	<p><b>Department of CSE</b> presented amendments in the scheme of B.Tech.-Computer Science &amp; Engineering programme to be applicable from AY 2024-25 onward. These amendments were endorsed by their Board of Studies (BOS) on March 27, 2024 (<b>refer to Annexure #5 for details</b>).</p> <p>The following were the highlights of the discussion:</p> <ul style="list-style-type: none"> <li>• The amendments are aimed at making the scheme aligned with the model course-curriculum of AICTE.</li> <li>• New programming courses have been introduced apart from amending the contents of existing programming courses to make student placement ready.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>CSE</b> to prepare the ppt as per the discussion points and keep it ready for presentation during the upcoming Academic Council Meeting.</li> <li>• <b>CSE</b> to finalize the preparation of course templates for first-year courses of B. Tech in CSE according to the amended scheme before the Academic Council</li> </ul>	<p><b>Annexure#5:</b></p> <ul style="list-style-type: none"> <li>• BoS Constitution/Data Approval</li> <li>• BoS Minutes in Meetings</li> <li>• Presentation slides</li> </ul> <p><b>Annexure#6:</b></p> <ul style="list-style-type: none"> <li>• Proposed Scheme (B. Tech.-CSE)</li> </ul>

**MINUTES OF MEETING**  
**The Academic Council Sub-Committee-SOET**

S. No	Agenda Points	Action / Follow up by:	Remarks
	<ul style="list-style-type: none"> <li>Sequencing of courses, both core &amp; elective, in the programme scheme have been changed to make it more aligned to the learning trajectory of students across the programme duration.</li> <li>A new course Engineering Mathematics-III has tailored specifically to meet the academic needs of B. Tech. CSE students. This course which replaces CSL223 Discrete Mathematics in the 3<sup>rd</sup> Semester not only encompasses discrete mathematics but also integrates other essential mathematical concepts crucial to their field of study.</li> </ul> <p><b>The Sub-Committee recommended that the <i>amended scheme of B. Tech. in CSE programme</i>, be considered for approval in the upcoming Academic Council Meeting, applicable to the Batch of 2024 &amp; onwards (refer to Annexure #6 for the finalized schemes).</b></p>	Meeting and ensure their readiness for reference during the meeting.	

**Endorsed by:**

Name	Designation	Signature
Prof. (Dr.) Manoj Kumar Gopaliya	Dean Academic Affairs - Chairperson	
Prof. Rita Chhikara	HoD-CSE	
Dr. Sharda Vashishth	HoD-MDE	
Prof. Hukum Singh	HoD-APS	

Date of Issue: 29 April 2024

# Annexure#1: BoS Constitution/Data Approval

NCU/FRM/1.1/ACAD/001

 THE NORTHCAP UNIVERSITY	<b>Constitution of Board of Studies (BoS) Meeting</b>	Date: 08/01/2023
	<b>Multidisciplinary Engineering Department School of Engineering &amp; Technology</b>	Sheet 1 of 1
From: HoD MDE		To: BoS Members, MDE CC: Dean Academics, MDE Faculty

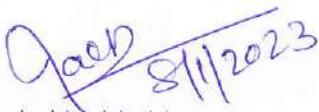
## Constitution of Board of Studies (BoS) Meeting

The constitution of the Board of Studies of the Multidisciplinary Engineering Department (MDE), School of Engineering & Technology (SOET) as approved by Hon'ble VC for the next two years is given below:

BoS Panel Members		
S. No.	Name	Role
1.	Prof. Sharda Vashisth	HoD & Chairperson BoS, MDE
2.	Prof. Manoj Kumar Gopaliya,	Dean Academics, NCU
3.	Dr. Rohit Singh Lather,	Associate Head, Program Coordinator ME, MDE & Convener BoS, MDE
4.	Dr. Vaishali Sahu, Associate Head MDE, , MDE	Associate Head, Program Coordinator CE, MDE & Member BoS, MDE
5.	Dr. Pooja Sabharwal	Program Coordinator – ECE, NCU, Member BoS
6.	Prof. Anjal Garg	Professor, MDE, Member BoS
7.	Dr. Satnam Singh	Associate Professor, MDE, Member BoS
8.	Prof. Monika Aggarwal	Professor, CARE, IIT DELHI, External Expert BoS
9.	Mr. Pankaj Sharma	Manager, Incubation Centre, STPI, Industry Expert BoS

The BoS will have a tenure of Two Years from the date of issue.

Issued by:

  
(Prof. Sharda Vashisth)  
HOD MDE

# BoS Minutes in Meetings

NCU/FRM/1.1/ACAD/001

	<b>Minutes of 3<sup>rd</sup> Meeting - BoS</b>  <b>Multidisciplinary Engineering Department</b> <b>School of Engineering &amp; Technology (SOET)</b>	<b>Date:</b> 20/04/24
		Sheet 1 of 5
From: BoS Convener		To: BoS Members CC: Dean Academics, MDE Faculty

## Minutes of the Meeting

**Meeting Venue and Time:** MDE meeting Room (RN216) on 20<sup>th</sup> April 2024 at 10:30 AM

BoS Panel Members			
S. No.	Name	Role	Signature
1.	Prof. Sharda Vashisth	HoD & Chairperson BoS	<i>Sharda</i> 20/4/24
2.	Prof. Manoj Kumar Gopaliya	Dean Academics	<i>Manoj</i>
3.	Dr. Rakhi Nangia	Semiconductor fab Policy Advisory, Ministry of Electronics and Information Technology, Industry Expert	<i>Rakhi</i>
4.	Dr. Anmol Bhatia	Program Coordinator – BTech ME & Convener BoS	<i>Anmol Bhatia</i>
5.	Dr. Vaishali Sahu	Associate Head & Member BoS	<i>Vaishali</i> 20/4/24
6.	Dr. Pooja Sabharwal	Program Coordinator – BTech ECE, Member BoS	<i>Pooja</i>
7.	Prof. Anjali Garg	Professor, Member BoS	<i>Anjali</i> 20/4/24
8.	Dr. Anu Tonk	Program Coordinator – MTech ECE, Special Invitee	<i>Anu Tonk</i>
9.	Dr. Nidhi Malik	Program Coordinator – BTech CSE, Special Invitee	<i>Nidhi</i>

### Minutes of the meeting:

1. Prof. Sharda Vashisth welcomed the distinguished Industry expert, Dr. Rakhi Nangia, and thanked her for sparing her precious time. She also emphasized that her position as a

*Manoj*  
*Anmol Bhatia*  
*Sharda*  
*Rakhi*  
*Vaishali*  
*20/4/24*  
*Pooja*  
*Anjali*  
*20/4/24*  
*Anu Tonk*  
*Nidhi*  
*20/4/24*

Semiconductor Fab Policy Advisory at the Ministry of Electronics and Information Technology will enhance the value of the offerings to be presented, particularly in adding specialization tracks to BTech and MTech programs.

2. Prof. Sharda Vashisth further explained the need for introducing academic offerings to provide students entering this University with the best courses demanded by industries and to prepare them to finish their degrees with an industry-ready product. It was also highlighted that these academic offerings are chosen to match the fast-changing technologies in the industries and to bridge the gap between industries and academia.
3. Dr. Pooja Sabharwal, Programme Coordinator, B.Tech ECE, and Dr. Anu Tonk, Programme Coordinator, M.Tech ECE, briefed the motivation behind introducing Specialization in semiconductor technology in B.Tech CSE and revamping MTech ECE specializations respectively and presented the courses to be included in the tracks.

### **Agenda no. 1 Bachelor of Technology in Computer Science and Engineering with specialization in Semiconductor Technology from Academic Year 2024-25**

Dr. Pooja made a detailed presentation of the proposed scheme of studies and syllabus of the new Academic offerings to B.Tech CSE which is planned to be started w.e.f. July, 2024.

*Some highlights of the program are as follows:*

- Bachelor of Technology in Computer Science and Engineering with a specialized track in Semiconductor Technology starting from Academic Year 2024-25
- Designed to cater to the growing demand in the semiconductor industry, offering students an edge in a pivotal sector of contemporary technology
- Addresses the Indian government's initiatives to bolster semiconductor manufacturing within the country
- Curriculum focuses on essential courses such as VLSI Design, Digital System Design, and Semiconductor Equipment Design and Technology
- Emphasizes practical skills with courses in VLSI Verification and Testing, Semiconductor Materials Synthesis and Characterization, and Packaging and Testing
- Provides students with a comprehensive understanding of semiconductor technology, preparing them for diverse career opportunities in the field

### **Agenda no. 2 Revamping the M.Tech ECE Program**

- a. Introduction of M.Tech ECE with specialization in Semiconductor Technology in place of M.Tech ECE with specialization in VLSI Design from Academic Year 2024-25
- b. Introduction of M.Tech ECE with specialization in IoT & 5G in place of M.Tech ECE with specialization in Communication Engineering from Academic Year 2024-25

Dr. Anu Tonk made a detailed presentation of the proposed scheme of studies and syllabus of the new Academic offerings for M.Tech (ECE) which is planned to be started w.e.f. July, 2024.

*Some highlights of the program are as follows:*

- Master of Technology in Electronics and Communication Engineering with a specialized focus on Semiconductor Technology.

Sharda  
20/4/24

2  
Sharma  
20/4/24

Nickles  
Anu Tonk  
20/4/24

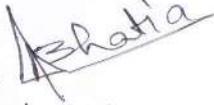
- Aligned with the Indian Semiconductor Mission and the evolving demands of the electronics industry
  - Advanced studies in semiconductor materials, devices, fabrication techniques, and very large-scale integration (VLSI) design
  - Equips students with specialized skills to address challenges and opportunities in the rapidly advancing semiconductor field
  - Offers hands-on experience and research opportunities in semiconductor technology
  - Nurtures a new generation of engineers and researchers prepared to drive innovation and development in the semiconductor and design industry
- Master of Technology in Electronics and Communication Engineering with a specialized focus on IoT & 5G.
    - Emphasis on IoT architecture, 5G networks, and their convergence.
    - Designed to meet industry demands and foster digital innovation.
    - Curriculum tailored to align with current industry trends and government initiatives like the Digital India program.
    - Provides students with specialized skills for navigating the complexities of IoT and 5G technologies.

After detailed discussion and due consideration, the scheme and syllabi were approved with suggestions as per Annexure I.

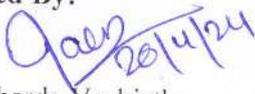
Chairperson, BOS was authorized for amendments to implement this scheme within the guidelines given in Annexure I. (Modified scheme enclosed)

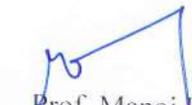
There being no other points, the meeting was concluded.

The Chairperson thanked all BOS members for sparing their precious time and providing worthy suggestions that will help gain momentum in academics and The NorthCap University, Gurugram.

Prepared by:   
 Dr. Anmol Bhatia, Assistant Professor, MDE  
 BoS Convenor

Endorsed By:

  
 Prof. Sharda Vashisth  
 HoD & Chairperson BoS, MDE

  
 Prof. Manoj K Gopaliya  
 Dean Academics, NCU

  
 Dr. Rakhi Nangia  
 Semiconductor fab Policy  
 Advisory, Ministry of  
 Electronics and Information  
 Technology, Industry Expert

*Bhatia*

Dr. Anmol Bhatia  
Program Coordinator ME &  
Convener BoS, MDE

*Sahu*  
20/4/24

Dr. Vaishali Sahu,  
Associate Head &  
Member BoS, MDE

*Anjali Garg*  
20/4/24

Prof. Anjali Garg  
Professor, MDE, Member BoS

*Pooja Sabharwal*

Dr. Pooja Sabharwal  
Program Coordinator – BTech  
ECE, Member BoS

*Anu Tonk*  
20/4/24

Dr. Anu Tonk  
Program Coordinator  
MTech ECE, Special  
Invitee

*Nidhi Malik*

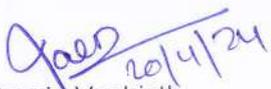
Dr. Nidhi Malik  
Program Coordinator-BTech  
CSE, Special Invitee

*Jaen*  
20/4/24

Approved By:  
The Chairperson, BoS (Signature with Date)

## Valuable suggestions of the distinguished experts

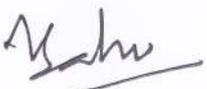
- A. The committee suggested the following changes in BTech (CSE) with specialization in Semiconductor Technology.
1. Merge VLSI & IC Design and add semiconductor packaging & testing, placing it at the end of the semester.
  2. Include silicon CMOS, Compound Semiconductor, MEMS, and discrete semiconductor in the VLSI syllabus.
  3. Incorporate program electives such as Semiconductor Design, Verification & Testing, Micro-fabrication, Semiconductor equipment; materials and packaging into the B.Tech (CSE) scheme.
  4. Align program electives according to the suggested sequence.
- B. The committee suggested the following changes in MTech (ECE) with specialisation in Semiconductor Technology
1. Common courses in M.Tech (ECE) Program should include System Design and Modeling, Embedded System Design, Optimization Techniques and Applications, and AI and ML.
  2. Semiconductor specialization should include Micro & Nano fabrication, Equipment-related course, Materials synthesis & Characterization, and Semiconductor Packaging and Testing, FPGA and ASIC respectively as program electives.
  3. IoT & 5G specialization should include Advanced Microcontrollers, focusing on Design for IoT and 5G technology.
- C. The committee suggested to consider floating a full-fledged B.Tech (ECE) Program with semiconductor specialisation in the near future.

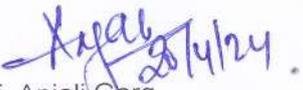
  
Prof. Sharda Vashisth  
HoD & Chairperson BoS, MDE

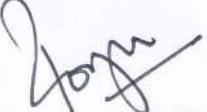
  
Prof. Manoj K Gopaliya  
Dean Academics, NCU

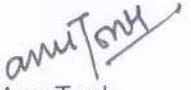
  
Dr. Rakhi Nangia  
Semiconductor fab Policy  
Advisory, Ministry of  
Electronics and Information  
Technology, Industry Expert

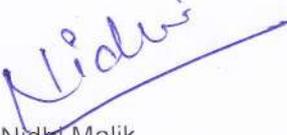
  
Dr. Anmol Bhatia  
Program Coordinator ME &  
Convener BoS, MDE

  
Dr. Vaishali Sahu,  
Associate Head &  
Member BoS, MDE

  
Prof. Anjali Garg  
Professor, MDE, Member BoS

  
Dr. Pooja Sabharwal  
Program Coordinator – BTech  
ECE, Member BoS

  
Dr. Anu Tonk  
Program Coordinator –  
MTech ECE, Special  
Invitee

  
Dr. Nidhi Malik  
Program Coordinator-BTech  
CSE, Special Invitee

S. No.	Semester Course Code, Course Name (L-T-P) Credits							GP	Community Services	Hrs. Per week			Credits	
	L	T	P											
1	MAL151 Engg Maths-I (3-0-2)4	CSL106 FOCP-I (2-1-4)5	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			CSR1 18 GP 1 Credit	CSS101 CS-I	10	1	16	18+1 =19	
2	MAL152 Engg Maths-II (3-0-2)4	CSL108 FOCP-II (2-1-4)5	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 Communication-I (1-0-2)2		CSR1 19 GP 1 Credit	CSS102 CS-II (140 Hrs)** 2 Credits	13	1	14	21+3 =24	
<b>Summer</b>														
3	CSL214 DBMS (3-1-2)5	ECL255 DE & CA (3-0-2)4	CSL223 Discrete Mathematics (3-0-0)3	CSL215 Intro To Java (3-0-2)4	Program Elective - I (2-0-4)4	CLL140 Effective Communication-II (1-0-2)2		CSR2 18 GP 1 Credit	CSS201 CS-III	15	1	12	22+1 =24	
4	CSL422 Cyber Security (3-0-2)4	CSL209 Data Structures (3-0-2)4	CLL120 HVPE (2-0-0)2	Program Elective- 2 (2-0-4)4	SML300 Entrepreneurship (3-0-0)3	Open Elective – 1 (MOOC) (3-0-0)3	CSV101 Skill Development (0-0-2)1	CSR2 19 GP 1 Credit	CSS202 CS-IV (140 Hrs)** 2 Credits	16	1	8	21+3 =24	
<b>Summer</b>														
5	CST201 Industrial Training/Internship													2
5	CSL236 Introduction to AI & ML / CSL242 AI for Games (3-0-2)4	CSL-303 Operating System (3-0-2)4	Program Elective-3 (2-0-4)4	CSL315 Adv Java (3-0-2)4	Open Elective – 2 (MOOC) (3-0-0)3	CSL240 Computer Networks (3-0-2)4		CSR3 18 GP 1 Credit	CSS301 CS-V	17	0	10	23+1 =24	
6	CSL229 SEPM (3-0-2)4	CSL230 Analysis and Design of Algorithms using JAVA (3-0-2)4	Program Elective-4 (2-0-4)4	CSI238 Introduction to Cloud Computing (3-0-2)4	Open Elective-3 (3-0-0)3	CSC301 Seminar 1 Credit		CSR3 19 GP 1 Credit	CSS302 CS-VI (140 Hrs)** 2 Credits	15	0	10	20+3 =23	
<b>Summer</b>														
7	CST301 Industrial Training/Internship													04
7	Program Elective- 5 (2-0-4)4	Program Elective-6 (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	0	8	21	
8	Liberal Arts Elective	Open Elective – 5 (MOOC)	CSD402 Project # 2 /Internship 6 Credits	Program Elective- 7 (2-0-4)4					CSS402 CS-VIII (140 Hrs)	6	0	4	16+2	

*Arshia*

*Jaar*

*Rash*

*Kahu*

*Zoya*

*am Tom*

*Arsh*

*Arsh*

*Nishu*

(3-0-0)3	(3-0-0)3								2 Credits				=18
<b>Total</b>										105	4	82	161+14= 175

\*\* 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 1<sup>st</sup> 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 4<sup>th</sup> 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 5<sup>th</sup> & 6<sup>th</sup> semesters to impart special skills to students for enhancing their employability.
- Advanced sessions on soft skills shall be conducted in the 7<sup>th</sup> semester to hone up the preparedness of students for placements and make them industry ready for national and international jobs.

Arshia      Rach      Bhu      Joyn      amr Tank      Kyee  
Naw      Jo      Jaeb

Tracks	Tracks	Data Science	Cloud Computing	Full Stack	Game Tech	Cyber Security	Blockchain	AI & ML	IoT & 5G	Other Electives	Semiconductor Technology
Program Elective-1	PE 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 AI	ECL256 Embedded Systems	MAL270 Numerical Methods	VLSI Design
Program Elective-2	PE 2	CSL227 Applied Computational Statistics	CSL337 Cloud Architecture	CSL274 Middleware Frameworks and ORM	CSL245 Programing for Games	CSL 284 Digital Forensics and Malware Analysis	CSL247 Intro. to blockchain technologies	CSL347 Applied Artificial Intelligence and Expert Systems	CSL238 Introduction to Cloud Computing	CSL223 Web Development Technologies	Digital System Design
Program Elective-3	PE 3	CSL232 Business Intelligence and Data Visualization	CSL338 Virtualization & Cloud Computing	CSL276 No SQL Databases	CSL244 Advanced Programing for Games	CSL 383 Network security	CSL355 Bitcoin and Cryptocurrency Technologies	CSL348 Reinforcement Learning	ECL252 Micro Controllers & Sensors	MAL280 Linear Algebra and its Applications	VLSI Verification and Testing
Program Elective-4	PE 4	CSL313 Machine Learning	CSL339 Big Data on Cloud	CSL253 Web Frameworks	CSL343 Designing Human Computer Interfaces	CSL387 Web and Mobile Security	CSL356 Smart Contracts	CSL349 Artificial Intelligence for Robotics	ECL316 Wireless & Mobile Communication	MAL260 Probability and Statistics	Introduction to Microfabrication
Program Elective-5	PE 5	CSL311 Big Data	CSL346 Artificial Intelligence & Machine Learning on Cloud	CSL371 Mobile Application Development	CSL246 Cross Platform Game Development	CSL385 Risk Analysis and Assessment	CSL357 Blockchain for Cyber Security	CSL312 Deep Learning	ECL352 Design for IOT	CSL 318 Theory of Computation	Semiconductor Equipment Design and Technology
Program Elective-6	PE 6	CSL316 Introduction to Image Processing and Recognition	CSL445 Cloud Application Development & Deployment	CSL373 Devops	CSL341 AR Development	CSL384 Cloud Security Essentials	CSL358 Blockchain Technology in Web Development	CSL447 Computer Vision	ECL367 Introduction to 5G Technologies		Semiconductor Materials Synthesis and Characterization
Program Elective-7	PE 7	CSL312 Deep Learning	CSL446 Cloud Security	CSL374 Micro service Based Applications	CSL345 VR Development	CSL382 Blockchain	CSL449 Security and Privacy for Big Data Analytics	CSL448 Computational Linguistics and Natural Language Processing	ECL368 Network and Security in IoT		Semiconductor Packaging and Testing

*Arav*  
*Nidhi*  
*Prathia*  
*Rakhi*  
*Ushu*  
*Zoya*  
*amrta*  
*Kyara*



**Department of Multidisciplinary Engineering**  
**M. Tech in ECE**  
 (With specialization in Semiconductor Technology)  
**2024**

**M.Tech full time (2 years)**

Sem	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5	Subject 6	L	T	P	Weekly Contact Hours	Credits
I	System Design & Modelling 3-0-2(4)	AI & ML 3-0-2(4)	Program Elective-1 3-0-2(4)	Program Elective-2 3-0-2 (4)	ECC509 Seminar 0-0-4(2)	ECS501 Community Service	12	0	12	24	18
II	ECL532: Embedded System Design 3-0-2(4)	Optimization Theory and Applications 2-0-2(3)	Program Elective-3 3-0-2(4)	Program Elective-4 3-0-2(4)	ECD512 Minor Project 0-0-10(5)	ECS502 Community Service (140 hours = 2 credit)*	11	0	18	19	22
III	MAL616 Research Methodology 2-1-0(3)	Open Elective 2-0-2(3)	ECD605 Dissertation -I 0-0-12(6)	Program Elective-5 3-0-2(4)		ECS601 Community Service	7	1	16	12	16
IV	ECD602 Dissertation-II 0-0-24(12)					ECS602 Community Service (140 hours = 2 credit)*	0	0	24	-	14
<b>TOTAL CREDITS OF THE M.TECH DEGREE PROGRAMME = 70</b>											70

\*Students can utilize the summer/winter break period to complete the 140 Community Service hours every year

*Abhatia*  
*Rakhi*

*Nidhi*

*Yash*

*Yash*

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**Department of Multidisciplinary Engineering**  
**M. Tech in Electronics and Communication Engineering**  
 (With specialization in Semiconductor Technology)  
**2024**

PG Diploma with 1 year exit

Sem	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5	Subject 6	L	T	P	Weekly Contact Hours	Credits
I	System Design & Modelling 3-0-2(4)	AI & ML 3-0-2(4)	Program Elective-1 3-0-2(4)	Program Elective-2 3-0-2 (4)	ECC509 Seminar 0-0-4(2)	ECS501 Community Service	12	0	12	24	18
II	ECL532: Embedded System Design 3-0-2(4)	Optimization Theory and Applications 2-0-2(3)	Program Elective-3 3-0-2(4)	Program Elective-4 3-0-2(4)	ECD512 Minor Project 0-0-10(5)	ECS502 Community Service (140 hours = 2 credit)*	11	0	18	19	22
Summer	ECV502 Skill based course (3)	ECT502 Industrial Internship (7)									10
<b>EXIT OPTION: PG DIPLOMA; CREDITS = 50</b>											50

\*Students can utilize the summer/winter break period to complete the 140 Community Service hours in a year

*Azhar*  
*Rishi*  
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*amit*  
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**Department of Multidisciplinary Engineering**  
**M. Tech in ECE**  
 (With specialization in Semiconductor Technology)  
**2024**

Program Core		
System Design & Modelling	AI & ML	Embedded System Design
Optimization Theory and Applications	Research Methodology	Seminar
Minor Project	Dissertation- I	Dissertation- II
Program Electives		

Micro & Nano fabrication	Semiconductor equipment & technology	Semiconductor Material Synthesis & Characterization	Semiconductor Packaging and Testing	ASIC's & FPGA	MEMS & NEMS
ECL528 Analog VLSI Design	ECL523 Digital VLSI Design	ECL633 Mixed Signal Design	ECL524 Low Power VLSI Design	VLSI Design Verification & Testing	Semiconductor Optoelectronics & Photovoltaics
ECL536 VLSI Fabrication and Technology	ECL534 CMOS RF Circuit Design	ECL529 Linux & Scripting	Organic Electronics	Communication Buses and Interfaces	Physical Design Automation
ECL527 Digital System Design with Verilog HDL	ECL538 Hardware Software CoDesign	SoC Design	System C/C++	ECL582 Data structures & algorithms using C++	ECL562 Millimeter Wave Integrated Circuits
VLSI Interconnect	ECL531 Design and Analysis of Computer Architecture	CAD of Digital System	Perl/Python	Solar PV System design	RISC-V
ECL637 VLSI Test and Testability	RTL Simulation and Synthesis with PLDs	VLSI signal Processing	ECL525: Semiconductor Device Modelling & Technology	Device Modeling for Circuit Simulation	ECL540 Real Time Systems and Software
Special Topics in Semiconductor Technologies and Applications	ECL542 Designing with ASICs	Structural and Functional Characterization 3-0-2(4)	ECL629 Cryptography and Crypto Chip Design	ECL530 Computer Aided VLSI Design	Semiconductor Devices for RF and Microwave Electronics



**Department of Multidisciplinary Engineering**  
**M. Tech in Electronics and Communication Engineering**  
 (With specialization in IOT & 5G)  
**2024**

**M.Tech full time (2 years)**

Sem	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5	Subject 6	L	T	P	Weekly Contact Hours	Credits
I	System Design & Modelling 3-0-2(4)	AI & ML 3-0-2(4)	Program Elective-1 3-0-2(4)	Program Elective-2 3-0-2 (4)	ECC509 Seminar 0-0-4(2)	ECS501 Community Service	12	0	12	24	18
II	ECL532: Embedded System Design 3-0-2(4)	Optimization Theory and Applications 2-0-2(3)	Program Elective-3 3-0-2(4)	Program Elective-4 3-0-2(4)	ECD512 Minor Project 0-0-10(5)	ECS502 Community Service (140 hours = 2 credit)*	11	0	18	19	22
III	MAL616 Research Methodology 2-1-0(3)	Open Elective 2-0-2(3)	ECD605 Dissertation-I 0-0-12(6)	Program Elective-5 3-0-2(4)		ECS601 Community Service	7	1	16	12	16
IV	ECD602 Dissertation-II 0-0-24(12)					ECS602 Community Service (140 hours = 2 credit)*	0	0	24	-	14
<b>TOTAL CREDITS OF THE M.TECH DEGREE PROGRAMME = 70</b>											70

\*Students can utilize the summer/winter break period to complete the 140 Community Service hours every year



**Department of Multidisciplinary Engineering**  
**M. Tech in Electronics and Communication Engineering**  
 (With specialization in Communication Engineering / VLSI Design)

**2024**

PG Diploma with 1 year exit

Sem	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5	Subject 6	L	T	P	Weekly Contact Hours	Credits
I	System Design & Modelling 3-0-2(4)	AI & ML 3-0-2(4)	Program Elective-1 3-0-2(4)	Program Elective-2 3-0-2(4)	ECC509 Seminar 0-0-4(2)	ECS501 Community Service	12	0	12	24	18
II	ECL532: Embedded System Design 3-0-2(4)	Optimization Theory and Applications 2-0-2(3)	Program Elective-3 3-0-2(4)	Program Elective-4 3-0-2(4)	ECD512 Minor Project 0-0-10(5)	ECS502 Community Service (140 hours = 2 credit)*	11	0	18	19	22
Summer	ECV502 Skill based course (3)	ECT502 Industrial Internship (7)									10
<b>EXIT OPTION: PG DIPLOMA; CREDITS = 50</b>											50

\*Students can utilize the summer/winter break period to complete the 140 Community Service hours in a year



**Department of Multidisciplinary Engineering**  
**M. Tech in Electronics and Communication Engineering**  
 (With specialization in IOT & 5G)  
**2024**

Program Core					
System Design & Modelling	AI & ML		ECL532: Embedded System Design		
Optimization Theory and Applications	Research Methodology		Seminar		
Minor Project	Dissertation- I		Dissertation- II		
Program Electives					
<b>TRACK: IOT &amp; 5G</b>					
Advanced Micro Controllers & Sensors	IoT: Architecture & Protocols	Advanced Wireless & Mobile Communication	Design for IOT	5G: Technologies, Architecture and Protocols	ECL529 Linux & Scripting
ECL640 Satellite Communication	ECL564 Soft Computing	Introduction to Deep Learning	Mobile Operating System and Security	ECL506 Optical Communication	Industrial IoT for Smart Cities
ECL502 Digital Image Processing	Edge And Fog Computing	ECL501 Digital Signal Processing	ECL505 Adv. Digital Communication	Hardware Security	ECL623 Telecom Network Management
ECL601 Cloud Computing	Big Data and Applications	ECL655 Access Networks	ECL517 Information Theory and Coding	Voice and Data networks	ECL539 Speech Communication
ECL611 Mobile Computing	ECL572 Modern Antennas and Arrays	ECL659 Global Navigation Satellite Systems and Applications	Intelligent Robotics and Shared Autonomy	Human-Machine Interfacing	Network and Security in IoT
ECL657 Wireless Sensor Networks	ECL578 Broadband Communication	ECL621 Statistical Signal Processing	IoT Design for Connected Health Care	ECL540 Real Time Systems & Software	Special Topics in IOT & 5G

# Board of Studies Meeting (Bos) 20 April 2024

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Dr. Pooja Sabherwal,  
Dr. Anu Tonk



# Outline



Need and Relevance



B.Tech CSE with specialization in Semiconductor Technology



M.Tech ECE with specialization in Semiconductor Technology



M.Tech ECE with specialization in IoT & 5G

# Agenda Items

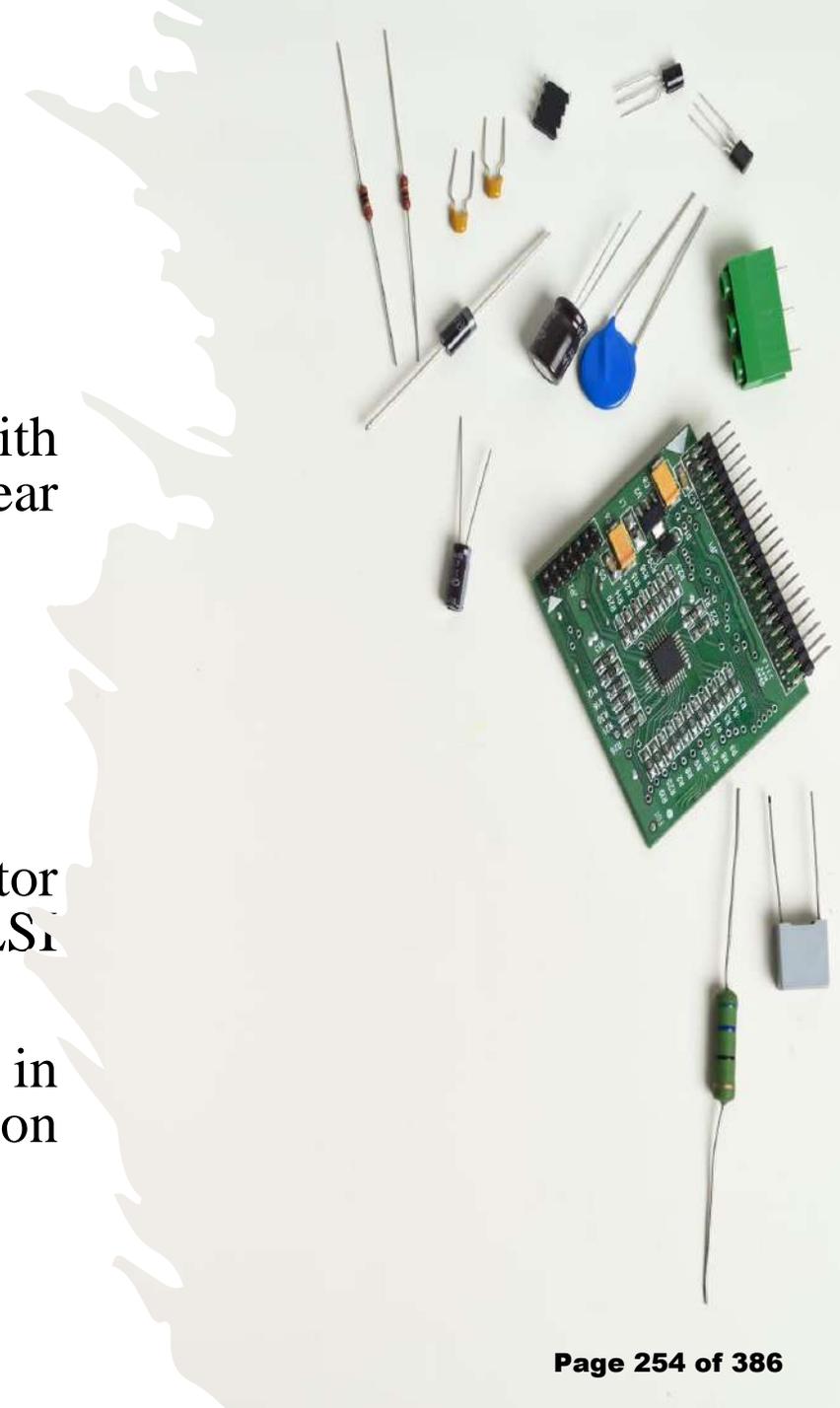
## Agenda No.1

Bachelor of Technology in Computer Science and Engineering with specialization in Semiconductor Technology from Academic Year 2024-25

## Agenda No 2

Revamping the M.Tech ECE Program:

- Introduction of M.Tech ECE with specialization in Semiconductor Technology in place of M.Tech ECE with specialization in VLSI Design from Academic Year 2024-25
- Introduction of M.Tech ECE with specialization in IoT & 5G in place of M.Tech ECE with specialization in Communication Engineering from Academic Year 2024-25



# TURNING INDIA INTO THE GLOBAL HUB OF ELECTRONIC MANUFACTURING

Union Cabinet approves programme for development of sustainable semiconductors and display ecosystem

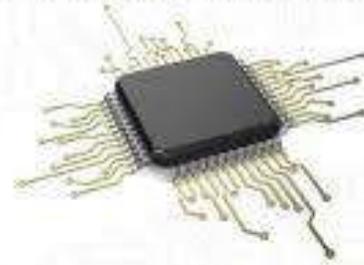


-  Incentives worth **Rs 2.3 lakh crore** to position India as global hub for electronics manufacturing
-  **Rs 76,000 crore** approved for development of semiconductors and display manufacturing ecosystem
-  Setting up of **India Semiconductor Mission (ISM)** to drive this sector

Read full at [bitly.ws/kaNY](https://bitly.ws/kaNY)

## INDIA SEMICONDUCTOR MISSION

Scheme for Semiconductor Fabs

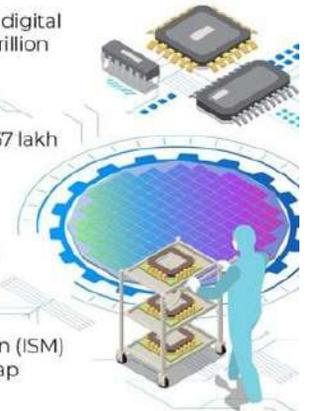


Cabinet Decisions: 15 Dec, 2021

## MAKE IN INDIA SEMICONDUCTORS FOR THE WORLD

Scheme for holistic development of Semiconductor & Display manufacturing ecosystem

-  To contribute to US \$1 trillion digital economy as a part of US \$5 trillion GDP by 2025 - 2026
-  Production target worth ₹9.57 lakh crore over the next 20 years
-  Exports expected to touch ₹5.15 lakh crore over the next 20 years
-  India Semiconductor Mission (ISM) to implement policy roadmap



# Government Initiatives

# Development of Semiconductors and Display Manufacturing Ecosystem in India

1/2

- Incentives of ₹2.3 lakh crores to position India as global hub
- ₹76000 crores approved for development of semiconductors and display manufacturing ecosystem
- Setting up of India Semiconductor Mission to drive this sector

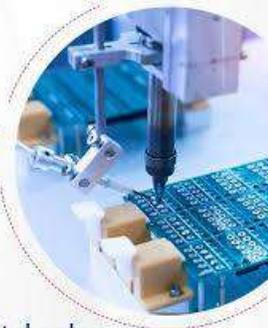


## DESIGN LINKED INCENTIVE (DLI) SCHEME

**NOTIFIED**

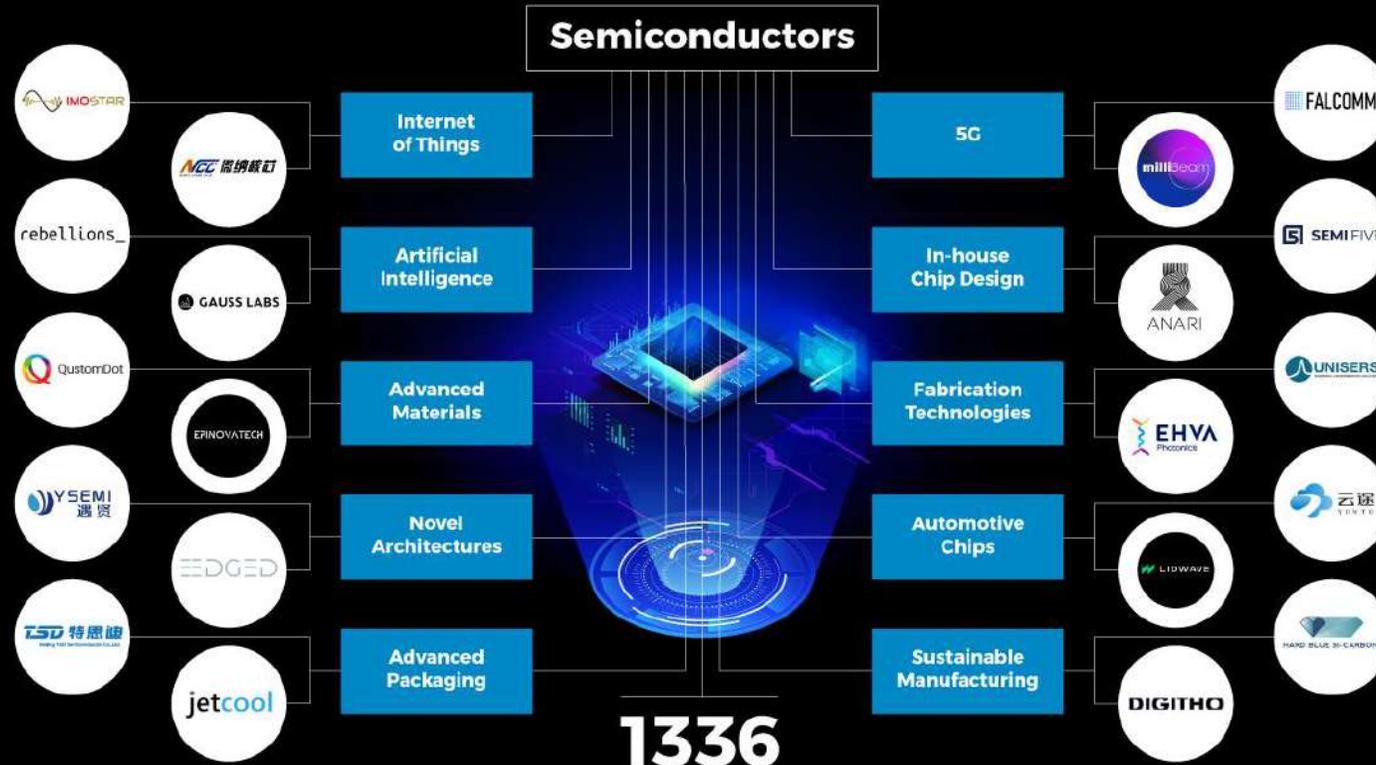
- **Fiscal support from Government of India:**
  - Product Design Linked Incentive - Reimbursement of up to 50% of the eligible expenditure subject to a ceiling of ₹15 Crore per application
  - Deployment Linked Incentive - Incentive of 6% to 4% of net sales turnover over 5 years subject to a ceiling of ₹30 Crore per application will be provided to approved applicants
- C-DAC to establish the semiconductor design infrastructure under the scheme and make available to the supported companies

## Production Linked Incentive Scheme (PLI) for Large Scale Electronics Manufacturing



- **Incentive:** 4% to 6% on incremental sales (over base year) of goods manufactured in India
- **Target Segments:** Mobile phones and specified electronic components
- **Eligibility:** Subject to thresholds of incremental investment and incremental sales of manufactured goods

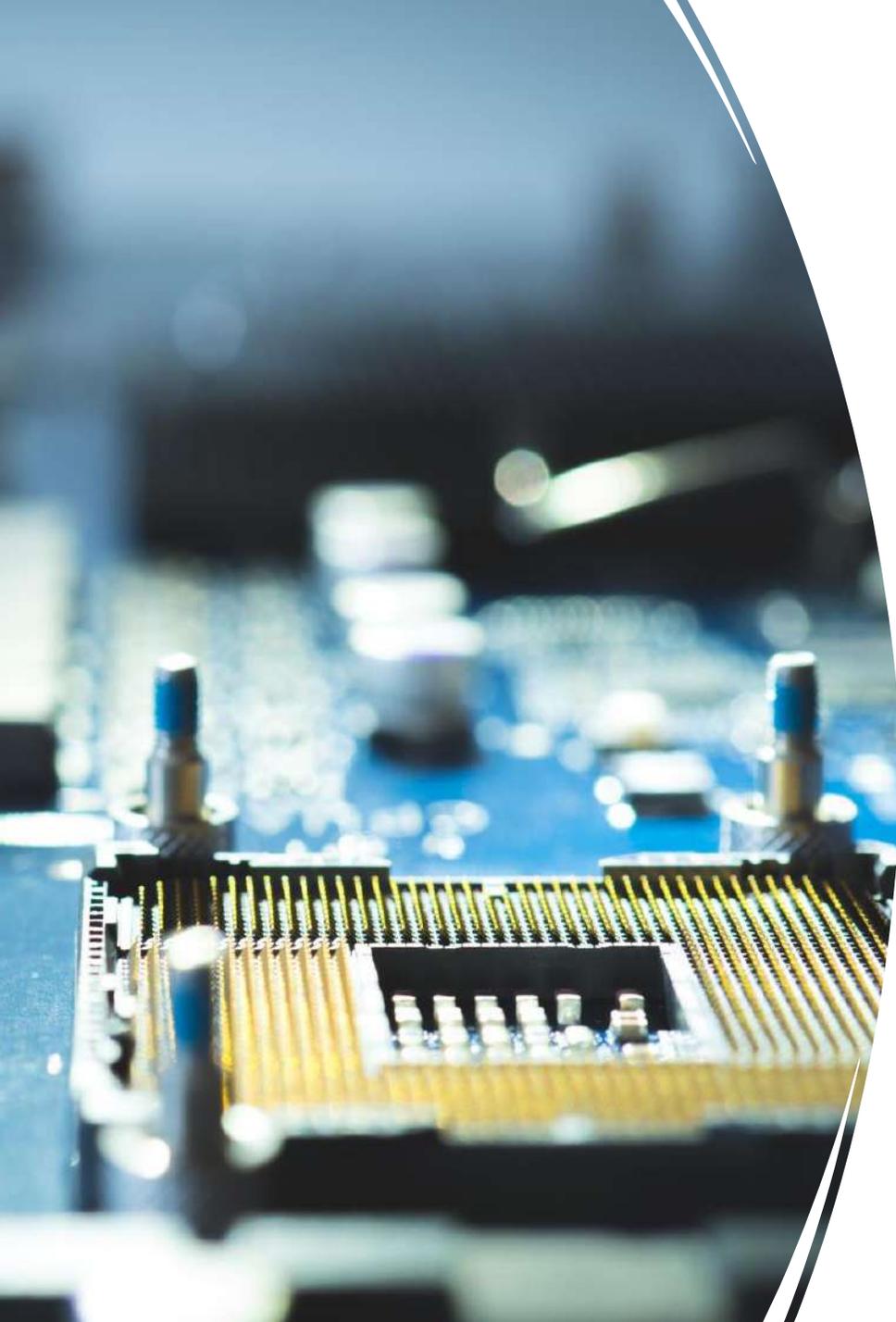
# Top 10 Semiconductors Trends & Innovations in 2024



Data provided by **StartUs insights** August 2023

# Market Trends

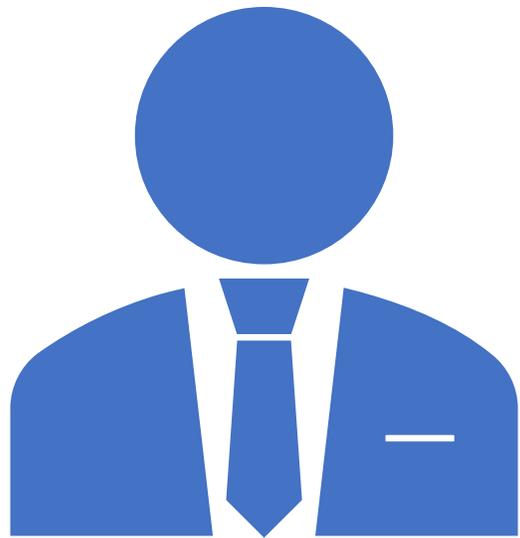
- Global semiconductor revenue is projected to grow 16.8% in 2024 to total \$624 billion, according to the latest forecast from Gartner.
- The global semiconductor industry is poised for a decade of growth and is projected to become a trillion-dollar industry by 2030. (McKinsey)
- India's semiconductor demand was estimated at about \$26 billion in 2022 and projected to reach \$272 billion by 2032. The country's electronics ministry envisions an overall products manufacturing output of \$300 billion by 2026, versus \$75 billion in 2022. (Forbes)



# Latest development in Semiconductor

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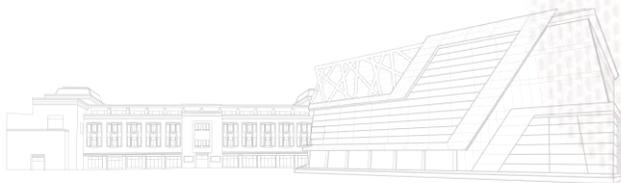
- Beginning of construction of two chip factories by Tata Sons: Wafer fabrication plant at Dholera, Gujarat and the other an OSAT (outsourced semiconductor assembly and testing) facility at Jogiroad, Assam.
- Tata Electronics will set up the semiconductor fab in partnership with Taiwan's Powerchip Semiconductor Manufacturing Corp (PSMC).
- The government had approved a \$2.75 billion ATMP (assembly, testing, marking and packaging) project, in Gujarat, led by America's Micron Technology



**Ajit Manocha the President  
and CEO of global  
microelectronics  
association SEMI says:**

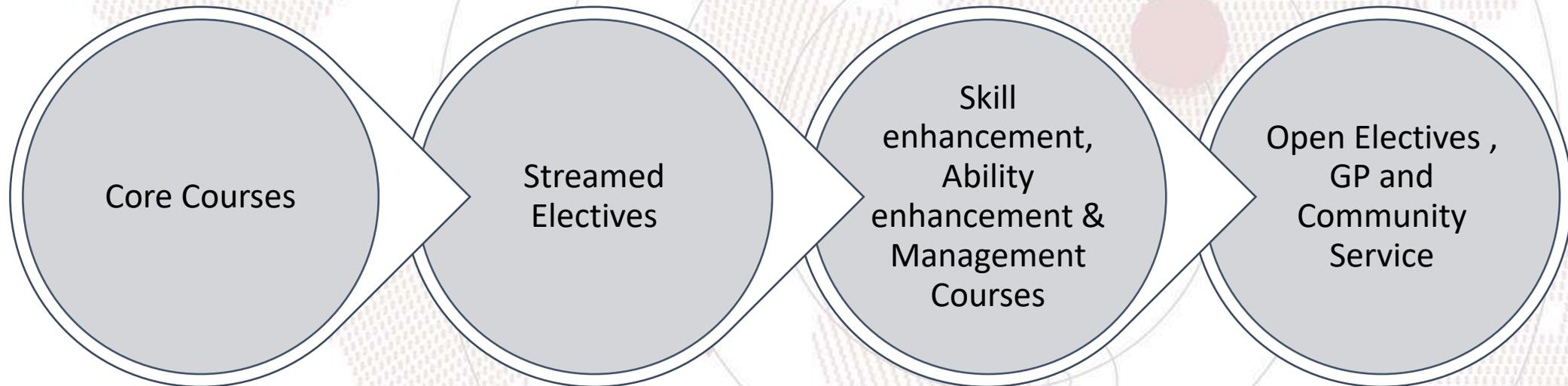
**Skill shortages are a global  
problem in the  
semiconductor industry**

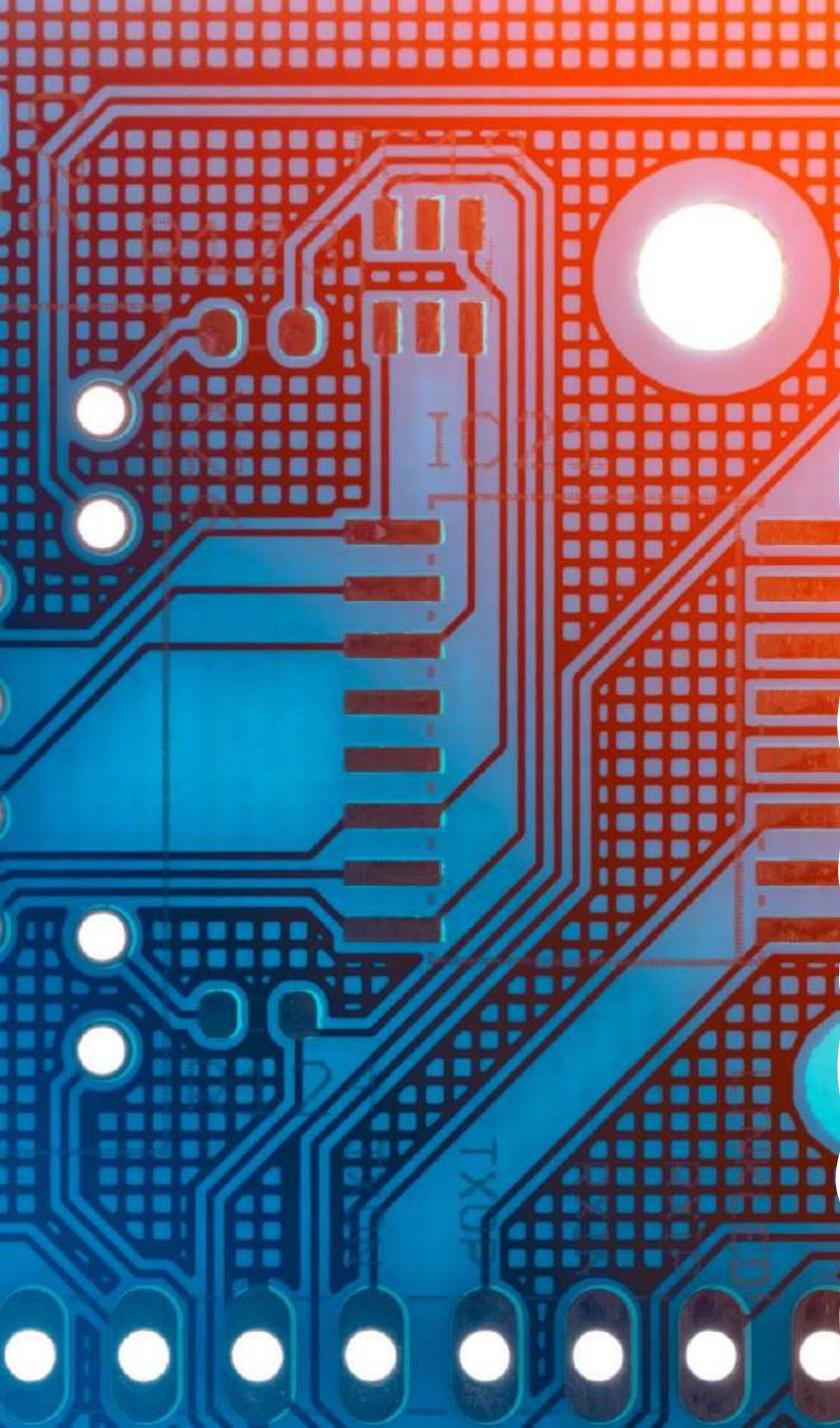
# **B.Tech CSE with Specialization in Semiconductor Technology**



©	Semester Course Code, Course Name (L-T-P)Credits						GP	Community Services	Hrs. Per week			Credits		
	L	T	P											
1	MAL151 Engg Maths-I (3-0-2)4	CSL106 FOCP-I (2-1-4)5	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			CSR11 8 GP 1 Credit	CSS101 CS-I	10	1	1 6	18+1 =19	
2	MAL152 Engg Maths-II (3-0-2)4	CSL108 FOCP-II (2-1-4)5	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 Communication-I (1-0-2)2		CSR11 9 GP 1 Credit	CSS102 CS-II (140 Hrs)** 2 Credits	13	1	1 4	21+3 =24	
Summer														
3	CSL214 DBMS (3-1-2)5	ECL255 DE & CA (3-0-2)4	CSL223 Discrete Mathematics (3-0-0)3	CSL215 Intro To Java (3-0-2)4	Program Elective - I (2-0-4)4	CLL140 Effective Communication-II (1-0-2)2		CSR21 8 GP 1 Credit	CSS201 CS-III	15	1	1 2	22+1 =24	
4	CSL422 Cyber Security (3-0-2)4	CSL209 Data Structures (3-0-2)4	CLL120 HVPE (2-0-0)2	Program Elective- 2 (2-0-4)4	SML300 Entrepreneurship (3-0-0)3	Open Elective – 1 (MOOC) (3-0-0)3	CSV101 Skill Development (0-0-2)1	CSR21 9 GP 1 Credit	CSS202 CS-IV (140 Hrs)** 2 Credits	16	1	8	21+3 =24	
Summer	CST201 Industrial Training/internship												2	
5	CSL236 Introduction to AI & ML / CSL242 AI for Games (3-0-2)4	CSL-303 Operating System (3-0-2)4	Program Elective-3 (2-0-4)4	CSL315 Adv Java (3-0-2)4	Open Elective – 2 (MOOC) (3-0-0)3	CSL240 Computer Networks (3-0-2)4		CSR31 8 GP 1 Credit	CSS301 CS-V	17	0	1 0	23+1 =24	
6	CSL229 SEPM (3-0-2)4	CSL230 Analysis and Design of Algorithms using JAVA (3-0-2)4	Program Elective-4 (2-0-4)4	CSI238 Introduction to Cloud Computing (3-0-2)4	Open Elective-3 (3-0-0)3	CSC301 Seminar 1 Credit		CSR31 9 GP 1 Credit	CSS302 CS-VI (140 Hrs)** 2 Credits	15	0	1 0	20+3 =23	
Summer	CST301 Industrial Training/ internship												04	
7	Program Elective- 5 (2-0-4)4	Program Elective- 6 (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	0	8	21	
8	Liberal Arts Elective (3-0-0)-3	Open Elective – 5 (MOOC) (3-0-0)3	CSD402 Project # 2 /Internship 6 Credits	Program Elective- 7 (2-0-4)4					CSS402 CS-VIII (140 Hrs) 2 Credits	10	4	8	16+2 =18	
	Total										10	4	8	161+1

# Specializations: An overview



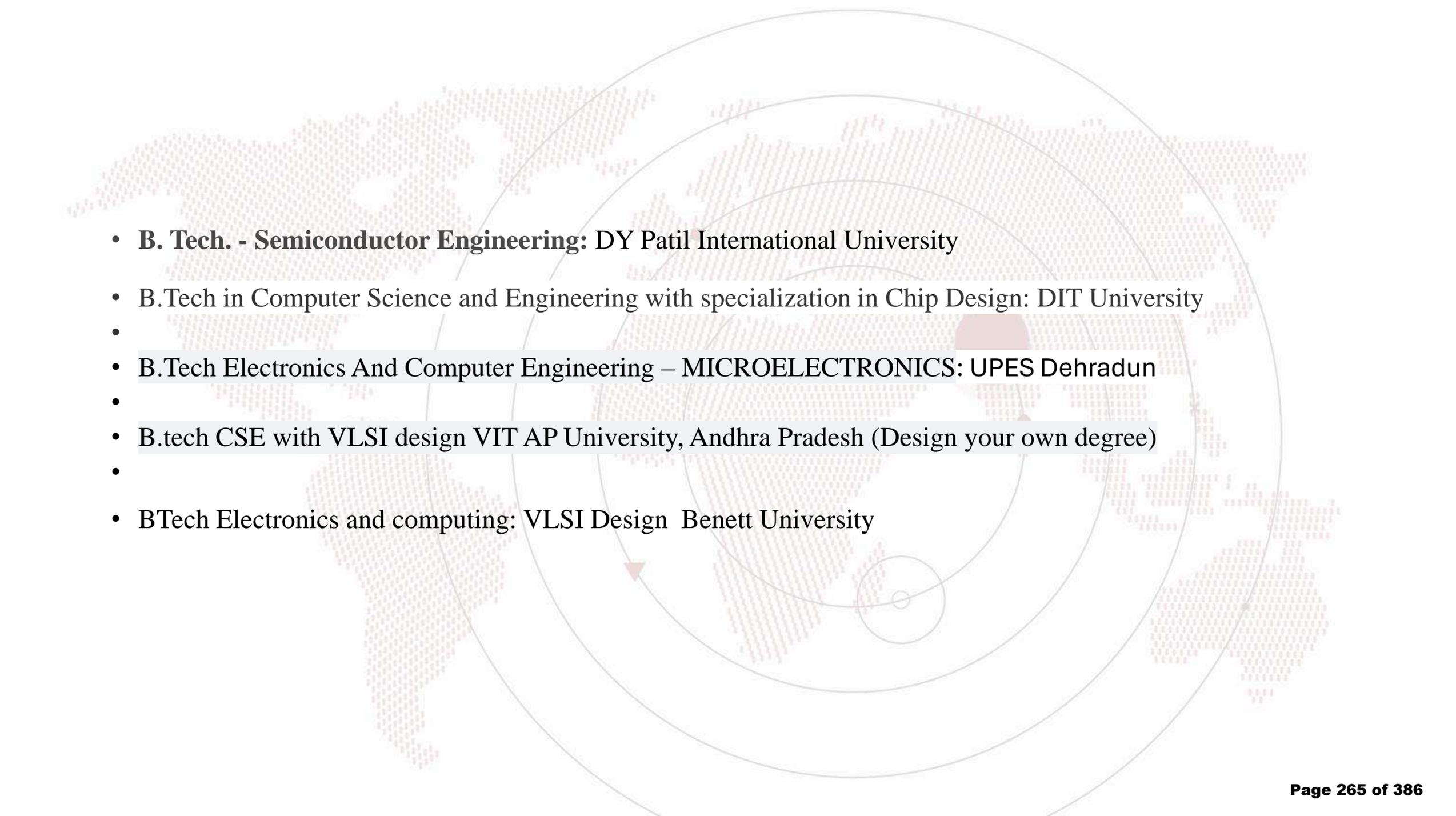


# Program Electives for Semiconductor Technology Track

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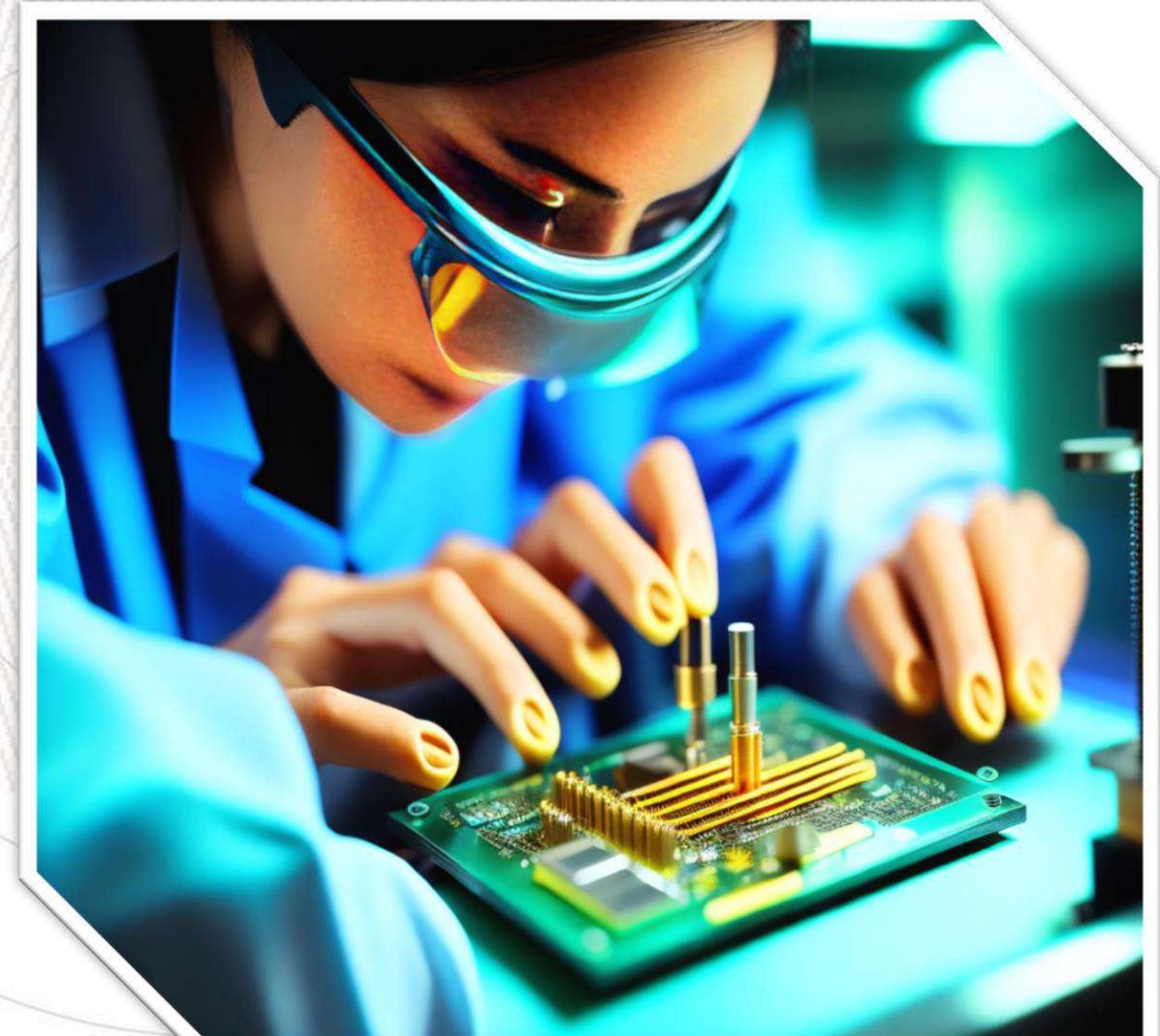
- PE1: VLSI Design
- PE2: Digital System Design
- PE3: VLSI Verification and Testing
- PE4: Introduction to microfabrication
- PE5: Semiconductor Equipment Design and Technology
- PE6: Semiconductor Materials Synthesis and Characterization
- PE7: Semiconductor Packaging and Testing

[Brief syllabus](#)

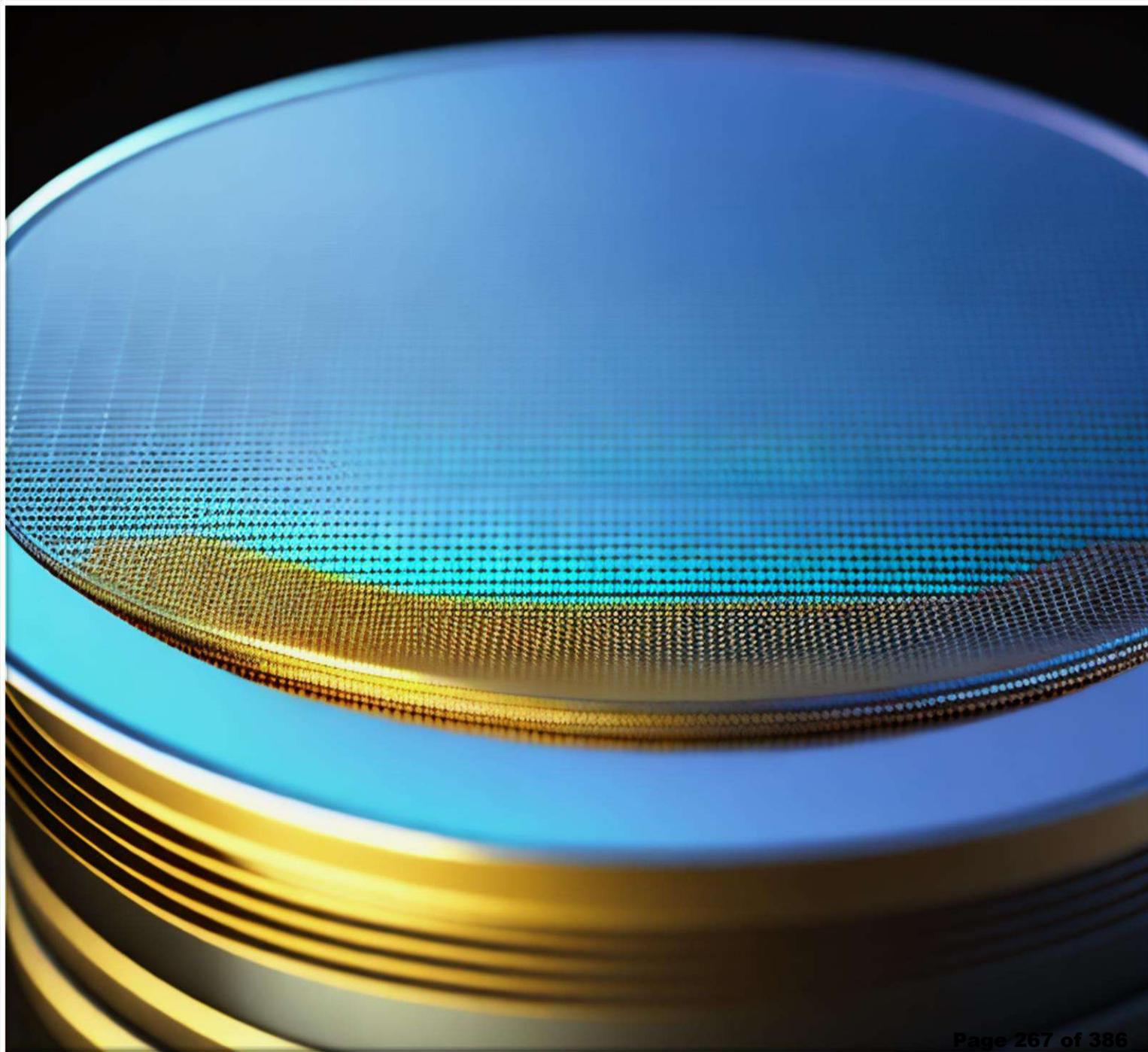
- 
- **B. Tech. - Semiconductor Engineering: DY Patil International University**
  - B.Tech in Computer Science and Engineering with specialization in Chip Design: DIT University
  - 
  - B.Tech Electronics And Computer Engineering – MICROELECTRONICS: UPES Dehradun
  - 
  - B.tech CSE with VLSI design VIT AP University, Andhra Pradesh (Design your own degree)
  - 
  - BTech Electronics and computing: VLSI Design Benett University

# Agenda No. 2: Revamping the M.Tech ECE Program

- Introduction of **two new specializations** within the M.Tech ECE program.
- ***M.Tech ECE with specialization in Semiconductor Technology*** in place of ***M.Tech ECE with specialization in VLSI Design***, offering advanced studies in semiconductor materials, devices, and fabrication techniques to address the evolving needs of the electronics industry.
- ***M.Tech ECE with specialization in IoT & 5G*** in place of ***M.Tech ECE with specialization in Communication Engineering***, focusing on IoT architecture, 5G networks, and their convergence to meet industry demands and foster digital innovation.



# M.Tech ECE with Specialization in Semiconductor Technology



# Overview of Proposal

2-year M.Tech in ECE with  
specialization in  
Semiconductor Technology  
with exit option after 1 year

If a student exits after 1  
year

he/she will be eligible for  
**PG Diploma certificate in  
Semiconductor Technology**



**Department of Multidisciplinary Engineering**  
**M. Tech in ECE**  
 (With specialization in Semiconductor Technology)  
**2024**

**M.Tech full time (2 years)**

Sem	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5	Subject 6	L	T	P	Weekly Contact Hours	Credits
I	System Design & Modelling 3-0-2(4)	AI & ML 3-0-2(4)	Program Elective-1 3-0-2(4)	Program Elective-2 3-0-2 (4)	ECC509 Seminar 0-0-4(2)	ECS501 Community Service	12	0	12	24	18
II	ECL532: Embedded System Design 3-0-2(4)	Optimization Theory and Applications 2-0-2(3)	Program Elective-3 3-0-2(4)	Program Elective-4 3-0-2(4)	ECD512 Minor Project 0-0-10(5)	ECS502 Community Service (140 hours = <u>2 credit</u> )*	11	0	18	19	22
III	MAL616 Research Methodology 2-1-0(3)	Open Elective 2-0-2(3)	ECD605 Dissertation -I 0-0-12(6)	Program Elective-5 3-0-2(4)		ECS601 Community Service	7	1	16	12	16
IV	ECD602 Dissertation-II 0-0-24(12)					ECS602 Community Service (140 hours = <u>2 credit</u> )*	0	0	24	-	14
<b>TOTAL CREDITS OF THE <u>M.TECH</u> DEGREE PROGRAMME = 70</b>											70

\*Students can utilize the summer/winter break period to complete the 140 Community Service hours every year



**Department of Multidisciplinary Engineering**  
**M. Tech in Electronics and Communication Engineering**  
 (With specialization in Semiconductor Technology)  
**2024**

**PG Diploma with 1 year exit**

Sem	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5	Subject 6	L	T	P	Weekly Contact Hours	Credits
I	System Design & Modelling 3-0-2(4)	AI & ML 3-0-2(4)	Program Elective-1 3-0-2(4)	Program Elective-2 3-0-2 (4)	ECC509 Seminar 0-0-4(2)	ECS501 Community Service	12	0	12	24	18
II	ECL532: Embedded System Design 3-0-2(4)	Optimization Theory and Applications 2-0-2(3)	Program Elective-3 3-0-2(4)	Program Elective-4 3-0-2(4)	ECD512 Minor Project 0-0-10(5)	ECS502 Community Service (140 hours = 2 <a href="#"><u>credit</u></a> )*	11	0	18	19	22
Summer	ECV502 Skill based course (3)	ECT502 Industrial Internship (7)									10
<b>EXIT OPTION: PG DIPLOMA; CREDITS = 50</b>											50

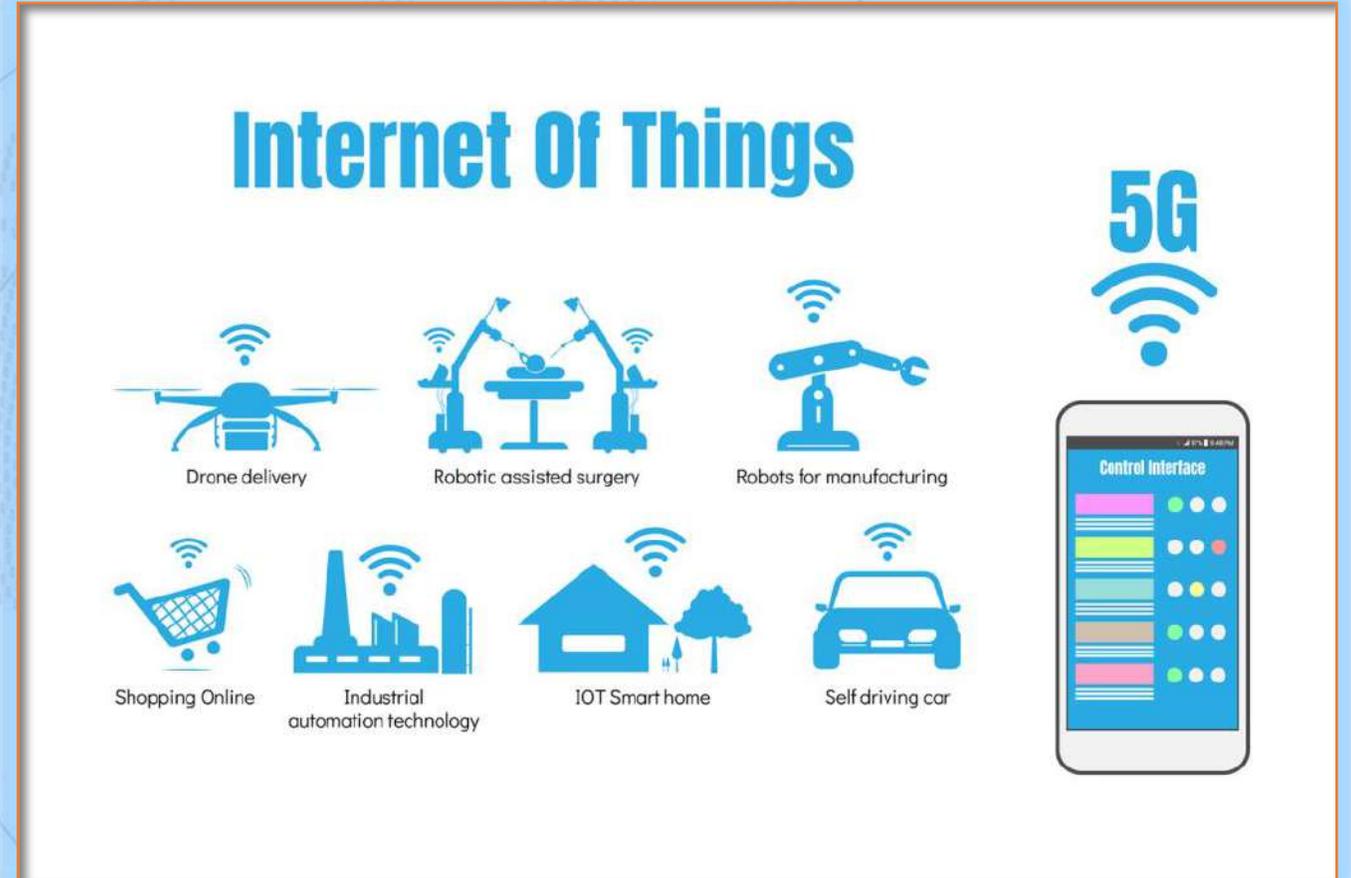
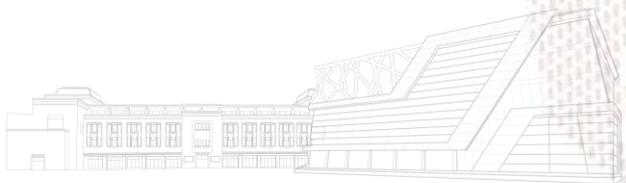
\*Students can utilize the summer/winter break period to complete the 140 Community Service hours in a year

**Department of Multidisciplinary Engineering**  
**M. Tech in ECE**  
**(With specialization in Semiconductor Technology)**  
**2024**

<b>Program Core</b>		
System Design & Modelling	AI & ML	Embedded System Design
Optimization Theory and Applications	Research Methodology	Seminar
Minor Project	Dissertation- I	Dissertation- II
<b>Program Electives</b>		

Micro & Nano fabrication	Semiconductor equipment & technology	Semiconductor Material Synthesis & Characterization	Semiconductor Packaging and Testing	ASIC's & FPGA	MEMS & NEMS
ECL528 Analog VLSI Design	ECL523 Digital VLSI Design	ECL633 Mixed Signal Design	ECL524 Low Power VLSI Design	VLSI Design Verification & Testing	Semiconductor Optoelectronics & Photovoltaics
ECL536 VLSI Fabrication and Technology	ECL534 CMOS RF Circuit Design	ECL529 Linux & Scripting	Organic Electronics	Communication Buses and Interfaces	Physical Design Automation
ECL527 Digital System Design with Verilog HDL	ECL538 Hardware Software CoDesign	SoC Design	System C/C++	ECL582 Data structures & algorithms using C++	ECL562 Millimeter Wave Integrated Circuits
VLSI Interconnect	ECL531 Design and Analysis of Computer Architecture	CAD of Digital System	Perl/Python	Solar PV System design	RISC-V
ECL637 VLSI Test and Testability	RTL Simulation and Synthesis with PLDs	VLSI signal Processing	ECL525: Semiconductor Device Modelling & Technology	Device Modeling for Circuit Simulation	ECL540 Real Time Systems and Software
Special Topics in Semiconductor Technologies and Applications	ECL542 Designing with ASICs	Structural and Functional Characterization 3-0-2(4)	ECL629 Cryptography and Crypto Chip Design	ECL530 Computer Aided VLSI Design	Semiconductor Devices for RF and Microwave Electronics

# M.Tech ECE with Specialization in IOT & 5G



# Why “IoT & 5G”

**5G and the IoT** are two buzzwords which are constantly being heard around.

5G, or **fifth generation-cellular wireless**, is a wireless technology that is the latest **iteration of the well-known 4G**. Since its rollout in 2019, 5G wireless networks have been growing in both availability and use cases.

**The Internet of Things**, or the IoT, for short, is 5G’s partner in creating a more interconnected world. The IoT is essentially “**billions of physical devices** around the world which are now **connected to the internet, collecting and sharing data.**”

A forecast by International Data Corporation (IDC) estimates that there will be **41.6 billion IoT devices in 2025**, capable of generating 79.4 zettabytes (ZB) of data.

**Internet of Things & 5G  
mobile communications  
lie at the heart of many  
emerging applications.**



Connected and driverless cars



Smart cities



eHealth



Virtual reality



Robotics



Smart manufacturing

# Why “IoT & 5G”

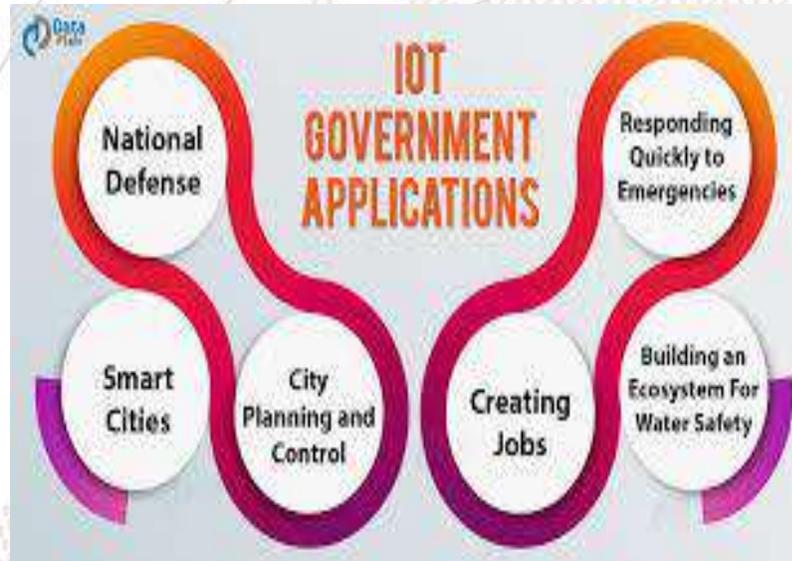
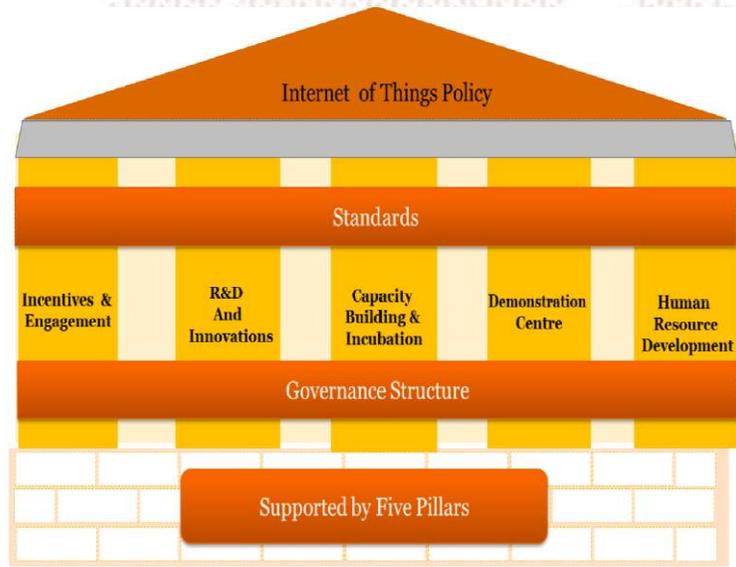
**Massive implementation of IoT is one of the important use cases of 5G.** 5G is designed to support a 100x increase in traffic capacity and network efficiency.

There has been significant **adoption of smart home devices** in recent years. These smart home devices consist of a wide range of technologies and are interconnected by the IoT, voice-first technology, AR, and VR.

Internet of Things has **revolutionized industrial operations**, including manufacturing and healthcare, local administrations worldwide are looking towards new technologies to create future-ready smart cities.

According to this recent IDC white paper in the US alone, **almost 120 million 5G devices were expected to ship by the end of 2023**—a 9.3 % increase over the previous year. **By 2027**, the final year covered in the report, **155 million units are expected to ship**, representing a compound annual growth rate (CAGR) of 7.4%.

The crux is that **5G and the IoT are just going to keep getting bigger and better.**



# Government Initiatives: Fostering IoT & 5G Innovation

# Government Policies & Initiatives: Advancing IoT & 5G in Academia

- PM awarded 100 '5G Use Case Labs' to educational institutions across the country in 7th Edition of the India Mobile Congress (IMC) 2023 on 27th October.
- '100 5G labs initiative' aims to develop 5G applications to foster innovation across socio economic sectors and is a key step towards building a 6G-ready ecosystem in the country.



# Market Survey

Institute	Course	Duration	Others
<b>National Institute of Electronics &amp; Information Technology</b> (Ministry of Electronics & Information Technology, Government of India)	<b>PG Diploma in Embedded System Design &amp; IoT</b>	<ul style="list-style-type: none"> <li>• 2 semesters of 13 weeks each</li> <li>• 25 credits (6 courses + 1 project)</li> <li>• 4 hrs of lab is considered as 1 credit</li> </ul>	
<b>Cranes Varsity</b> (Bangalore based training institute)	<b>PG Diploma in IoT &amp; Embedded Systems</b>	<ul style="list-style-type: none"> <li>• 5 month course for engineering students</li> </ul>	Different topics are covered in specific days
<b>BITS Pilani</b>	<b>Post Graduate Programme in Internet of Things</b>	<ul style="list-style-type: none"> <li>• 11 month programme</li> <li>• 6 Courses and a Capstone Project</li> </ul>	Week wise distribution to courses
<b>C-DAC, Noida</b> (premier R&D organization of the Ministry of Electronics and Information Technology (MeitY))	<b>PG Diploma in Internet of Things (PG-DIoT)</b>	<ul style="list-style-type: none"> <li>• 900 hrs</li> <li>• 10 technical+ 2 communication + 1 project</li> </ul>	Hours wise distribution to courses

# Market Survey

Institute	Course	Duration	Others
<b>IIT Delhi</b> Continuing Education Programme (CEP)	CERTIFICATE PROGRAMME IN 5G AND ITS APPLICATIONS IN IOT AND AI	8 months- 8 modules	Classes on Sundays
<b>University of Surrey (UK)</b>	MSc- 5G and Future Generation Communication Systems	12 months 9 courses + 1 project (year-long 60 credits)	
<b>Nokia Bell Labs and NIIT</b>	5G Certification Programme	6 weeks course with 6 units	
<b>Sushant university</b>	M. Tech in 5G and IoT	2 Years	
<b>Amrita Vishwa Vidyapeetham</b>	M. Tech Wireless Networks & Applications (Specialising in IoT, AI, 5G, Blockchain)	2 Years	

# Top Recruiters

and 500+ more..

# Overview of Proposal

2-year M.Tech in ECE with  
specialization in **IoT & 5G**  
with exit option after 1 year

If a student exits after 1  
year

he/she will be eligible for  
**PG Diploma certificate in  
IoT & 5G**



**Department of Multidisciplinary Engineering**  
**M. Tech in Electronics and Communication Engineering**  
 (With specialization in IOT & 5G)  
**2024**

**M.Tech full time (2 years)**

Sem	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5	Subject 6	L	T	P	Weekly Contact Hours	Credits
I	System Design & Modelling 3-0-2(4)	AI & ML 3-0-2(4)	Program Elective-1 3-0-2(4)	Program Elective-2 3-0-2 (4)	ECC509 Seminar 0-0-4(2)	ECS501 Community Service	12	0	12	24	18
II	ECL532: Embedded System Design 3-0-2(4)	Optimization Theory and Applications 2-0-2(3)	Program Elective-3 3-0-2(4)	Program Elective-4 3-0-2(4)	ECD512 Minor Project 0-0-10(5)	ECS502 Community Service (140 hours = 2 <u>credit</u> )*	11	0	18	19	22
III	MAL616 Research Methodology 2-1-0(3)	Open Elective 2-0-2(3)	ECD605 Dissertation-I 0-0-12(6)	Program Elective-5 3-0-2(4)		ECS601 Community Service	7	1	16	12	16
IV	ECD602 Dissertation-II 0-0-24(12)					ECS602 Community Service (140 hours = 2 <u>credit</u> )*	0	0	24	-	14
<b>TOTAL CREDITS OF THE <u>M.TECH</u> DEGREE PROGRAMME = 70</b>											70

\*Students can utilize the summer/winter break period to complete the 140 Community Service hours every year



**Department of Multidisciplinary Engineering**  
**M. Tech in Electronics and Communication Engineering**  
 (With specialization in IOT & 5G)  
**2024**

**PG Diploma with 1 year exit**

Sem	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5	Subject 6	L	T	P	Weekly Contact Hours	Credits
I	System Design & Modelling 3-0-2(4)	AI & ML 3-0-2(4)	Program Elective-1 3-0-2(4)	Program Elective-2 3-0-2 (4)	ECC509 Seminar 0-0-4(2)	ECS501 Community Service	12	0	12	24	18
II	ECL532: Embedded System Design 3-0-2(4)	Optimization Theory and Applications 2-0-2(3)	Program Elective-3 3-0-2(4)	Program Elective-4 3-0-2(4)	ECD512 Minor Project 0-0-10(5)	ECS502 Community Service (140 hours = 2 <u>credit</u> )*	11	0	18	19	22
Summer	ECV502 Skill based course (3)	ECT502 Industrial Internship (7)									10
<b>EXIT OPTION: PG <u>DIPLOMA</u>; CREDITS = 50</b>											50

\*Students can utilize the summer/winter break period to complete the 140 Community Service hours in a year

**Department of Multidisciplinary Engineering**  
**M. Tech in Electronics and Communication Engineering**  
 (With specialization in IOT & 5G)

**2024**

Program Core					
System Design & Modelling		AI & ML		ECL532: Embedded System Design	
Optimization Theory and Applications		Research Methodology		Seminar	
Minor Project		Dissertation- I		Dissertation- II	
Program Electives					
TRACK: IOT & 5G					
Advanced Micro Controllers & Sensors	IoT: Architecture & Protocols	Advanced Wireless & Mobile Communication	Design for IOT	5G: Technologies, Architecture and Protocols	ECL529 Linux & Scripting
ECL640 Satellite Communication	ECL564 Soft Computing	Introduction to Deep Learning	Mobile Operating System and Security	ECL506 Optical Communication	Industrial IoT for Smart Cities
ECL502 Digital Image Processing	Edge And Fog Computing	ECL501 Digital Signal Processing	ECL505 Adv. Digital Communication	Hardware Security	ECL623 Telecom Network Management
ECL601 Cloud Computing	Big Data and Applications	ECL655 Access Networks	ECL517 Information Theory and Coding	Voice and Data networks	ECL539 Speech Communication
ECL611 Mobile Computing	ECL572 Modern Antennas and Arrays	ECL659 Global Navigation Satellite Systems and Applications	Intelligent Robotics and Shared Autonomy	Human-Machine Interfacing	Network and Security in IoT
ECL657 Wireless Sensor Networks	ECL578 Broadband Communication	ECL621 Statistical Signal Processing	IoT Design for Connected Health Care	ECL540 Real Time Systems & Software	Special Topics in IOT & 5G



Thank You!!!

Tracks	Data Science	Cloud Computing	Full Stack	Game Tech	Cyber Security	Blockchain	AI & ML	IoT & 5G	Other Electives	Semiconductor Technology
PE-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 AI	ECL256 Embedded Systems	MAL270 Numerical Methods	VLSI Design
PE-2	CSL227 Applied Computational Statistics	CSL337 Cloud Architecture	CSL274 Middleware Frameworks and ORM	CSL245 Programming for Games	CSL 284 Digital Forensics and Malware Analysis	CSL247 Intro. to blockchain technologies	CSL347 Applied Artificial Intelligence and Expert Systems	CSL238 Introduction to Cloud Computing	CSL223 Web Development Technologies	Digital System Design
PE-3	CSL232 Business Intelligence and Data Visualization	CSL338 Virtualization & Cloud Computing	CSL276 No SQL Databases	CSL244 Advanced Programming for Games	CSL 383 Network security	CSL355 Bitcoin and Cryptocurrency Technologies	CSL348 Reinforcement Learning	ECL252 Micro Controllers & Sensors	MAL280 Linear Algebra and its Applications	VLSI Verification and Testing
PE-4	CSL313 Machine Learning	CSL339 Big Data on Cloud	CSL253 Web Frameworks	CSL343 Designing Human Computer Interfaces	CSL387 Web and Mobile Security	CSL356 Smart Contracts	CSL349 Artificial Intelligence for Robotics	ECL316 Wireless & Mobile Communication	MAL260 Probability and Statistics	Introduction to Microfabrication
PE-5	CSL311 Big Data	CSL346 Artificial Intelligence & Machine Learning	CSL371 Mobile Application Development	CSL246 Cross Platform Game Development	CSL385 Risk Analysis and Assessment	CSL357 Blockchain for Cyber Security	CSL312 Deep Learning	ECL352 Design for IOT	CSL 318 Theory of Computation	Semiconductor Equipment Design and Technology

		on Cloud	ment							
<b>PE-6</b>	CSL316 Introduc tion to Image Processi ng and Recognitio n	CSL445 Cloud Applicatio n Developm ent & Deployme nt	CSL373 Devops	CSL341 AR Developm ent	CSL384 Cloud Security Essential s	CSL358 Blockchain Technology in Web Development	CSL447 Comput er Vision	ECL367 Introduc tion to 5G Technologie s		Semiconductor Materials Synthesis and Characterization
<b>PE-7</b>	CSL312 Deep Learning	CSL446 Cloud Security	CSL374 Micro service Based Applicati ons	CSL345 VR Developm ent	CSL382 Blockchai n	CSL449 Security and Privacy for Big Data Analytics	CSL448 Computati onal Linguistics and Natural Language Processing	ECL368 Network and Security in IoT		Semiconductor Packaging and Testing

**Program Electives for each track**

## VLSI Design

Overview of VLSI Design: Historical perspective, overview of VLSI design methodologies, VLSI design flow, design hierarchy, concepts of regularity, modularity, and locality, VLSI design styles, design quality, packaging technology, CAD technology., MOS Transistor ,I-V characteristics, C-V characteristics, non-linear I-V effects, DC transfer characteristics., Introduction to ASIC and SoC, Overview of ASIC flow, functional verification, CMOS Process Technology: Fabrication process flow- basic steps, the CMOS n-Well process, layout design rules, stick diagram, full-custom mask layout design, MOS Inverter (Static Characteristics): Resistive-load inverter, inverter with n-type 16 MOSFET load, CMOS inverter, MOS Inverters (Switching Characteristics and Interconnects effects): Delay-time definitions, calculation of delay times, logical efforts, inverter design with delay constraints, estimation of interconnect parasitics, calculation of interconnect delay, Bus vs. Network-on-Chip (NoC), switching power dissipation of CMOS inverters. Combination CMOS Logic Circuits: MOS logic circuits with depletion nMOS loads, CMOS logic circuits, complex logic circuits, CMOS transmission gates (pass gates), ratioed, dynamic and pass transistor logic circuits., Sequential MOS logic circuits: Behaviour of bi-stable elements, SR latch circuits, clocked latch and flip-flop circuits, CMOS D-latch and edge-triggered flip-flop. Timing path, Setup time and hold time static, example of setup and hold time static, setup and hold slack, clock skew and jitter, Clock, reset and power distributions.

## Digital System Design

RTL-GATE level, synthesis, synthesis optimization techniques, pre-layout timing verification, static timing analysis, floor-planning, placement and routing, extraction, post layout timing verification, extraction.

Semiconductor Memories: Memory Design, SRAM, DRAM structure and implementations Recent Trends in VLSI Design & its research issues in industry: System case studies. Design automation of VLSI Systems: basic concepts. Deep Sub-micron Technologies: Some Design Issues

## VLSI Verification and Testing

Physical faults and their modeling. Fault equivalence and dominance; fault collapsing, Fault simulation: parallel, deductive and concurrent techniques; critical path tracing. Test generation for combinational circuits: Boolean difference, D-algorithm, Podem, random etc. Exhaustive, random and weighted test pattern generation; aliasing and its effect on fault coverage. PLA testing: cross-point fault model, test generation, easily testable designs. Memory testing: permanent, intermittent and pattern-sensitive faults; test generation. Delay faults and hazards; test pattern generation techniques, ATPG and its different types Test pattern generation for sequential circuits: ad-hoc and structures techniques scan path and LSSD, boundary scan Built-in self-test techniques: LBIST and MBIST. Verification: logic level (combinational and sequential circuits), RTL-level (data path and control path). Verification of embedded systems. Use of formal techniques: decision diagrams, logic-based approaches. ASIC/IP Verification, direct and random testing, Error detection and correction codes.

## Introduction to Microfabrication

History of IC's; Operation & Models for Devices of Interest: CMOS and MEMS. Electronic Materials: Crystal Structures, Defects in Crystals, Si, Poly Si, Si Crystal Growth. Clean room and Wafer Cleaning: Definition, Need of Clean Room, RCA cleaning of Si. Oxidation, Lithography: Diffusion, Pre-Deposition and Drive-in Diffusion Modeling, Dose, Ion Channeling, Multi Energy Implantation, Thin Film Deposition: Physical Vapor Deposition: Thermal evaporation, Resistive Evaporation, Electron beam evaporation, Laser ablation, Sputtering Chemical Vapor Deposition: Advantages and disadvantages of Chemical Vapor deposition (CVD) techniques over PVD techniques, reaction types, Boundaries and Flow, Different kinds of CVD techniques: APCVD, LPCVD, Metalorganic CVD (MOCVD), Plasma Enhanced CVD etc., Etching: Anisotropy, Selectivity, Wet Etching, Plasma Etching, Reactive Ion Etching. Overview of Interconnects, Contacts, Metal gate/Poly Gate, Metallization, Problems in Aluminum Metal contacts, Al spike,

Electromigration, Metal Silicides, Multi-Level Metallization, Planarization, Inter Metal Dielectric

## **Semiconductor Equipment Design and Technology**

Fundamentals of vacuum technology- nomenclature and definition, pressure regions, gas properties and laws, molecular processes and kinetic theory, gas flow calculations, technology of vacuum pumps- throughput, pumping speed, forevacuum and high vacuum pumping, pump system design, diaphragm pumps, vacuum blowers, diffusion pumps, cryogenic pumps, turbomolecular pumps, pumps for ultra-high vacuum, vacuum measurements, types of gauges, mass analysis and spectrometry, mass flow control and measurement, vacuum valves, flanges and components, vacuum feedthroughs, vacuum seals, vacuum leak detectors, vacuum chambers and viewports, outgassing, vacuum applications such as sputtering, plasma etching, CVD, epitaxy, electron spectroscopies

### **Plasma Science and Technology**

Plasma physics- Motion of individual electrons and ions in electric and magnetic fields- Single, collisionless, particles in DC and AC electric fields, Particle orbits in magnetic fields, Space charge and collective effects, Debye shielding, Plasma oscillations and plasma frequency, Plasma shielding and plasma sheaths, Response to DC, RF and microwave fields, Plasma potential, Characteristic electron and ion transit times

Introduction to Plasma Reactors- Chamber pump systems, load locks, mass flow control, hazardous gas handling, effluent control, Pressure gauges / control (Piranhi, thermocouple, ionization, baratron, convectron) Wafer chucks (Clamps/Electrostatic chucks)

RF and microwave power sources and coupling- Power sources, matching networks, feedthroughs and coupling

RF Capacitively and Inductively coupled plasmas- Spatial variations of plasma potential, electric field, charge density and energy, optical emission, Sheaths at powered, grounded and floating surfaces, parameters, models, matching networks, Ion bombardment - energy / time / frequency/ power dependencies

Applications in processes- etching, deposition, sputtering, ashing

## **Semiconductor materials synthesis and characterization**

Principles of extraction, pyrometallurgical processes, material and heat balance of processes, thermodynamics of processes; introduction to laws, thermodynamic equilibrium, thermochemistry, Ellingham diagram. Process kinetics; introduction to chemical kinetics and rate processes, heterogeneous kinetics, kinetics of liquid-liquid reactions, concepts of reactor design. Structure & properties of molten liquids.

Production of metallurgical grade (MG) Si: Carbothermic reduction, principle, operation and practice of sub-merged arc furnace, energy and process calculation, refining & impurities control in molten MG Si. Production of electronic grade (EG) Si: Concept of fluidized bed reactor, Siemens Process. Crystal Growth: Crystal growth processes (Bridgman and its variants, Czochralski), heat and species transfer during non-steady and steady state plane-front growth, interface instability and effect of convection on interface stability

XRD (Bulk and thin film), Microscopy (Optical, SEM, TEM, SPM), UV-Visible spectroscopy, Photoluminescence, Raman spectroscopy

## Semiconductor Packaging and Testing

**Overview of electronic systems packaging:** Introduction and Objectives of the course definition of a system and history of semiconductors, Products and levels of packaging, Packaging aspects of handheld products, Case studies in the application.

Semiconductor Packaging Overview: Basics of Semiconductor and Process flowchart; Video on “Sand-to-Silicon”, Wafer fabrication, inspection and testing, Wafer packaging; Packaging evolution, Chip connection choices, Wire bonding, TAB and flipchip-1, TAB and flipchip-2, Need for packaging & Single chip packages or modules (SCM), Commonly used packages and advanced packages, Materials in packages, Thermal mismatch in packages, Current trends in packaging, Multichip modules (MCM)-type, System-in- package (SIP), Packaging roadmaps, Hybrid circuits. Electrical Design considerations in systems packaging (L. Umanand): Electrical Issues – I Resistive Parasitic, Electrical Issues – II; Capacitive and Inductive Parasitic, Electrical Issues – III; Layout guidelines and the Reflection problem, Electrical Issues – IV; Interconnection, CAD for Printed Wiring Boards: Benefits from CAD; Introduction to DFM, DFR & DFT, Components of a CAD package and its highlights, Design Flow considerations; Beginning a circuit design with schematic work and component layout, Demo and examples of layout and routing;

Technology file generation from CAD; DFM checklist and design rules; Design for Reliability. Printed Wiring Board Technologies: Board-level packaging aspects, Review of CAD output files for PCB fabrication, Photo plotting, and mask generation, Process flow-chart; Vias; PWB substrates, Surface preparation, Photoresist and application methods, UV exposure and developing, Printing technologies for PWBs, PWB etching, Resist stripping, Screen-printing technology, Through-hole manufacture process steps, Panel and pattern plating methods, Solder mask for PWBs, Multilayer PWBs; Introduction to microvias, Microvia technology, and Sequential build-up technology process flow for high-density interconnects, Conventional Vs HDI technologies; Flexible circuits.

Surface Mount Technology: SMD benefits; Design issues; Introduction to soldering, Reflow, and Wave Soldering methods to attach SMDs, Solders: Wetting of solders; Flux and its properties, Defects in wave soldering, Vapor phase soldering, BGA soldering, and desoldering/ Repair, SMT failures, SMT failure library, Tin Whiskers, Tin-lead, and lead-free solders; Phase diagrams, Thermal profiles for reflow soldering, Lead-free alloys, Lead-free solder considerations; Green electronics; RoHS compliance and e-waste recycling issues.

Thermal Design considerations in systems packaging, Introduction to embedded passives: Need for embedded passives, Design Library, Embedded resistor processes, Embedded capacitors; Processes for embedding capacitors.



**Department of Multidisciplinary Engineering**  
**M. Tech in ECE**  
 (with specialization in Semiconductor Technology/IOT & 5G)  
**2024**

Amend Scheme of  
 M.Tech-ECE with  
 Specialization in  
 Semiconductor  
 Technology and IOT &  
 5G.

**M.Tech full time (2 years)**

Sem	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5	Subject 6	L	T	P	Weekly Contact Hours	Credits
I	System Design & Modeling 3-0-2(4)	Optimization Theory and Applications 3-0-2(4)	Program Elective-1 3-0-2(4)	Program Elective-2 3-0-2 (4)	ECC509 Seminar 0-0-4(2)	ECS501 Community Service	12	0	12	24	18
II	ECL532: Embedded System Design 3-0-2(4)	ECL513: Machine Learning 2-0-2(3)	Program Elective-3 3-0-2(4)	Program Elective-4 3-0-2(4)	ECD512 Minor Project 0-0-10(5)	ECS502 Community Service (140 hours = 2 credit)*	11	0	18	19	22
III	MAL616 Research Methodology 2-1-0(3)	Open Elective 2-0-2(3)	ECD605 Dissertation -I 0-0-12(6)	Program Elective-5 3-0-2(4)		ECS601 Community Service	7	1	16	12	16
IV	ECD602 Dissertation-II 0-0-24(12)					ECS602 Community Service (140 hours = 2 credit)*	0	0	24	-	14
<b>TOTAL CREDITS OF THE M.TECH DEGREE PROGRAMME = 70</b>											70

\*Students can utilize the summer/winter break period to complete the 140 Community Service hours every year



**Department of Multidisciplinary Engineering**  
**M. Tech in Electronics and Communication Engineering**  
 (with specialization in Semiconductor Technology/IOT & 5G)

**2024**

**PG Diploma with 1 year exit**

Sem	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5	Subject 6	L	T	P	Weekly Contact Hours	Credits
I	System Design & Modeling 3-0-2(4)	Optimization Theory and Applications 3-0-2(4)	Program Elective-1 3-0-2(4)	Program Elective-2 3-0-2 (4)	ECC509 Seminar 0-0-4(2)	ECS501 Community Service	12	0	12	24	18
II	ECL532: Embedded System Design 3-0-2(4)	ECL513: Machine Learning 2-0-2(3)	Program Elective-3 3-0-2(4)	Program Elective-4 3-0-2(4)	ECD512 Minor Project 0-0-10(5)	ECS502 Community Service (140 hours = 2 credit)*	11	0	18	19	22
Summer	ECV502 Skill based course (3)	ECT502 Industrial Internship (7)									10
<b>EXIT OPTION: PG DIPLOMA; CREDITS = 50</b>											50

\*Students can utilize the summer/winter break period to complete the 140 Community Service hours in a year

**Department of Multidisciplinary Engineering**  
**M. Tech in ECE**  
**(with specialization in Semiconductor Technology/IOT & 5G)**  
**2024**

<b>Program Electives</b>			
	<b>TRACK I: Semiconductor Technology</b>	<b>TRACK II: IOT &amp; 5G</b>	
<b>PE-1</b>	Micro & Nano Fabrication	Advanced Wireless & Mobile Communication	
<b>PE-2</b>	Semiconductor Equipment & Technology	Advanced Microcontroller & Sensors	
<b>PE-3</b>	Semiconductor Material Synthesis & Characterization	IoT: Architecture & Protocols	
<b>PE-4</b>	Semiconductor Packaging and Testing	Design for IOT	
<b>PE-5</b>	ASIC's & FPGA	5G: Technologies, Architecture and Protocols	
<p><b>Other Program Electives Available</b> (For award of specialization in Semiconductor Technology/IOT &amp; 5G, it is mandatory to complete any four PE from the list of courses as mentioned above under respective tracks)</p>			
ECL528 Analog VLSI Design	ECL527 Digital System Design with Verilog HDL	ECL505 Adv. Digital Communication	Edge And Fog Computing
ECL523 Digital VLSI Design	ECL529 Linux & Scripting	ECL540 Real Time Systems and Software	Network and Security in IoT
ECL633 Mixed Signal Design	VLSI Design Verification & Testing	ECL578 Broadband Communication	Industrial IoT for Smart Cities
ECL524 Low Power VLSI Design	MEMS & NEMS	ECL601 Cloud Computing	IoT Design for Connected Health Care
ECL538 Hardware Software CoDesign	Special Topics in Semiconductor Technologies and Applications	ECL659 Global Navigation Satellite Systems and Applications	Special Topics in IOT & 5G

# Annexure#3: BoS Constitution/Data Approval

NCU/FRM/L1/ACAD/001

	<b>Constitution of Board of Studies (BoS)</b> Department of Applied Sciences	Date 20/04/2024
From: Department of Applied Sciences		To: Hon'ble Vice-Chancellor CC: To all BOS member

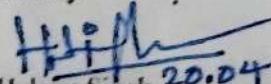
## Constitution of Board of Studies (BoS) Meeting

The constitution of the Board of Studies of the School/Department is proposed as follows:

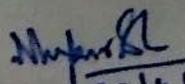
BoS Panel Members		
S. No	Name	Role
1.	Prof. Hukum Singh	Head, Department of Applied Sciences
2.	Dr. Anshu Malhotra	Assistant Professor, Member APS
3.	Prof. Anurag Sharma	External Subject Expert (Physics), Ex Professor, IIT Delhi
4.	Prof. Kehar Singh	External Subject Expert (Physics), Ex Professor, IIT Delhi
5.	Prof. Sangita Kansal	External Subject Expert (Maths), Professor, Delhi Technology University, Delhi
6.	Prof. Shalini Arora	External Subject Expert (Maths), Professor, Indira Gandhi Technical University for Women, Delhi
7.	Prof. I. K. Varma	External Subject Expert (Chemistry), Professor, IIT Delhi (Retd)
8.	Dr. Bharti Arora	Assistant Professor, Member APS
9.	Dr. Seema Thakran	Assistant Professor, Member APS
10.	Dr Chetna Tyagi	Assistant Professor, Member Secretary APS

The BoS will have a tenure of **Two Years** from the date of issue.

Proposed by:

  
Prof. Hukum Singh  
HoD- Applied Sciences  
20.04.2024

Approved by:

  
Hon'ble, VC- NCU  
22/4/2024



INTER OFFICE MEMO

Review Date:

Sheet 1 of 1

From: Member Secretary, BOS

To: Members of the board of studies  
 Cc: Hon'ble GB.VC, All DOSs/HODs  
 Dy. Dean(Academics), Registrar

Date: 23<sup>rd</sup> April, 2024

Minutes of the Meeting of Board of Studies of the Department of Applied Sciences held on 23/04/2024

A meeting of Board of Studies of the Department of Applied Sciences was held on 23/04/24 at 11:30 am in Room No 26A to revise the syllabus of Engineering Mathematics I (MAL151), Engineering Mathematics II(MAL152), Mathematical Reasoning and Aptitude (MAL252) and proposing Engineering Mathematics III(MAL154).

The following members were present:

- Prof. Hukum Singh, HOD (APS)
- Prof. Prabha Sharma (External)
- Dr. Rajni Rohila
- Dr. Pooja Punyani
- Dr. Anshu Malhotra
- Dr. Seema Thakran
- Dr. Chetna Tyagi

The Minutes of the meeting are as follows:

*Rajni*  
 23/4/24

Dr. Rajni Rohila welcomed all the members and presented the old course content of the courses to be revised.

She urged them to give suggestions to revise the course content of Engineering Mathematics I (MAL151), Engineering Mathematics II(MAL152) , and Mathematical Reasoning and Aptitude (MAL252). She also gave a brief description of requirements of B. Tech CSE to propose Engineering Mathematics III(MAL154). She presented the suggestions given by faculty members teaching Engineering Mathematics . She requested the members to given their inputs with a view of comprehensive revision of the content.

Issued by:	Approved by:
Date:	Date:

*Prabha Sharma*  
 23.4.24

*H. Singh*  
 23/4/2024

*Pooja*  
 23/4/2024

*Anshu*  
 23/4/24

*Seema Thakran*  
 23/4/24

Following points were highlighted in revision of Engineering Mathematics I:

1. Syllabus of Engineering Mathematics I has been revised on the basis of requirements of B. Tech computer Science Scheme.
2. A unit 0: Differentiation and Integration is added to Engineering Mathematics I. In this unit following topics has been added: Formulae for differentiation and integration, Integration by using partial fraction, integration by substitution, integration by parts, integration with trigonometric identities, integration of some particular functions, Some properties of definite integrals.
3. Topics: Diagonalization of matrices and Similar matrices in Unit I have been replaced with Diagonalization of symmetric matrices.
4. Topics: Dirichlet's integral, Application in finding centre of gravity and moment of inertia are removed from Unit III according to the requirement of B.Tech (CSE).

Following points were highlighted in revision of Engineering Mathematics II:

5. On the basis of requirement of scheme of B Tech CSE, following topics may be removed from Unit I: Applications of differential equations of first order & first degree to simple electric circuits, Newton's law of cooling, heat flow, Simultaneous linear equations with constant co-efficient, Applications of linear differential equations to simple pendulum, oscillatory electric circuits.
6. On the basis of requirements of B. Tech(CSE), Laplace transform has been replaced with Sequence and Series. Content : Sequences, Convergence, divergence and oscillation of sequences series, Convergence, divergence and oscillation of series, geometric series, comparison test, integral test ratio test, Rabe's test, Logarithmic test, Cauchy's test, alternating series is added.
7. From Unit III, topics Fourier expansion of odd and even functions, Fourier expansion of square wave, Rectangular wave, Saw-toothed wave, Fourier integrals, Fourier transform of Dirac-delta function are removed and Discrete Fourier transform is added to Unit III.

Following points were highlighted in proposing Engineering Mathematics III:

8. The CSE department wants their B. Tech students to go through basics of probability and statistics and optimization methods. We have therefore proposed a third course (MAL154-Engineering Mathematics III) to meet these requirements. Topics taught in Discrete mathematics have all been included in the new course being proposed( MAL154-Engineering Mathematics III). It is therefore suggested that this course should replace the course Discrete Mathematics (CSL223).

Following points were highlighted in revision of Mathematical Reasoning and Aptitude (MAL252):

9. Since the Aptitude test taken by the B. Tech students covers logic and data interpretation, therefore these two topics have been added to the course Mathematical reasoning and Aptitude(MAL252).

Issued by:	Approved by:
Date:	Date:

Prabha Shrivastava  
23/4/24

Prabha Shrivastava  
23.4.24

Pooja  
23/4/2024

Anshu  
23/4/24

Seema Thakran  
23/4/24

All the suggestions have been incorporated and and revised templates are attached.

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

*Chetna*  
23/4/24

Dr. Chetna Tyagi (Member Secretary-BOS)

Encl:

Annexure I:

Revised course Templates of Engineering Mathematics I (MAL151), Engineering Mathematics II(MAL152) , and Mathematical Reasoning and Aptitude (MAL252).

Annexure II:

Course Template of Engineering Mathematics III(MAL154)

Prabha Sharma  
23.4.24  
*Prabha*  
23/4/2024

*Raj*  
23/4/2024

*Raj*  
23/4/24  
Anshu  
23/4/24  
*Seema Thakran*  
23/4/24

Issued by:	Approved by:
Date:	Date:

# Department of Applied Sciences

Board of Studies (BOS)

## Attendance Sheet

S. No.	Name	Signature
1	Prof. Prabha Sharma	Prabha Sharma 23/4/24
2	Prof. Hukum Singh	Hukum Singh 23/4/24
3	Dr. Rajni Rohila	Rajni Rohila 23/4/24
4	Dr. Seema Thakran	Seema Thakran 23/4/24
5	Dr. Pooja Punyani	Pooja Punyani 23/4/24
6	Dr. Anshu Malhotra	Anshu Malhotra 23/4/24

Issued by:

Approved by:

Date:

Date:



## **THE XXXIV MEETING    ACADEMIC COUNCIL**

**May 15, 2024**

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Prof. Hukum Singh  
Department of APS



## Mathematics courses

- Following Courses have been revised:
- MAL151-Engineering Mathematics-I
- MAL152-Engineering Mathematics-II
- MAL252-Mathematical Reasoning and Aptitude.
- Following course has been proposed:
- MAL154- Engineering Mathematics III

The courses have been revised for the following reasons

- 1) To update content of mathematics to meet the requirements of topics which are required in B. Tech(CSE).
- 2) To add basic topics like differentiation and integration on the basis of feedback taken from the students.
- 3) To enhance reasoning and aptitude skills for job placements.

# MAL152-Engineering Mathematics-I

Topics deleted	Topics added
<p>Unit 1: diagonalization of symmetric matrices</p> <p>Unit 3: Dirichlet's integral, Application in finding centre of gravity and moment of inertia</p> <p>Old Course Template:</p> <p><a href="https://docs.google.com/document/d/1h9g3_dvT2EVy_gOhZ30VmqQhNB07_z-B/edit?usp=drive_link&amp;oid=118341093498293780164&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1h9g3_dvT2EVy_gOhZ30VmqQhNB07_z-B/edit?usp=drive_link&amp;oid=118341093498293780164&amp;rtpof=true&amp;sd=true</a></p>	<p>Unit 0: Differentiation and Integration is added to Engineering Mathematics I. In this unit following topics has been added: Formulae for differentiation and integration, Integration by using partial fraction, integration by substitution, integration by parts, integration with trigonometric identities, integration of some particular functions, Some properties of definite integrals.</p> <p>Unit 1: Diagonalization of matrices and Similar matrices.</p> <p>New Course Template:</p> <p><a href="https://docs.google.com/document/d/1mlbChk_g43_zaq7Zxr6icjiA8WV9pE_T/edit?usp=drive_link&amp;oid=118341093498293780164&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1mlbChk_g43_zaq7Zxr6icjiA8WV9pE_T/edit?usp=drive_link&amp;oid=118341093498293780164&amp;rtpof=true&amp;sd=true</a></p>

# MAL151-Engineering Mathematics-II

Topics deleted	Topics added
<p><b>Unit 1: Applications of differential equations of first order &amp; first degree to simple electric circuits, Newton's law of cooling, heat flow, Simultaneous linear equations with constant co-efficient, Applications of linear differential equations to simple pendulum, oscillatory electric circuits.</b></p> <p><b>Unit 2: Laplace transforms of elementary functions, Properties of Laplace transforms, Existence conditions. Transforms of derivatives, Transforms of integrals, Multiplication by t, Division by t. Evaluation of integrals by Laplace transforms. Laplace transform of unit step function, Unit impulse function and periodic function, Inverse transforms, Convolution theorem, Application to linear differential equations and simultaneous linear differential equations with constant coefficients and applications to integral equations.</b></p> <p><b>Unit 3: Fourier expansion of odd and even functions, Fourier expansion of square wave, Rectangular wave, Saw-toothed wave, Fourier integrals Fourier transform of Dirac-delta function.</b></p> <p><b>Old course Template:</b></p> <p><a href="https://docs.google.com/document/d/1t45KF7osjn86XpilO1hJv_IAE8DN4QK/edit?usp=drive_link&amp;oid=118341093498293780164&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1t45KF7osjn86XpilO1hJv_IAE8DN4QK/edit?usp=drive_link&amp;oid=118341093498293780164&amp;rtpof=true&amp;sd=true</a></p>	<p><b>Unit 2: Sequences, Convergence, divergence and oscillation of sequences series, Convergence, divergence and oscillation of series, geometric series, comparison test, integral test ratio test, Rabe'e's test, Logarithmic test, Cauchy's test, alternating series is added.</b></p> <p><b>Unit 3: Discrete Fourier Transform</b></p> <p><b>New course Template :</b></p> <p><a href="https://docs.google.com/document/d/14mJOzIFTxUokHtQpGi7Dq37VNpnUQ62t/edit?usp=drive_link&amp;oid=118341093498293780164&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/14mJOzIFTxUokHtQpGi7Dq37VNpnUQ62t/edit?usp=drive_link&amp;oid=118341093498293780164&amp;rtpof=true&amp;sd=true</a></p>

# MAL252- MAL252-Mathematical Reasoning and Aptitude



Topics deleted	Topics added
<p>Nil</p> <p>Old course template:</p> <p><a href="https://docs.google.com/document/d/1dYnslEjs9-g63tRu7q5nh8kJSaESnFaP/edit?usp=drive_link&amp;oid=118341093498293780164&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1dYnslEjs9-g63tRu7q5nh8kJSaESnFaP/edit?usp=drive_link&amp;oid=118341093498293780164&amp;rtpof=true&amp;sd=true</a></p>	<p>Methods of Proof: by contradiction, by deduction, Existence proofs Logic, Data interpretation</p> <p>New course template:</p> <p><a href="https://docs.google.com/document/d/11zmKhN-Rx_s_3QI-yZRyTjOa0LFfeAP/edit?usp=drive_link&amp;oid=118341093498293780164&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/11zmKhN-Rx_s_3QI-yZRyTjOa0LFfeAP/edit?usp=drive_link&amp;oid=118341093498293780164&amp;rtpof=true&amp;sd=true</a></p>

# MAL154-Engineering Mathematics-III

- **The CSE department wants their B. Tech students to go through basics of probability and statistics and optimization methods. We have therefore proposed a third course (MAL154-Engineering Mathematics III)**
- **to meet these requirements. Topics taught in Discrete mathematics have all been included in the new course being proposed( MAL154-Engineering Mathematics III). It is therefore suggested that this course should replace the course Discrete Mathematics (CSL223).**
- **Proposed course template:**  
[https://docs.google.com/document/d/1qjZNIHoVNI3YucAzE2y9CvtuPfEmdU-s/edit?usp=drive\\_link&oid=118341093498293780164&rtpof=true&sd=true](https://docs.google.com/document/d/1qjZNIHoVNI3YucAzE2y9CvtuPfEmdU-s/edit?usp=drive_link&oid=118341093498293780164&rtpof=true&sd=true)



**Thank You**



<b>Unit: 0</b>	<b>Differentiation and integration</b>	<b>Hours: 3</b>
Formulae for derivatives and antiderivatives, Integration by substitution, Integration using by partial fraction, Integration by parts, Integration with trigonometric identities, Integrals of some particular functions, Some properties of definite Integrals		
<b>Unit: 1</b>	<b>Matrices</b>	<b>Hours: 11</b>
Rank of a matrix, elementary transformations, elementary matrices, inverse using elementary transformations, normal form of a matrix, linear dependence and independence of vectors, consistency of linear system of equations, Orthogonal, Symmetric, skew symmetric, Hermitian Matrices, skew Hermitian Matrices, Normal and unitary Matrices and their properties, eigenvalues and eigenvectors, properties of eigenvalues, Cayley - Hamilton theorem and its applications, Diagonalization of symmetric matrices		
<b>Unit: 2</b>	<b>Differential Calculus and Partial Differentiation</b>	<b>Hours: 11</b>
Taylor's and Maclaurin's series, Functions of two or more variables, limit and continuity, partial derivatives, total differential and differentiability, derivatives of composite and implicit functions, Jacobians, higher order partial derivatives, homogeneous functions, Euler's Theorem and applications, Taylor's series for functions of two variables (without proof), maxima-minima of function of two variables, Lagrange's method of undetermined multipliers, differentiation under integral sign (Leibnitz rule).		
<b>Unit: 3</b>	<b>Calculus and its Application</b>	<b>Hours: 10</b>
Double integral, change of order of integration, double integral in polar coordinates, applications of double integral to find area enclosed by plane curves, triple integral, change of variables, volume of solids		
<b>Unit: 4</b>	<b>Vector Calculus</b>	<b>Hours: 10</b>
Differentiation of vectors, scalar and vector point functions. Gradient of a scalar field and directional derivative, divergence and curl of a vector field and their physical interpretations. Integration of vectors, line integral, surface integral, volume integral, Green's, Stoke's and Gauss's theorems (without proof) and their applications.		
<b>14. Brief Description of Self-learning component by students (through books/resource material etc.):</b>		
<b>Topics:</b> Types of matrices and their properties, Application of partial derivatives and maxima-minima, Real life problems based on Integrations, Proof of Green's, Stoke's and Gauss's theorem.		
<b>15. Books Recommended:</b>		
<b>Text Books:</b>		
1. E. Kreyszig , "Advanced Engineering Mathematics", John Wiley & Sons, 10 <sup>th</sup> edition, 2015.		
2. G. B. Thomas, R. L. Finney, "Calculus and Analytic Geometry", Pearson Education, Asia, 9 <sup>th</sup> edition, 2002.		
3. B. S. Grewal, "Higher Engineering Mathematics", Khanna Publications, 43 <sup>rd</sup> edition, 2010.		
4. Shanti Narayan, "A Textbook of Matrices", S. Chand Limited, 2010.		
<b>Reference Books:</b>		
1. Michael D. Greenberg, "Advanced Engineering Mathematics", Pearson Education, Asia, 2 <sup>nd</sup> edition, 2002.		
2. Piskunov, "Differential and Integral Calculus Volume 1 &2", CBS, 1 <sup>st</sup> edition, 1999.		
3. B. V. Ramana, "Higher Engineering Mathematics" Tata McGraw-Hill Limited, Delhi, 2007.		
4. Jain and Iyenger, "Advanced Engineering Mathematics", Narosa Publications, 5 <sup>th</sup> edition, 2010.		

Reference websites: <https://nculms.ncuindia.edu>

**Evaluation Scheme:**

Theory + Practical (L-T-P/L-0-P)	Minor Test	25%	Must Secure 30% Marks Out of Combined Marks of Major Test Plus Minor Test with Overall 40% Marks in Total.
	Major Test	45%	
	Continuous Evaluation Through Class Tests/Practice/Assignments/Presentation/Quiz	20%	
	Online Quiz	10%	
	Lab Work	Considered in class evaluation	

**List of Tutorials for Engineering Mathematics-I:**

S.No.	Tutorial Sheet	Topics	CO's	Time (During Lab Hours)
1	Tutorial Sheet 1	Differentiation and Integration		1 hr
2	Tutorial Sheet 2	Rank of matrices	CO1	1 hr
3	Tutorial Sheet 3	System of Equations	CO1	1 hr
4	Tutorial Sheet 4	Eigenvalues and Eigenvectors	CO1	1 hr
5	Tutorial Sheet 5	Leibnitz theorem , Taylor's and Maclaurin's theorem	CO2	1 hr
6	Tutorial Sheet 6	Partial Derivatives, Euler's Theorem	CO2	1 hr
7	Tutorial Sheet 7	Jacobian, Maxima and minima	CO2	1 hr
8	Tutorial Sheet 8	Double and triple integral, Change of Order	CO3	1 hr
9	Tutorial Sheet 9	Area and Volume	CO3	1 hr
10	Tutorial Sheet 10	Gradient, Divergence and Curl	CO4	1 hr

11	Tutorial 11	Green's , Gauss's and Stokes Theorem	CO4	1 hr
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**List of Practicals for Engineering Mathematics-I:**

S.No.	Experiment	CO's	Time
1	How to enter a matrix, Algebra of matrices: addition, subtraction and different ways of matrix multiplication, determinant, inverse, row and column operations, Echelon form, rank of a matrix.	CO1	1 hr
2	Solution of system of linear equations: Gauss Jordan and Gauss elimination method, How to find out eigenvalues and eigenvectors of a matrix.	CO1	1hr
3	Encryption and decryption of images using matrices.	CO1	1hr
4	For the function of two variables (a) Find the first and second order partial derivatives of two variables and plot the graphs. (b) Find the optimum value under a given constraint.	CO2	1 hr
5	(a) To implement a simple sentiment model where change in sentiment over time is proportional to the difference between the current sentiment and a baseline sentiment level. (b) To implement a simple cyber security model where the growth of a cyber security threat $T$ over time $t$ is proportional to the current threat level.	CO2	1 hr
6	How to perform curve plotting for Cartesian, parametric and polar curves such as cardioids, Lemniscates and surfaces.	CO3	1hr

7	How to perform curve plotting for Cartesian, parametric and polar curves such as cardioids, Lemniscates and surfaces.	CO3	1hr
8	To calculate and visualize gradients, divergences, and curls of vector fields in 2D and 3D.	CO4	1hr
9	To find unit tangent and unit normal of parametric curves and directional derivatives at a point.	CO4	1hr
10.	To perform surface and volume integration and verify Green's theorem and Stokes' theorem.	CO4	1hr



## COURSE TEMPLATE

<b>1. Department:</b>	Department of Applied Sciences (APS)		
<b>2. Course Name: Engineering Mathematics II</b>	<b>3. Course Code</b>	<b>4. L-T-P</b>	<b>5. Credits</b>
	MAL 152	3-0-2	4
<b>6. Type of Course (Check one):</b>	Programme Core <input checked="" type="checkbox"/>	Programme Elective <input type="checkbox"/>	Open Elective <input type="checkbox"/>
<b>7. Frequency of offering (check one):</b>	Odd <input type="checkbox"/>	Even <input checked="" type="checkbox"/>	Either semester <input type="checkbox"/> Every semester <input type="checkbox"/>
<b>8. Brief Syllabus:</b> Ordinary differential equations of first order and first degree, Application of first order and first degree, Linear differential equation of higher order, variation of parameters, Cauchy's, Legendre's Equations, Sequences and series, Oscillatory, convergent and divergent series, Fourier series, Conditions for a Fourier expansion, Fourier expansion of odd and even functions, Discrete fourier transform, Fourier transforms of derivatives and integrals, Convolution theorem, Formation of partial differential equations, Linear and non-linear partial differential equations, Charpit's method. Method of separation of variables.			
<b>9. Total lecture and Practical Hours for this course</b> 75hrs			
<b>10. Course Outcomes (COs)</b> Possible usefulness of this course after its completion i.e. how this course will be practically useful to him once it is completed			
<b>CO 1</b>	Solve 1st order and higher order linear differential equations and their applications to scientific and engineering problems, e.g., LCR circuits, Heat flow, Simple pendulum etc.		
<b>CO 2</b>	Understand the concept of sequences and series and apply to check convergence and divergence		
<b>CO 3</b>	Determine Fourier series expansions of periodic functions including various waveforms and apply Fourier analysis to diverse problems in Physics, Engineering, Financial Mathematics and in other mathematical contexts.		
<b>CO 4</b>	Demonstrate capacity to model physical phenomena using PDE's (in particular using the heat and wave equations) and apply various methods to solve them.		
<b>11. UNIT WISE DETAILS Number of Units: 4</b>			
<b>Unit: 1 Ordinary Differential Equations and Applications</b>			<b>Hours: 14</b>
Exact differential equations, Equations reducible to exact differential equations. Orthogonal trajectories. Linear differential equations of second and higher order. Complete solution, Complementary function and particular integral. Method of variation of parameters to find particular integral, Cauchy's and Legendre's linear equations.			

<b>Unit: 2 Sequences and Series</b>	<b>Hours: 11</b>
Sequences, Convergence, divergence and oscillation of sequences, series, Convergence, divergence and oscillation of series, geometric series, comparison tests, integral test, Ratio test, Rabe's test, logarithmic test, Cauchy's root test, Alternating series.	
<b>Unit: 3 Fourier Series and Fourier Transforms</b>	<b>Hours: 11</b>
Euler's formulae, Conditions for a Fourier expansion. Change of interval, Half and Full rectified wave, Half range sine and cosine series. Fourier transforms, Shifting theorem (both on time and frequency axes), Fourier transforms of derivatives, Fourier transforms of integrals. Convolution theorem, Discrete Fourier transform	
<b>Unit: 4 Partial Differential Equations and Its Applications</b>	<b>Hours: 9</b>
Formation of partial differential equations (PDE). Lagrange's linear partial differential equation, First order non-linear partial differential equation, Charpit's method. Method of separation of variables.	
<b>12. Brief description of self-learning components by students (through books/resource material etc.): Differential equation and its applications, Applications of Laplace transform and inverse Laplace transform, Real life problems based on partial differential equations (For example: Heat equation, Wave equation and Laplace equation).</b>	
<b>13. Books Recommended:</b>	
<b>Text Books:</b>	
1. B. S. Grewal, "Higher Engineering Mathematics", Khanna Publications, 43 <sup>rd</sup> edition, 2010.	
<b>Reference Books:</b>	
1. Michael D. Greenberg, "Advanced Engineering Mathematics", Pearson Education, Asia, 2 <sup>nd</sup> edition, 2002.	
2. Piskunov, "Differential and Integral Calculus Volume 1 & 2", CBS, 1 <sup>st</sup> edition, 1999.	
3. B. V. Ramana, "Higher Engineering Mathematics" Tata McGraw-Hill Limited, 2018.	
4. Jain and Iyenger, "Advanced Engineering Mathematics", Narosa Publications, 5 <sup>th</sup> edition, 2010.	
5. E. Kreyszig, "Advanced Engineering Mathematics", John Wiley & Sons, 10 <sup>th</sup> edition, 2015.	
6. G. B. Thomas, R. L. Finney, "Calculus and Analytic Geometry", Pearson Education, Asia, 9 <sup>th</sup> edition, 2002.	
7. Shanti Narayan, "A Text Book of Matrices", S. Chand Limited, 2010.	
<b>Reference websites: Canvas</b>	

**Evaluation Scheme:**

Theory + Practical (L-T-P/L-O-P)	Minor Test	25%	Must Secure 30% Marks Out of Combined Marks of Major Test Plus Minor Test with
	Major Test	45%	
	Continuous Evaluation Through Class Tests/Practice/Assignments/Presentation/Quiz	20%	

	Online Quiz	10%	Overall 40% Marks in Total.
	Lab Work	Considered in class evaluation	

### List of Tutorials for Engineering Mathematics-II:

S.No.	Tutorial	Topics	CO's	Time (During Lab Hour)
1	Tutorial Sheet 1	Exact/ Non exact Differential Equation	CO1	1 hr
2	Tutorial Sheet 2	Orthogonal Trajectory, Cauchy and Legendre Equation	CO1	1hr
3	Tutorial Sheet 3	Linear equations with constant Coefficients, Method of Variation of Parameter	CO1	1hr
4	Tutorial Sheet 4	Comparison tests, integral test, Ratio test, Rabe's test,	CO2	1 hr
5	Tutorial Sheet 5	Logarithmic test, Cauchy's root test, Alternating series	CO2	1 hr
6	Tutorial Sheet 6	Fourier Series	CO3	1hr
7	Tutorial Sheet 7	Fourier Transform	CO3	1hr
8	Tutorial Sheet 8	Partial Differential Equations	CO4	1hr

### List of Practicals for Engineering Mathematics-II:

S.No.	Experiment	CO's	Time
1	<p><b>(a):</b> To find the solution of first order differential equation and plotting of graph of solution.</p> <p>For example</p> <p>1. <math>\frac{dy}{dt} + 4y(t) = e^{-t}</math></p>	CO1	1 hr

	<p>2. <math>\frac{dy}{dx} = \frac{x^2 - y^2}{xy}</math></p> <p><b>(b):</b> To find the solution of differential equation of order two or three and plot it.</p> <p>For example</p> <p>1. <math>\frac{d^2y}{dx^2} = \cos(2x) - y</math></p> <p>2. <math>\frac{d^3y}{dx^3} - 4y = (e^x + 1)^2</math></p>		
2	To demonstrate use of Differential Equations in Data compression, error analysis, forecasting etc.	CO1	1hr
3	How to input sequences and series and to find the sum of series such as Arithmetic, Geometric and Harmonic.	CO2	1hr
4	To compute Taylor and Maclaurin series expansions for fundamental functions such as sine, cosine, exponential functions, logarithmic functions etc.	CO2	1 hr
5	To find the radioactive decay, compound interest using series.	CO2	1 hr
6	<p>Fourier Series To find Fourier series and Fourier coefficients of basic functions and plot the graph.</p> <p>1. Sin x</p> <p>2. Cos x</p> <p>3. <math>x - x^2</math></p> <p>4. <math>\pi - x</math></p>	CO3	1hr
7	<p>To find Fourier Transform and Inverse Fourier transform of basic functions and plot the graph.</p> <p>1. Sin x</p> <p>2. <math>e^{-2x^2} \cos x</math></p>	CO3	1hr

	<p>3. <math> x </math>  4. <math>\pi - x</math></p>		
8	To implement image encryption and decryption using Fourier transform and Inverse Fourier transform.	CO3	1hr
9	To compute Fourier series coefficients of the signal and Fourier transform, to compute frequency content of the signal. Further, plot the Fourier series coefficients and the Fourier transform as an application to feature extraction from the synthetic time series signal.	CO3	1hr
10.	<p>Solve the following partial differential equation and plot the solution matrix.</p> $\frac{\partial u}{\partial t} = \frac{\partial^2 u}{\partial x^2}, u(x,0)=0, u(0,t)=0 \text{ and } u(1,t)=1$ <p>(b): Solve the following partial differential equation and plot the solution matrix</p> $\pi^2 \frac{\partial u}{\partial t} = \frac{\partial^2 u}{\partial x^2}, u(x,0)=\sin(\pi x), u(0,t)=0 \text{ and } u(1,t)=\pi e^{-t} + \frac{\partial u}{\partial x} = 0$	CO4	1hr

ExtraVideo: How a differential equation becomes a robot.

<https://in.mathworks.com/videos/how-a-differential-equation-becomes-a-robot-expanding-the-power-of-matlab-with-simulink-and-the-symbolic-math-toolbox-overview-81896.html>



## COURSE TEMPLATE

1. Department:	Department of Applied Sciences		
2. Course: Mathematical Reasoning and Aptitude	3. Course Code	4. L-T- P	5. Credits
	MAL252	3-0-0	3
6. Type of Course (Check one):	Programme Core <input checked="" type="checkbox"/>	Programme Elective <input type="checkbox"/>	Open Elective <input type="checkbox"/>
7. Pre-requisite(s), if any (Mention Course code and name) No			
8. Frequency of offering (check one): Odd <input type="checkbox"/> Even <input type="checkbox"/> Every semester <input checked="" type="checkbox"/>			
9. Focus: Employability <input checked="" type="checkbox"/> Entrepreneurship <input checked="" type="checkbox"/> Skill Development <input type="checkbox"/> Basic Knowledge <input checked="" type="checkbox"/>			
10. Brief Syllabus: Principle of counting, Permutation and Combination, Methods of Proof, H.C.F and L.C.M., Problems on Numbers, Algorithms, Percentage, Profit and Loss, Ratio and proportions, Time and Work, Time and Distance, Simple and Compound Interest, Volume and Area, Stocks and Shares, Heights and Distance, Coding, Probability, Logic, Data interpretation			
Total lecture, Tutorial and Practical Hours for this course (Take 15 teaching weeks per semester)			
Lectures: 45 hours	Tutorials: 15 hours	Practicals: 0 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. On successful completion of this course students will be able:			
CO 1	To understand the concepts of mathematical reasoning, alphabets and series		
CO 2	To develop understanding of profit , loss, ratio and proportions, clocks and calendar		
CO 3	To apply the knowledge of time, work, distance and area and volume etc		
CO 4	To develop mathematical reasoning by different techniques of probability, coding and chain rule		
CO 5	To develop reasoning via data interpretation and chain rule		
12. UNIT WISE DETAILS		Number of Units: 5	
Unit Number: 1	Title: Principles of counting and methods of proofs	Hours: 12	
Content Summary: Principle of counting, Use of Venn diagrams, Permutation and Combination, Logarithms, Methods of Proof: by contradiction, by deduction, Existence proofs, H.C.F and L.C.M., Problems on Numbers, Alphabets, Sequences, AP, GP, HP series			
Unit Number: 2	Title: Profit, Loss , Ratio and Proportions		
Hours: 10			
Content Summary: Profit and Loss, Ratio and proportions, Percentage, Clocks and Calendar			
Unit Number: 3	Title: Mathematical Reasoning I	Hours: 8	

<b>Content Summary:</b> Time and Work, Time and Distance, Simple and Compound Interest, Volume and Area, Train Problems, Boat Problems, Problems on Water and Mirror Image.		
<b>Unit Number: 4</b>	<b>Title: Mathematical Reasoning II</b>	<b>Hours: 7</b>
<b>Content Summary:</b> Stocks and Shares, Heights and Distance, Coding, Decoding, Directions		
<b>Unit Number: 5</b>	<b>Title: Logic and data interpretation</b>	<b>Hours:8</b>
<b>Content Summary:</b> Probability, Logic, Data interpretation, Pie charts, Tabulation, Bar Graphs, Line graphs, Data Sufficiency and Data Analysis, Blood relations		
13. Title of Lab Manual, if applicable: NA		
14. Books Recommended : Text Books		
<ul style="list-style-type: none"> <li>• A New Approach to Reasoning Verbal, Non-Verbal &amp; Analytical by B. S. Sijwali and InduSijwali, Kindle Edition, 2020.</li> <li>• Quantitative Aptitude for Competitive Examinations by R. S. Aggarawal, S. Chand Publishing, Revised edition, 2017.</li> <li>• Fast Track Objective Arithmetic by Rajesh Verma, Arihant Publications, Fourth edition, 2018.</li> </ul>		
Reference Books		
<ul style="list-style-type: none"> <li>• Quantitative Aptitude for All Competitive Examinations by Abhijit Guha, McGraw Hill Education, Sixth edition, 2016.</li> </ul>		
15. E-Learning Resources: <a href="https://nculms.ncuindia.edu">https://nculms.ncuindia.edu</a> , e-books		

**Evaluation Scheme:**

<b>TYPE OF COURSE</b>	<b>PARTICULAR</b>	<b>ALLOTTED RANGE OF MARKS</b>	<b>PASS CRITERIA</b>
<b>Theory (L-T-0/L-0-0)</b>	<b>Minor Test</b>	<b>25%</b>	<b>Must Secure 30% Marks Out of Combined Marks of Major Test Plus Minor Test with Overall 40% Marks in Total.</b>
	<b>Major Test</b>	<b>45%</b>	
	<b>Continuous Evaluation Through Class Tests / Practice / Assignments / Presentation / Quiz</b>	<b>20%</b>	
	<b>Online Quiz</b>	<b>10%</b>	



## COURSE TEMPLATE

<b>1. Department:</b>	Department of Applied Sciences		
<b>2. Course Name:</b> Engineering Mathematics III	<b>3. Course Code</b>	<b>4. L-T-P</b>	<b>5. Credits</b>
		3-0-0	3
<b>6. Type of Course (Check one):</b>	Programme Core <input checked="" type="checkbox"/>	Programme Elective <input type="checkbox"/>	Open Elective <input type="checkbox"/>
<b>7. Pre-requisite(s), if any:</b> None			
<b>8. Frequency of offering (check one):</b> Odd <input checked="" type="checkbox"/> Even <input type="checkbox"/> Either semester <input type="checkbox"/> Every semester <input type="checkbox"/>			
<b>9. Brief Syllabus:</b>			
This course covers widely applicable mathematical tools for computer science, including topics from logic, set theory, combinatorics, Algebraic Structures and graph theory. Numerical Methods. Probability and Distributions.			
<b>Total lecture, Tutorial and Practical Hours for this course (Take 15 teaching weeks per semester): 45</b>			
<b>Lectures: 45 Hours</b>			
<b>10. Course Outcomes (Cos)</b>			
Possible usefulness of this course after its completion i.e. how this course will be practically useful to him once it is completed.			
<b>CO 1</b>	<b>Apply</b> the operations of sets and use Venn diagrams to solve applied problems; solve problems using the principle of inclusion-exclusion		
<b>CO 2</b>	<b>Identify</b> and <b>implement</b> the base step and the recursive or inductive step in applied problems and give a recursive and a non-recursive definition for an iterative algorithm.		
<b>CO 3</b>	<b>Identify</b> and <b>Interpret</b> tree traversals using preorder, in order, and post order traversals and apply these traversals to application problems; use binary search trees or decision trees to solve problems.		
<b>CO4</b>	To <b>Understand</b> the concept of optimization methods and <b>Apply</b> to solve problems		
<b>CO5</b>	To make the students to <b>Understand</b> the concepts of probability and distributions so that they can apply it in relevant areas		
<b>11. UNIT WISE DETAILS</b>			<b>No. of Units: 5</b>
<b>Unit Number: 1</b>	<b>Title: Set Theory</b>	<b>No. of hours: 10</b>	

<b>Content Summary:</b> Introduction to set theory, Set operations, Algebra of sets, Duality, Finite and Infinite sets, Classes of sets, Power Sets, Multi sets, Cartesian Product, Partial ordering relations and lattices, Algebraic Structures Definition and examples of a monoid, Semigroup, Groups, abelian group and rings, Subgroups and Normal subgroups, Cyclic groups.		
<b>Self study topics:</b> Representation of relations, Types of relation, Equivalence relations and partitions, Function and its types, Composition of function and relations,		
<b>Unit Number: 2</b>	<b>Title: Recursion and Recurrence Relation</b>	<b>No. of hours : 6</b>
<b>Content Summary:</b> Linear recurrence relation with constant coefficients, Solutions of homogeneous and nonhomogeneous systems using generating functions		
<b>Unit Number: 3</b>	<b>Title: Graphs and Trees</b>	<b>No. of hours: 6</b>
<b>Content Summary:</b> Introduction to graphs, Directed and Undirected graphs, Homomorphic and Isomorphic graphs, Sub graphs, Cut points and Bridges,,Multigraph and Weighted graph, Paths and circuits, Euler path and circuits, Hamilton paths and circuits, Planar graphs, Euler's formula, Trees, Spanning trees, Binary trees		
<b>Unit Number: 4</b>	<b>Title: Optimization and Algorithms</b>	<b>No. of hours : 9</b>
<b>Content Summary:</b> Optimization problems, Local and global optima, Convex sets and convex functions, Convex programming problems, Linear programming problems and characterization of optimal solution , Nonlinear programming problems and characterization of a local optimal solution, Discrete optimization problems and search method, Stopping criteria.		
<b>Unit Number : 5</b>	<b>Title: Probability and Distributions</b>	<b>No. of hours : 14</b>
<b>Content Summary: Introduction to Probability:</b> Conditional Probability, Baye's theorem and its applications, Expected value of a random variable, Properties and applications of Binomial distributions, Properties and applications of Poisson distributions, Properties and applications of Normal distributions, Measures of central tendency, Measure of spread, Measure of shape, Statistical Sampling, Estimations, Confidence intervals		

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

Sr. No.	Topic	Unit covered
1.	Set Theory	1
2.	Recursion and Recurrence Relation	2
3.	Graphs and Trees	3
4.	Numerical Methods	4
5.	Probability and Distributions	5

**Evaluation Scheme:**

Theory + Practical (L-T-P/L-O-P)	Minor Test	25%	Must Secure 30% Marks Out of Combined Marks of Major Test Plus Minor Test with Overall 40% Marks in Total.
	Major Test	45%	
	Continuous Evaluation Through Class Tests/Practice/Assignments/Presentation/Quiz	20%	
	Online Quiz	10%	

## COMPOSITION OF THE BOARD OF STUDIES

## Board of Studies (CSE)

SR NO	NAME	REPRESENTING	DESIGNATION
1.	Prof. Rita Chhikara	Chairperson	Professor & HOD, Dept. of CSE
2.	Prof. B. Chandra	External Member (Academician)	Professor (retired), IIT Delhi, New Delhi
3.	Mr. Pankaj Bhardwaj	External Member (Industry Expert)	Solution Architect: BI Solutions Consultant at Tata Consultancy Limited, New Delhi
4.	Prof. Nitin Malik	Member	Dy. Dean-RDIL and Professor, Dept. of CSE
5.	Nominee from VC office	Special Invitee	Dean Academic Affairs
6.	Dr Divyabha Vashisth	Special Invitee	HOD, Department of CLL
7.	Prof. Prabha Sharma	Special Invitee	Emeritus Professor
8.	Dr. Prachi	Member	Associate Professor, Dept. of CSE
9.	Dr. Meghna Sharma	Member	Associate Professor, Dept. of CSE
10.	Dr. Shilpa Mahajan	Member	Associate Professor, Dept. of CSE
11.	Dr. Srishti Sharma	Member	Associate Professor, Dept. of CSE
12.	Dr Nidhi Malik	Member, Program coordinator	Assistant Professor, Dept. of CSE
13.	Dr. Shraddha Arora	Member	Assistant Professor, Dept. of CSE
14.	Dr. Purna Singal	Member	Assistant Professor, Dept. of CSE
15.	Dr. Shaveta Arora	Member Secretary	Associate Professor, Dept. of CSE

The above composition is approved. Sr. No. 7 be dropped and Dean Academic Affairs be included as VC's nominee.

  
22/3/2024

HOD (CSE)

NCU-FRM-37

 <p><b>THE NORTHCAP UNIVERSITY</b></p>	<p><b>The NorthCap University</b>  <b>School of Engineering and Technology</b></p> <hr/> <p><b>16<sup>th</sup> Board of Studies Meeting, Dept. of CSE</b></p>
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From: Member Secretary, BOS-CSE Dept.

To: Hon'ble GB, Pro-Chancellor,  
VC, HODs, Faculty members (CSE)

Date – 27-3-24

Minutes of the meeting of 16<sup>th</sup> Board of Studies (BOS) of CSE Department held on March 27, 2024 at 3:00pm in room no. 124 are as follows.

The following members attended the meeting:

1.	Prof. Rita Chhikara	Chairperson	Professor & HOD, Dept. of CSE
2.	Prof. B. Chandra	External Member (Academician)	Professor (retired), IIT Delhi, New Delhi
3.	Mr. Pankaj Bhardwaj	External Member (Industry Expert)	Solution Architect: BI Solutions Consultant at Tata Consultancy Limited, New Delhi
4.	Prof. Nitin Malik	Member	Dy. Dean-RDIL and Prof., Dept. of CSE
5.	Prof. Manoj Gopaliya	Special Invitee (VC's Nominee)	Leave of absence ( Prof. Swarn Ahuja – Academic Advisor attended the meeting on his behalf )
6.	Dr Divyabha Vashisth	Special Invitee	HOD, Department of CLL
7.	Dr. Prachi	Member	Associate Professor, Dept. of CSE
8.	Dr. Meghna Sharma	Member	Associate Professor, Dept. of CSE
9.	Dr. Shilpa Mahajan	Member	Associate Professor, Dept. of CSE
10.	Dr. Srishti Sharma	Member	Associate Professor, Dept. of CSE
11.	Dr Nidhi Malik	Member, Program coordinator	Assistant Professor, Dept. of CSE
12.	Dr. Shraddha Arora	Member	Absent
13.	Dr. Prerna Singal	Member	Assistant Professor, Dept. of CSE
14.	Dr. Shaveta Arora	Member Secretary	Associate Professor, Dept. of CSE

Meeting started at 3:00pm with a warm welcome of the BOS members by the chairperson. Following agenda points were discussed.

## Agenda points:

### 1. Confirmation of last BoS meeting

Confirmation of the minutes of the last BoS meeting of CSE & IT department held on May 12, 2023, and minutes were circulated and the same is enclosed as Annexure I. As per point 8, it was asked to explore DBMS syllabus to include PL/SQL and get it approved in the next BoS meeting.

Action: DBMS syllabus was discussed as per agenda point 5 and approved in BOS.

### 2. Discussion and approval for amendments in the existing B.Tech Scheme.

Dr Nidhi Malik presented this point and explained the reason for the changes. The following are the suggested changes and the corresponding reasons.

S.No.	Semester	Amendments	Description	Remarks for Changes
1	1	FOCP-1 (2-1-4)5	LTP & credit changed (C-Programming)	To Enhance the practical skills of the students and based on the feedback received from industry experts through CPAA, additional tutorial is added.
2		Total credits 19	Credit changed (from 20 to 19)	Credits changed as Skill development is shifted to 4 <sup>th</sup> semester
3	2	FOCP-II (2-1-4)5	LTP & credit changed (C++ Programming)	To Enhance the practical skills of the students and based on the feedback received from industry experts through CPAA, additional tutorial is added.
4		Total credits 24	Credit changed (from 23 to 24)	As credits for FOCP-II have increased.
5	3	Intro To Java (3-0-2) 4	CN moved to 5th sem and new subject Java is introduced.	To enhance the programming skills of students, Java has been introduced.
6		CSL214 DBMS (3-1-2)5	LTP and credit changed	DBMS exchanged with Data structures. As Intro to Java should be studied before DS. To Enhance the practical skills of the students, additional tutorial is added.
7		Total credits=23	Credit changed (from 22 to 23)	Credits of DBMS have been increased from 3 to 4 credits.
8	4	CSL209 Data Structures using Java (3-0-2)4	Swapped DBMS with DS	Data structures should be studied after studying Intro to Java.
9		CLL120 HVPE (2-0-0-)2	Replaced ADA by HVPE and ADA shifted to 6th sem	ADA is an advanced level course, so it has been moved to 3rd year.
10		Skill Development (0-0-2)1	LTP and credit changed	This course shall cover aptitude and reasoning to enhance employability.
11		Total credits=24	Credit changed (from 25 to 24)	Due to skill development course and ADA has been replaced by HVPE which has lesser credits.
12	5	CSL240 Computer Networks (3-0-2)4	Replaced HVPE by CN	Cn shall be covered in 3 <sup>rd</sup> year as per AICTE norms and HVPE has been shifted to semester 4 as per internal discussion.

13		Adv Java (3-0-2)4	Added new subject Adv Java in place of PE-4	To enhance programming skills of students, Advanced Java has been introduced
14		Total credits=24	Credit changed (from 22 to 24)	Computer networks has more number of credits than HVPE.
14	6	CSL230 Analysis and Design of Algorithms (3-0-2)4	Replaced PE-5 by ADA	One PE has been dropped to improve the knowledge of students in core courses
15		Introduction to Cloud Computing (3-0-2)4	Moved Theory of Computation course as PE and added new subject- Intro to Cloud computing	Seeing the prerequisites of various companies for placements, cloud computing has been introduced.
16	8	Program Elective- 7 (2-0-4)4	Moved PE-7 to 8th sem	New subject intro to cloud computing introduced in 6th semester.
17		Total credits=18	Credit changed (from 14 to 18)	PE7 has been added to 8th semester.

The overall credits of the scheme remained unchanged to 177. In addition to above mentioned reasons for the changes made in the scheme, Mr. Sumit was asked to present the syllabus of FOCPII (CSL108), Introduction to JAVA (CSL 215), Advance Java (CSL315). All these course templates are attached as annexure III.

Prof. Chandra suggested for addition of tutorial sheets in each of these courses to enhance practical skills. Prof. Ahuja emphasized the need of increasing interaction among the students.

Action: The updated scheme is attached as Annexure – II.

### 3. Discussion and finalization of programme electives owing to changes in the B.Tech Scheme

The revised list of electives is attached in annexure II. Dr Poonam explained the revised list of electives as follows: The reason for dropping an elective is mentioned.

S.No.	Specialization	Elective removed course	Reason
1.	Data Science	Data Engineering (CSL 234)	The contents of the course are overlapping with AI ML and ACS course. Preprocessing is included in ACS and Programming with Data Science. Unsupervised Machine learning is mapped with Machine Learning course and Data warehousing is included in Hive tool of Big Data Course.

2.	AI & ML	Applied Computational Statistics (CSL 227)	Students already have knowledge of basic concepts of descriptive statistics. Some topics within this course already overlaps with material covered in few other courses like Introduction to AIML and Reinforcement Learning. Also, rather than having a standalone statistics course, important statistical concepts like probability theory and inferential statistics could be taught along with the machine learning algorithms focused on those topics.
3.	Full Stack	Big Data (CSL 311)	Seeing the market trend, CSL311 was the least crucial course for Full Stack Specialization. Part of the course is being covered in the Devops course also.
4.	Cyber Security	Secure Coding & Software Vulnerabilities (CSL283)	Some topics within this course overlap with material covered in other courses to some extent. Further, plan to incorporate a few crucial topics into the curriculum of Web and Mobile Security.
5.	Cloud Computing	Introduction to Cloud Computing (CSL238)	CSL238 is now a core course
6.	Game Tech	XR Studio (CSL 342)	Course content can be merged with VR Development course. XR studio can be removed, and the course content can be merged with CSL 345.
7.	Blockchain	Cloud Infrastructure and services (CSL455)	Concepts of Cloud are now included in Core Course: Introduction to Cloud Computing
8.	IOT and 5G	Mobile Networks (ECL482)	Some part of the content of mobile communication and standards is included in course ECL316 and content regarding mobile networks is included in ECL368. This way students can study some other course in place of ECL482 and content of mobile networks is also covered.

In addition, Prof. Ahuja emphasized the need of python. Every student must learn python.

Action: All leads must ensure.

#### 4. Discussion and presentation of the course template of Introduction to Cloud Computing.

This course was being offered as elective, now considering the feedback from industry through placement cell, this is now included as a core course in the scheme. Dr Prerna presented the course, and she said that the course is mapped with AWS Academy. Mr Pankaj also emphasized the need of certification courses in cloud computing.

## 5. Revisions in the course templates based on suggestions from faculty and experts in previous BOS

Ms Kanika presented the inclusion of PL/SQL in the course. The template is attached in annexure III.

Ms Neetu Singla presented the need to change the course content of CSL312 Deep Learning. The existing syllabus include NLP as last unit which was proposed to replace with generative AI being the need of the hour. As there is a complete course on NLP also. Prof. Chandra suggested to include autoencoders in Unit2 instead of Unit 4. Some more keywords like types of optimizers were asked to add and remove word shallow. The experiments should also be clubbed according to the content.

All the changes in the course templates have been approved by the members. The new course templates of above courses are attached in Annexure III.

## 6. Discussion on open elective courses to be floated for July 2024

Dr Pankaj Rakheja discussed the open elective courses as follows.

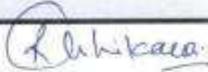
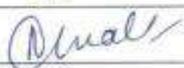
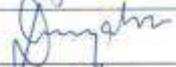
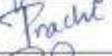
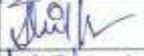
Code	Course	Mode	Credits	NPTEL Link
CSM201	Joy of computing using Python	FULL MOOC	3	<a href="https://nptel.ac.in/courses/2019/1/CSM201">The Joy of Computing using Python - Course (nptel.ac.in)</a>
CSM206	Ethical hacking	FULL MOOC	3	<a href="https://nptel.ac.in/courses/2019/1/CSM206">Ethical Hacking - Course (nptel.ac.in)</a>
CSM207	Problem Solving through programming in C	FULL MOOC	3	<a href="https://nptel.ac.in/courses/2019/1/CSM207">Problem Solving Through Programming In C - Course (nptel.ac.in)</a>
CSM208	Programming in Modern C++	FULL MOOC	3	<a href="https://nptel.ac.in/courses/2019/1/CSM208">Programming in Modern C++ - Course (nptel.ac.in)</a>
CSL263	Advanced Excel	REGULAR	3	<a href="#">Template</a>

## 7. Any other matter with the permission of the Chair.

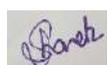
Dr Monika Lamba discussed the need to change the course contents of Reinforcement Learning (CSL348) in consultation with Prof. Prabha Sharma. The new course template is attached as Annexure III.

With no other point, member secretary ended the meeting at 4:30pm with a vote of thanks to all the attendees.

Duly signed attendance list is as follows.

S. No.	NAME	REPRESENTING	DESIGNATION	SIGNATURE
1.	Prof. Rita Chhikara	Chairperson	Professor & HOD, Dept. of CSE	
2.	Prof. B. Chandra	External Member (Academician)	Professor (retired), IIT Delhi, New Delhi	
3.	Mr. Pankaj Bhardwaj	External Member (Industry Expert)	Solution Architect, BI Solutions Consultant at Tata Consultancy Limited, New Delhi	
4.	Prof. Nitin Malik	Member	Dy. Dean-RDIL and Prof., Dept. of CSE	
5.	Prof. Swaran Ahuja	Special Invitee (VC's Nominee)	Academic Advisor and Senior Prof. Dept of MDE	
6.	Dr Divyabha Vashisth	Special Invitee	HOD, Department of CLL	
7.	Dr. Prachi	Member	Associate Professor, Dept. of CSE	
8.	Dr. Meghna Sharma	Member	Associate Professor, Dept. of CSE	
9.	Dr. Shilpa Mahajan	Member	Associate Professor, Dept. of CSE	
10.	Dr. Srishti Sharma	Member	Associate Professor, Dept. of CSE	
11.	Dr Nidhi Malik	Member, Program coordinator	Assistant Professor, Dept. of CSE	
12.	Dr. Shraddha Arora	Member	Assistant Professor, Dept. of CSE	
13.	Dr. Prerna Singal	Member	Assistant Professor, Dept. of CSE	
14.	Dr. Shaveta Arora	Member Secretary	Associate Professor, Dept. of CSE	

Thanks and regards



Dr. Shaveta Arora  
Member Secretary - BoS,  
Dept. of CSE  
The NorthCap University, Gurugram

Attachments as annexures:

1. BoS MoM dated 12-5-23
2. Updated B.Tech. CSE 2024 Scheme and Updated Electives list
3. Updated course templates



## Academic Council Meeting – Revisions in B.Tech CSE Scheme

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Prof. Rita Chhikara  
Department of Computer Science and  
Engineering



# Rationale for revision in B.Tech CSE Scheme

- In today's rapidly evolving tech landscape, BTech programs must prioritize coding skills to meet industry demands.
- Enhancing coding-based education within the curriculum ensures students acquire hands-on knowledge crucial for real-world applications.

According to the [\*\*2022 IT Skills and Salary Report\*\*](#) from [\*\*Skillsoft\*\*](#), 66 percent of IT leaders are dealing with skills gaps, and software development is one of the top-ten skill areas that IT decision-makers are investing in right now.

Based on the recent marketing trends and feedback received from CPAA, following courses have been introduced to improve employability skills of students :

- 2 programming courses, C++ and Advanced Java
- Introduction to Cloud Computing

The overall credits of the scheme has been changed from 162+14 to 168+14 due to addition of new courses and changes made in L-T-P.

References have been taken from AICTE model curriculum(2022).

[AICTE Course Structure](#)

# Existing B.Tech CSE Scheme

Sem	Semester Course Code, Course Name (L-T-P)Credits							GP	Community Services	Hrs. Per week			Credits
	L	T	P										
1	MAL151 Engg Maths-I (3-0-2)4	CSL106 FOCP-I (2-0-4)4  (2-1-4)5 *1 credit increased	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	CSV104 Skill Development (1-0-2)2		CSR118 GP 1 Credit	CSS101 CS-I	11	1	14	<del>19+1</del> =20  18+1=19
2	MAL152 Engg. Maths-II (3-0-2)4	CSL108 FOCP-II (2-0-4)4  (2-1-4)5 *1 credit increased	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 Comm.-I (1-0-2)2		CSR119 GP 1 Credit	CSS102 CS-II (140 Hrs)** 2 Credits	13	1	14	<del>20+3</del> =23  21+3 = 24
<b>Summer</b>													
3	CSL209 Data Structures (3-0-2)4 CSL 214 DBMS(3-1-2) 5  *1 credit increased	CSL223 Discrete Mathematics (3-0-0)3 Engg. Maths III (3-0-0) 3	CSL240 Computer Networks (3-0-2)4 CSL 215 Intro to Java (3-0-2) 4	ECL255 DE & CA (3-0-2)4	Program Elective - I (2-0-4)4	CLL140 Effective Comm.-II (1-0-2)2		CSR218 GP 1 Credit	CSS201 CS-III	15	1	12	<del>21+1</del> =22  22+1 = 23
4	CSL422 Cyber Security (3-0-2)4	CSL214 DBMS (3-0-2)4 CSL 209 Data Structures (3-0-2) 4	CSL230 Analysis and Design of Algorithms (3-0-2)4 CLL120 HVPE (2-0-0-) 2	Program Elective 2 (2-0-4)4	SML300 Entrepreneur ship (3-0-0)3	Open Elective – 1 (3-0-0)3	CSV101 Skill Dev. (0-0-2)1  *1 credit reduced	CSR219 GP 1 Credit	CSS202 CS-IV (140 Hrs)** 2 Credits	16		10	<del>22+3</del> =25  21+3 = 24

<b>Summer</b>	<b>CST201 Industrial Training/internship</b>													<b>2</b>		
<b>5</b>	CSL236 Introduction to AI & ML / AI for Games (3-0-2) 4	CSL303 Operating System (3-0-2)4	Program Elective-3 (2-0-4)4	<del>Program Elective-4 (2-0-4)4</del> CSL 315 Adv. Java (3-0-2) 4	Open Elective – 2 (3-0-0)3	<del>CLL120 HVPE (2-0-0)-2</del> CSL240 Computer Networks (3-0-2)4	CSC301 Seminar 1 Credit	CSR318 GP 1 Credit	CSS301 CS-V	17		12	<del>21+1 =22</del> 24+1 = 25			
<b>6</b>	CSL229 SEPM (3-0-2)4	<del>Program Elective-5 (2-0-4)4</del> CSL230 Analysis and Design of Algorithms (3-0-2)4	<del>Program Elective-6 (2-0-4)4</del> Program Elective-4 (2-0-4)4	<del>CSL318 Theory of Computation (3-0-2)4</del> CSL 238 Introduction to Cloud Computing (3-0-2) 4	Open Elective-3 (MOOC) (3-0-0)3	Program Elective 5 (2-0-4)4		CSR319 GP 1 Credit	CSS302 CS-VI (140 Hrs)** 2 Credits	16		14	<del>20+3 =23</del> 23+3=26			
<b>Summer</b>	<b>CST301 Industrial Training/ internship</b>													<b>04</b>		
<b>7</b>	Program Elective 6 (2-0-4)4	Program Elective 7 (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			
<b>8</b>	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			
	<b>Total</b>												<b>107</b>	<b>3</b>	<b>84</b>	<del>162+14=176</del> <b>168+14=182</b>

# 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 AI	ECL256 Embedded Systems	MAL270 Numerical Methods
Program Elective-2	CSL227 Applied Computational Statistics	<del>CSL238</del> Introduction to Cloud Computing	CSL274 Middleware Frameworks and ORM	CSL245 Programing for Games	<del>CSL 283 Secure Coding and Vulnerabilities</del>	CSL247 Intro. to blockchain technologies	<del>CSL227 Applied Computational Statistics</del>	CSL238 Introduction to Cloud Computing	CSL223 Web Development Technologies
Program Elective-3	<del>CSL234 Data Engineering</del>	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	<del>CSL 318 Theory of Computation</del>
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	<del>CSL311 Big Data</del>	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	<del>CSL342 XR Studio</del>	CSL382 Blockchain	<del>CSL455 Cloud Infrastructure and Services</del>	CSL448 Computational Linguistics and Natural Language Processing	<del>ECL482 Mobile Networks</del>	

# Proposed B.Tech CSE Scheme 2024-2025

Bachelor of Technology in Computer Science and Engineering 2024-25

Annexure – II

S	Semester Course Code, Course Name (L-T-P)Credits							GP	Community Services	Hrs. Per week			Credits
	L	T	P	L	T	P							
1	MAL151 Engg. Maths-I (3-0-2)4	CSL106 FOCP-I (2-1-4)5	CHL150 Engg. Chemistry (2-0-2)3	MEP110 Engineering Graphics & Drawing (1-0-4)3	CSL110 Problem Solving & Design Thinking (2-0-2)3			CSR118 GP 1 Credit	CSS101 CS-I	10	1	14	18+1 =19
2	MAL152 Engg. Maths-II (3-0-2)4	CSL108 FOCP-II (2-1-4)5	PYL150 Engineering Physics (3-0-2)4	MEL160 Basic of Mechanical Engg. (2-0-2)3	ECL110 Basic of Electrical & Electronics Engineering (2-0-2)3	CLL130 Effective Comm. -I (1-0-2)2		CSR119 GP 1 Credit	CSS102 CS-II (140 Hrs)** 2 Credits	13	1	14	21+3 =24
Summer													
3	CSL214 DBMS (3-1-2)5	ECL255 DE & CA (3-0-2)4	Engg. Maths III (3-0-0)3	CSL215 Intro To Java (3-0-2)4	Program Elective - I (2-0-4)4	CLL140 Effective Comm-II (1-0-2)2		CSR218 GP 1 Credit	CSS201 CS-III	15	1	12	22+1 =23
4	CSL422 Cyber Security (3-0-2)4	CSL209 Data Structures (3-0-2)4	CLL120 HVPE (2-0-0)2	Program Elective- 2 (2-0-4)4	SML300 Entrepreneurship (3-0-0)3	Open Elective - 1 (3-0-0)3	CSV101 Skill Dev. (0-0-2)1	CSR219 GP 1 Credit	CSS202 CS-IV (140 Hrs) ** 2 Credits	16	0	10	21+3 =24
Summer CST201 Industrial Training/internship													
5	CSL236 Introduction to AI & ML / CSL242 AI for Games (3-0-2)4	CSL-303 Operating System (3-0-2)4	Program Elective-3 (2-0-4)4	CSL315 Adv Java (3-0-2)4	Open Elective - 2 (3-0-0)3	CSL240 Computer Networks (3-0-2)4	CSC 301 Seminar 1 credit	CSR318 GP 1 Credit	CSS301 CS-V	17	0	12	24+1 =25
6	CSL229 SEPM (3-0-2)4	CSL230 Analysis and Design of Algorithms (3-0-2) 4	Program Elective-4 (2-0-4)4	CSL 238 Introduction to Cloud Computing (3-0-2)4	Open Elective- 3 (3-0-0) 3	Program Elective- 5 (2-0-4) 4		CSR319 GP 1 Credit	CSS302 CS-VI (140 Hrs)** 2 Credits	16	0	14	23+3 =26
Summer CST301 Industrial Training/ internship													
7	Program Elective- 6 (2-0-4)4	Program Elective- 7 (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	0	8	21
8	Liberal Arts Elective (3-0-0)3 (MOOC)	Open Elective - 5 (MOOC) (3-0-0)3	CSD402 Project # 2 /Internship 6 Credits						CSS402CS-VIII (140 Hrs) 2 Credits	6	0	0	12+2 =14
Total										106	3	84	168+14=

Revised B.Tech CSE Scheme 2024-2025.docx - Google Docs

# Finalization of Program Electives

Tracks	Tracks	Data Science	Cloud Computing	Full Stack	Game Tech	Cyber Security	Blockchain	AI & ML	IoT & 5G	Other Electives
Program Elective-1	PE 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 AI	ECL256 Embedded Systems	MAL270 Numerical Methods
Program Elective-2	PE 2	CSL227 Applied Computational Statistics	CSL337 Cloud Architecture	CSL274 Middleware Frameworks and ORM	CSL245 Programing for Games	CSL 284 Digital Forensics and Malware Analysis	CSL247 Intro.to blockchain technologies	CSL347 Applied Artificial Intelligence and Expert Systems	CSL238 Introduction to Cloud Computing	CSL223 Web Development Technologies
Program Elective-3	PE 3	CSL232 Business Intelligence and Data Visualization	CSL338 Virtualization & Cloud Computing	CSL276 No SQL Databases	CSL244 Advanced Programming for Games	CSL 383 Network security	CSL355 Bitcoin and Cryptocurrency Technologies	CSL348 Reinforcement Learning	ECL252 Micro Controllers & Sensors	MAL280 Linear Algebra and its Applications
Program Elective-4	PE 4	CSL313 Machine Learning	CSL339 Big Data on Cloud	CSL253 Web Frameworks	CSL343 Designing Human Computer Interfaces	CSL387 Web and Mobile Security	CSL356 Smart Contracts	CSL349 Artificial Intelligence for Robotics	ECL316 Wireless & Mobile Communication	MAL260 Probability and Statistics
Program Elective-5	PE 5	CSL311 Big Data	CSL346 Artificial Intelligence & Machine Learning on Cloud	CSL371 Mobile Application Development	CSL246 Cross Platform Game Development	CSL385 Risk Analysis and Assessment	CSL357 Blockchain for Cyber Security	CSL312 Deep Learning	ECL352 Design for IOT	CSL 318 Theory of Computation
Program Elective-6	PE 6	CSL316 Introduction to Image Processing and Recognition	CSL445 Cloud Application Development & Deployment	CSL373 Devops	CSL341 AR Development	CSL384 Cloud Security Essentials	CSL358 Blockchain Technology in Web Development	CSL447 Computer Vision	ECL367 Introduction to 5G Technologies	
Program Elective-7	PE 7	CSL312 Deep Learning	CSL446 Cloud Security	CSL374 Micro service Based Applications	CSL345 VR Development	CSL382 Blockchain	CSL449 Security and Privacy for Big Data Analytics	CSL448 Computational Linguistics and Natural Language Processing	ECL368 Network and Security in IoT	

- Descriptions of the amendments :

<u>S.No</u>	Sem	Existing Sub/Credit	New Sub/credit	Description	Remarks for Changes
1	1	FOCP-1 (2-0-4)4	FOCP-1 (2-1-4)5	LTP & credit changed (C-Programming)	In response to industry feedback received through CPAA, an additional tutorial has been introduced to enhance students' practical skills in C programming.
2	1	Skill Dev. (1-0-2)2	None	Shifted to 4 <sup>th</sup> semester and credit reduced by 1.	To enhance students' preparedness for placement, the curriculum will include coverage of logical and aptitude reasoning topics and shifted from 1 <sup>st</sup> year to 2 <sup>nd</sup>
3	2	<u>FOCP-II</u> (2-0-4)4	FOCP-II (2-1-4)5	LTP & credit changed (C++ Programming)	The introduction of C++ concepts aims to enhance technical proficiency and fulfil industry demands. In the previous scheme, Java programming was taught in this course.

4	3	CSL209 Data Structures (3-0-2)4	CSL214 DBMS (3-1-2)5	Subject swapped	Swapping has been done to satisfy the pre-requisite of Introduction to Java subject as we teach DS with Java
5	3	CSL 240 Computer Networks (3-0-2) 4	Introduction To Java (3-0-2) 4	New subject introduced	Java has been introduced for students focusing on logic building and implementation, aiming to meet employment demands and align with current recruitment scenarios. CN shifted to 3 <sup>rd</sup> year. According to AICTE norms, the curriculum should include CN during the third year of study
6	3	CSL214 DBMS (3-0-2)4	CSL214 DBMS (3-1-2)5	LTP and credit changed	Incorporating feedback received from industry expert Mr. Parmeshwar Kumar, Technical Specialist at Fidelity International India, an extra tutorial has been integrated, emphasizing the practical implementation of query languages.

7	4	CSL230 Analysis and Design of Algorithms (3-0-2)4	CLL120 HVPE (2-0-0-)2	Shifted from 3 <sup>rd</sup> year to 2 <sup>nd</sup> year	To cultivate ethical leadership and foster a sense of social responsibility in students HVPE has been shifted and according to AICTE norms, the curriculum should include ADA during the third year of
8	5	Program Elective -4	Adv Java (3-0-2)4	Introduction of new subject	To enhance students' employability and refine their programming skills, a new subject has been introduced.
9	6	Program Elective -6	CSL230 Analysis and Design of Algorithms (3-0-2)4	Shifted ADA from 2 <sup>nd</sup> year to 3 <sup>rd</sup> year	According to AICTE norms, the curriculum should include ADA during the third year of study
10	6	CSL 318 Theory of Computation (3-0-2) 4	Introduction to Cloud Computing (3- 0-2)4	Introduction of new subject, and TOC moved to other PE.	The introduction of cloud computing has been prompted by the evolving prerequisites of numerous companies for placement opportunities.

S.No.	Specialization	Elective course removed	Reason
1.	Data Science	Data Engineering (CSL 234)	The contents of the course are overlapping with <u>AI ML</u> and <u>ACS</u> course. Preprocessing is included in <u>ACS</u> and <u>Programming with Data Science</u> . Unsupervised Machine learning is mapped with <u>Machine Learning</u> course and <u>Data warehousing</u> is included in <u>Hive tool of Big Data Course</u> .
2.	AI & ML	Applied Computational Statistics (CSL 227)	Students already have knowledge of basic concepts of descriptive statistics. Some topics within this course already <u>overlaps</u> with material covered in few other courses like <u>Introduction to AIML</u> and <u>Reinforcement Learning</u> . Also, rather than having a standalone statistics course, important statistical concepts like <u>probability theory</u> and <u>inferential statistics</u> could be taught along with the machine learning algorithms focused on those topics.
3.	Full Stack	Big Data (CSL 311)	Seeing the market trend, <u>CSL311</u> was the least crucial course for <u>Full Stack Specialization</u> . Part of the course is being covered in the <u>Devops</u> course also.
4.	Cyber Security	Secure Coding & Software Vulnerabilities (CSL283)	Some topics within this course overlap with material covered in other courses to some extent. Further, plan to incorporate a few crucial topics into the curriculum of <u>Web and Mobile Security</u> .
5.	Cloud Computing	Introduction to Cloud Computing (CSL238)	<u>CSL238</u> is now a core course
6.	Game Tech	XR Studio (CSL 342)	Course content can be merged with <u>VR Development course</u> . <u>XR studio</u> can be removed, and the course content can be merged with <u>CSL 345</u> .
7.	Blockchain	Cloud Infrastructure and services (CSL455)	Concepts of <u>Cloud</u> are now included in <u>Core Course: Introduction to Cloud Computing</u>
8.	IOT and 5G	Mobile Networks (ECL482)	Some part of the content of mobile communication and standards is included in <u>course ECL316</u> and content regarding mobile networks is included in <u>ECL368</u> . This way students can study some other course in place of <u>ECL482</u> and content of mobile networks is also covered.

## New Subjects Templates :

### 1. Introduction to Java

[CSL215 Intro to Java template.docx - Google Docs](#)

### 2. Advanced Java

[CSL315 Adv Java CourseTemplate NCU.docx - Google Docs](#)

### 3. Introduction to Cloud Computing

[CSL238 Introduction to Cloud Computing syllabus.docx - Google Docs](#)

# ANNEXURES

# COURSE TEMPLATE

<b>1. Department:</b>	Department of Computer Science and Engineering		
<b>2. Course Name:</b> Introduction to Cloud Computing	<b>3. Course Code</b>	<b>4. L-T-P</b>	<b>5. Credits</b>
	CSL238	2-0-4	4
<b>6. Type of Course (Check one):</b>	Programme Core <input type="checkbox"/>	Programme Elective <input type="checkbox"/>	Open Elective <input type="checkbox"/>
<b>7. <u>Pre-requisite(s)</u>, if any:</b> None			
<b>8. Frequency of offering (check one):</b>	Odd <input type="checkbox"/>	Even <input checked="" type="checkbox"/>	Either semester <input type="checkbox"/> Every semester <input type="checkbox"/>
<b>9. Focus:</b>	Employability <input type="checkbox"/>	Entrepreneurship <input type="checkbox"/>	Skill Development <input type="checkbox"/> Basic Knowledge <input type="checkbox"/>
<b>10. Brief Syllabus:</b>			
<p>Parallel and Distributed System Models, Cloud enabling technologies, Cloud Platform Architecture, Service Oriented Architecture, Cloud Programming and Software environments, Performance Scalability and Consistency on Cloud, Cloud Security. The course examines the most important APIs used in the Amazon and Microsoft Cloud, including the techniques for building, deploying, and maintaining machine images and applications. Students will learn how to use Cloud as the infrastructure for existing and new services, Amazon's Elastic Block Storage and Amazon's Virtual Private Cloud.</p>			
<b>Total lecture, Tutorial and Practical Hours for this course (Take 15 teaching weeks per semester): 90</b>			
<b>Lectures:</b> 30 hours	<b>Practice</b>		
	<b>Tutorials:</b> 0 hours		<b>Lab Work:</b> 60 hours
<b>11. Course Outcomes (COs)</b>			
Possible usefulness of this course after its completion i.e. how this course will be practically useful to him once it is completed.			
<b>CO 1</b>	Understand cloud computing models, cloud architecture and various types of cloud services.		
<b>CO 2</b>	Distinguish between various types of services provided by cloud service providers and demonstrate the use of various services on AWS and Google cloud.		
<b>CO 3</b>	Distinguish between various storage options available on the cloud and demonstrate the creation of a bucket and cluster on the cloud.		
<b>CO 4</b>	Describe the security architecture and features used by AWS and Google Cloud and demonstrate the creation of user groups, roles, identity and access management on AWS and Google Cloud.		
<b>CO 5</b>	Understand building and deployment of web applications on cloud clusters and analyze their performance and security in the deployed regions and zones.		

## COURSE TEMPLATE

<b>1. Department:</b>	Department of Computer Science and Engineering		
<b>2. Course Name:</b> Advanced Java	<b>3. Course Code</b>	<b>4. L-T-P</b>	<b>5. Credits</b>
	CSL315	3-0-2	4
<b>6. Type of Course (Check one):</b>	Programme Core <input checked="" type="checkbox"/>	Programme Elective <input type="checkbox"/>	Open Elective <input type="checkbox"/>
<b>7. <u>Pre-requisite(s)</u>, if any:</b> Introduction to Java			
<b>8. Frequency of offering (check one):</b> Odd <input type="checkbox"/> Even <input checked="" type="checkbox"/> <u>Either</u> semester <input type="checkbox"/> Every semester <input type="checkbox"/>			
<b>9. Brief Syllabus:</b>			
<p>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 on Java SE (Standard Edition). This intensive, hands-on course explores Java EE (Enterprise Edition) language features and packages by going deeper into programming topics that help understand concepts including the MVC Architecture, JDBC, Java Servlets, Java Server Pages and Unit Testing using Mockito &amp; JUnit. By the end of this course the students will have sound knowledge of advanced java concepts and will be able to apply them for designing and developing java based interactive web applications.</p>			
<b>Total lecture, Tutorial and Practical Hours for this course (Take 15 teaching weeks per semester): 60</b>			
<b>Lectures:</b> 30 hours	<b>Practice</b>		
	<b>Tutorials:</b> 0 hours	<b>Lab Work:</b> 30 hours	
<b>10. Course Outcomes (COs)</b>			
Possible usefulness of this course after its completion i.e. how this course will be practically useful to him once it is completed			
<b>CO 1</b>	<b>Understand</b> the hierarchy of Collections Framework and <b>identify</b> type safety features introduced in the Collections API		
<b>CO 2</b>	<b>Understand &amp; apply</b> the basic concurrency constructs and synchronize threads using locks and semaphores		
<b>CO 3</b>	<b>Create</b> applications which can communicate to a relational database and <b>analyze</b> various database operations		
<b>CO 4</b>	<b>Understand</b> Server-Side Web Application development using the web components defined under Java EE specification		
<b>CO 5</b>	<b>Develop</b> dynamic web applications using JSP and <b>determine</b> JSP tag library for designing dynamic web pages		

## COURSE TEMPLATE

<b>1. Department:</b>	Department of Computer Science and Engineering		
<b>2. Course Name: Introduction to Java</b>	<b>3. Course Code</b>	<b>4. L-T-P</b>	<b>5. Credits</b>
	CSL215	2-0-4	4
<b>6. Type of Course (Check one):</b>	Programme Core <input checked="" type="checkbox"/>	Programme Elective <input type="checkbox"/>	Open Elective <input type="checkbox"/>
<b>7. <u>Pre-requisite(s)</u>, if any:</b> None			
<b>8. Frequency of offering (check one):</b> Odd <input checked="" type="checkbox"/> Even <input type="checkbox"/> <u>Either</u> semester <input type="checkbox"/> Every semester <input type="checkbox"/>			
<b>9. Brief Syllabus:</b> <span style="float: right;">▼</span>			
<p>This course introduces Java, one of the most in-demand programming languages. Designed for beginners with little or no knowledge about Object Oriented programming concepts, this course covers the core OOP concepts including Encapsulation, Polymorphism, Inheritance etc. and their implementation in Java. In this course, the students will have extensive hands-on experience writing, compiling, testing and executing Java programs applying the above principles for developing modular reusable programs. By the end of this course the students will gain the foundational skills a software engineer needs, to solve real-world problems, from designing algorithms to testing and debugging; and will be able to apply these concepts to build their own interactive Java applications.█</p>			
<b>Total lecture, Tutorial and Practical Hours for this course (Take 15 teaching weeks per semester): 90</b>			
<b>Lectures:</b> 30 hours		<b>Practice</b>	
		<b>Tutorials:</b> 0 hours	<b>Lab Work:</b> 60 hours
<b>10. Course Outcomes (COs)</b>			
Possible usefulness of this course after its completion i.e. how this course will be practically useful to him once it is completed			
<b>CO 1</b>	Understand and solve simple real-world problems by identifying objects and their communication framework.		
<b>CO 2</b>	Apply the concepts of Classes and Objects to design solutions of a given programming problem.		
<b>CO 3</b>	Develop reusable codes by applying OOPS concepts (Inheritance and Polymorphism).		
<b>CO 4</b>	Implement Exception handling to find errors and develop efficient codes.		
<b>CO 5</b>	Analyze, Design and create applications that can manipulate data stored in files.		

**Thank You**

©	Semester Course Code, Course Name (L-T-P)Credits							GP	Community Services	Hrs. Per week			Credits	
	L	T	P	Credits	L	T	P							
1	MAL151 Engg. Maths-I (3-0-2)4	CSL106 FOCP-I (2-1-4)5	CHL150 Engg Chemistry (2-0-2)3	MEP110 Engineering Graphics & Drawing (1-0-4)3	CSL110 Problem Solving & Design Thinking (2-0-2)3			CSR118 GP 1 Credit	CSS101 CS-I	10	1	14	18+1 =19	
2	MAL152 Engg. Maths-II (3-0-2)4	CSL108 FOCP-II (2-1-4)5	PYL150 Engineering Physics (3-0-2)4	MEL160 Basic of Mechanical Engg. (2-0-2)3	ECL110 Basic of Electrical & Electronics Engineering (2- 0-2)3	CLL130 Effective Comm. -I (1-0-2)2		CSR119 GP 1 Credit	CSS102 CS-II (140 Hrs)** 2 Credits	13	1	14	21+3 =24	
Summer														
3	CSL214 DBMS (3-1-2)5	ECL255 DE & CA (3-0-2)4	Engg. Maths III (3-0-0)3	CSL215 Intro To Java (3-0-2)4	Program Elective - I (2-0-4)4	CLL140 Effective Comm-II (1-0-2)2		CSR218 GP 1 Credit	CSS201 CS-III	15	1	12	22+1 =23	
4	CSL422 Cyber Security (3-0-2)4	CSL209 Data Structures (3-0-2)4	CLL120 HVPE (2-0-0-)2	Program Elective- 2 (2-0-4)4	SML300 Entrepreneurship (3-0-0)3	Open Elective - 1 (3-0-0)3	CSV101 Skill Dev. (0-0-2)1	CSR219 GP 1 Credit	CSS202 CS-IV (140 Hrs) ** 2 Credits	16	0	10	21+3 =24	
Summer	CST201 Industrial Training/internship													2
5	CSL236 Introduction to AI & ML / CSL242 AI for Games (3-0-2)4	CSL-303 Operating System (3-0-2)4	Program Elective-3 (2-0-4)4	CSL315 Adv Java (3-0-2)4	Open Elective – 2 (3-0-0)3	CSL240 Computer Networks (3-0-2)4	CSC 301 Seminar 1 credit	CSR318 GP 1 Credit	CSS301 CS-V	17	0	12	24+1 =25	
6	CSL229 SEPM (3-0- 2)4	CSL230 Analysis and Design of Algorithms (3-0-2) 4	Program Elective-4 (2-0-4)4	CSL 238 Introduction to Cloud Computing (3-0-2)4	Open Elective– 3 (3-0-0) 3	Program Elective- 5 (2-0-4) 4		CSR319 GP 1 Credit	CSS302 CS-VI (140 Hrs)** 2 Credits	16	0	14	23+3 =26	
Summer	CST301 Industrial Training/ internship													04
7	Program Elective- 6 (2-0-4)4	Program Elective- 7 (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	0	8	21	
8	Liberal Arts Elective (3-0-0-)3 (MOOC)	Open Elective – 5 (MOOC) (3-0-0)3	CSD402 Project # 2 /Internship 6 Credits						CSS402CS- VIII (140 Hrs) 2 Credits	6	0	0	12+2 =14	
	Total										106	3	84	168+14= 182

\*\* 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 1<sup>st</sup> 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 4<sup>th</sup> 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 5<sup>th</sup> & 6<sup>th</sup> semesters to impart special skills to students for enhancing their employability.
- Advanced sessions on soft skills shall be conducted in the 7<sup>th</sup> semester to hone up the preparedness of students for placements and make them industry ready for national and international jobs.

Tracks	Trac ks	Data Science	Cloud Computing	Full Stack	Game Tech	Cyber Security	Blockchain	AI & ML	IoT & 5G	Other Electives
Program Elective-1	PE 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 AI	ECL256 Embedded Systems	MAL270 Numerical Methods
Program Elective-2	PE 2	CSL227 Applied Computational Statistics	CSL337 Cloud Architecture	CSL274 Middleware Frameworks and ORM	CSL245 Programing for Games	CSL 284 Digital Forensics and Malware Analysis	CSL247 Intro.to blockchain technologies	CSL347 Applied Artificial Intelligence and Expert Systems	CSL238 Introduction to Cloud Computing	CSL223 Web Development Technologies
Program Elective-3	PE 3	CSL232 Business Intelligence and Data Visualization	CSL338 Virtualization & Cloud Computing	CSL276 No SQL Databases	CSL244 Advanced Programmin g for Games	CSL 383 Network security	CSL355 Bitcoin and Cryptocurrency Technologies	CSL348 Reinforcement Learning	ECL252 Micro Controllers & Sensors	MAL280 Linear Algebra and its Applications
Program Elective-4	PE 4	CSL313 Machine Learning	CSL339 Big Data on Cloud	CSL253 Web Frameworks	CSL343 Designing Human Computer Interfaces	CSL387 Web and Mobile Security	CSL356 Smart Contracts	CSL349 Artificial Intelligence for Robotics	ECL316 Wireless & Mobile Communication	MAL260 Probability and Statistics
Program Elective-5	PE 5	CSL311 Big Data	CSL346 Artificial Intelligence & Machine Learning on Cloud	CSL371 Mobile Application Development	CSL246 Cross Platform Game Development	CSL385 Risk Analysis and Assessment	CSL357 Blockchain for Cyber Security	CSL312 Deep Learning	ECL352 Design for IOT	CSL 318 Theory of Computation
Program Elective-6	PE 6	CSL316 Introduction to Image Processing and Recognition	CSL445 Cloud Application Development & Deployment	CSL373 Devops	CSL341 AR Development	CSL384 Cloud Security Essentials	CSL358 Blockchain Technology in Web Development	CSL447 Computer Vision	ECL367 Introduction to 5G Technologies	
Program Elective-7	PE 7	CSL312 Deep Learning	CSL446 Cloud Security	CSL374 Micro service Based Applications	CSL345 VR Development	CSL382 Blockchain	CSL449 Security and Privacy for Big Data Analytics	CSL448 Computational Linguistics and Natural Language Processing	ECL368 Network and Security in IoT	

### Program Electives for each track

# NCU – School of Business MBA Curriculum

34<sup>th</sup> Academic Council Meeting  
15<sup>th</sup> May 2024

1

## Benchmarks

	IIM Indore	IIM Trichy	AICTE	NCU SoB
Credits I Year (Core)	70	51	54	49
Credits SIP			6	6
Credits II Year	62	45	42	46
Credits (Iyear +II Year)	<b>132</b>	<b>96</b>	<b>96</b>	<b>95</b>
No. of Hours to a credit	6.25	10	10	15
Total Hours (Iyear +II Year)	<b>825</b>	<b>960</b>	<b>960</b>	<b>1425</b>
Major / Minor Specialization	No	No	No	Yes
Major Project	No	No	No	No
Workshops	Yes	Yes		Yes

2

# MBA Batch 2023-25

## Changes in MBA Batch 2023-25 Scheme

Semesters 3 and 4:

**10 electives to 12 electives** (8 major area+ 4 minor area) + 2 core courses

Semester 3

Management Lab dropped

**Rationale:**

Python is already done in semester 2 for this batch

Semester 4

Major Project Dropped

Most electives shall anyway have a project component in the evaluation scheme.

**NEW:** Colloquium/Seminar courses (1 credit each) introduced:

Semester3:

Leadership and Executive Presence

Introduction to Consulting

Semester4:

Introduction to Sustainable Business

Global Trends in Management

**Rationale:**

Colloquium courses can help in creating awareness among students on contemporary topics beyond standard text books

3

## Scheme of Study – MBA 2023-25

SEM	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8	Course 9	Course 10	General Proficiency	Credits
III	BSL603						BSC---	BSC---	BSF502		BSR503	— 24
	Strategic Management	Elective 1 (Major)	Elective 2 (Major)	Elective 3 (Major)	Elective 4 (Major)	Elective 1 (Minor/Open)	Elective 2 (Minor/Open)	Leadership and Executive Presence	Introduction to Consulting	Management Lab	GP III	
	(2-0-2)3	3	3	3	3	3	3	(1-0-0)1	(1-0-0)1	(0-0-2)1	1 Credit	
IV	BSL516			New	New			BSC---	BSC---	BSD602	BSR504	— 24
	Entrepreneurship and Innovation	Elective 5 (Major)	Elective 6 (Major)	Elective 7 (Major)	Elective 8 (Major)	Elective 3 (Minor/Open)	Elective 4 (Minor/Open)	Introduction to Sustainable Business	Global Trends in Management	Major Project	GP IV	
	(2-0-2)3	3	3	3	3	3	3	(1-0-0)1	(1-0-0)1	(0-0-12)6	1 Credit	
												104
Total Credits MBA Program												95 104

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## MBA Batch 2024-26

MBA Batch 2024-26 Curriculum	Rationale
Colloquium/Seminar courses (1 credit each) across all semesters  Semester 1: Business Communication Semester2: Digital Transformation Introduction to AI Team Building and Work Ethics Semester 3: Leadership and Executive Presence Introduction to Consulting Semester4: Legal Aspects of Business Introduction to Sustainable Business Global Trends in Management	Colloquium courses can help <ul style="list-style-type: none"> <li>in creating awareness among students on contemporary topics beyond standard text books =&gt;Digital Transformation =&gt;AI =&gt;Consulting =&gt;Legal aspects =&gt;Sustainable business (ESG) =&gt;Global Trends in Management</li> <li>in developing the much needed soft skills progressively: =&gt;Business Communication =&gt; Team Building and Work Ethics =&gt; Leadership and Executive presence</li> <li>in grooming students for placements through an activity-based pedagogy</li> </ul>

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## Scheme of Study – MBA 2024-26 (Semester 1&2)

SEM	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8	Course 9	Course 10	General Proficiency	Credits
I	BSL505 Marketing Management	BSL--- Organizational Behaviour 1	BSL--- Financial Reporting and Control	BSL--- Indian Financial Systems	BSL509 Managerial Economics	BSL511 Business Statistics	Information Systems for Business	BSP504 Advanced Excel	BSC--- Business Comm		BSR501 GP I	24
	3	3	3	3	3	3	2	(0-0-4)2	(1-0-0)1		1 Credit	
II	BSL502 Management of Human	BSL504 Financial Management	BSL--- Sales and Distribution	BSL513 Operations Management	BSL522/ BSP508 Marketing Research/ 25	BSL516 Entrepreneurship and	BSL--- Organizational Behaviour 2	BSC--- Digital Transforma	BSC--- Intro to AI	BSC--- Team Building and Work	BSR502 GP II	6
	3	3	3	3	3	3	3	(1-0-0)1	(1-0-0)1	(1-0-0)1	1 Credit	
BST601 Summer Internship (6 credits) / Exit option											6	

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## Scheme of Study – MBA 2024-26 (Semester 3&4)

SEM	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8	Course 9	Course 10	General Proficiency	Credits
III	BSL603							BSC---	BSC---		BSR503	
	Strategic Management	Elective 1 (Major)	Elective 2 (Major)	Elective 3 (Major)	Elective 4 (Major) <sup>24</sup>	Elective 1 Minor/Open	Elective 2 Minor/Open	Leadership and Executive Presence (1-0-0)1	Introduction to Consulting (1-0-0)1		GP III	
	(2-0-2)3	3	3	3	3	3	3				1 Credit	
IV							BSC---	BSC---	BSC---		BSR504	
	Elective 5 (Major)	Elective 6 (Major)	Elective 7 (Major)	Elective 8 (Major)	Elective 3 Minor/Open	Elective 4 Minor/Open	Legal Aspects of Business	Introduction to Sustainable Business (1-0-0)1	Global Trends in Management (1-0-0)1		GP IV	22
	3	3	3	3	3	3	(1-0-0)1	(1-0-0)1	(1-0-0)1		1 Credit	
<b>Total Credits MBA Program</b>												<b>101</b>

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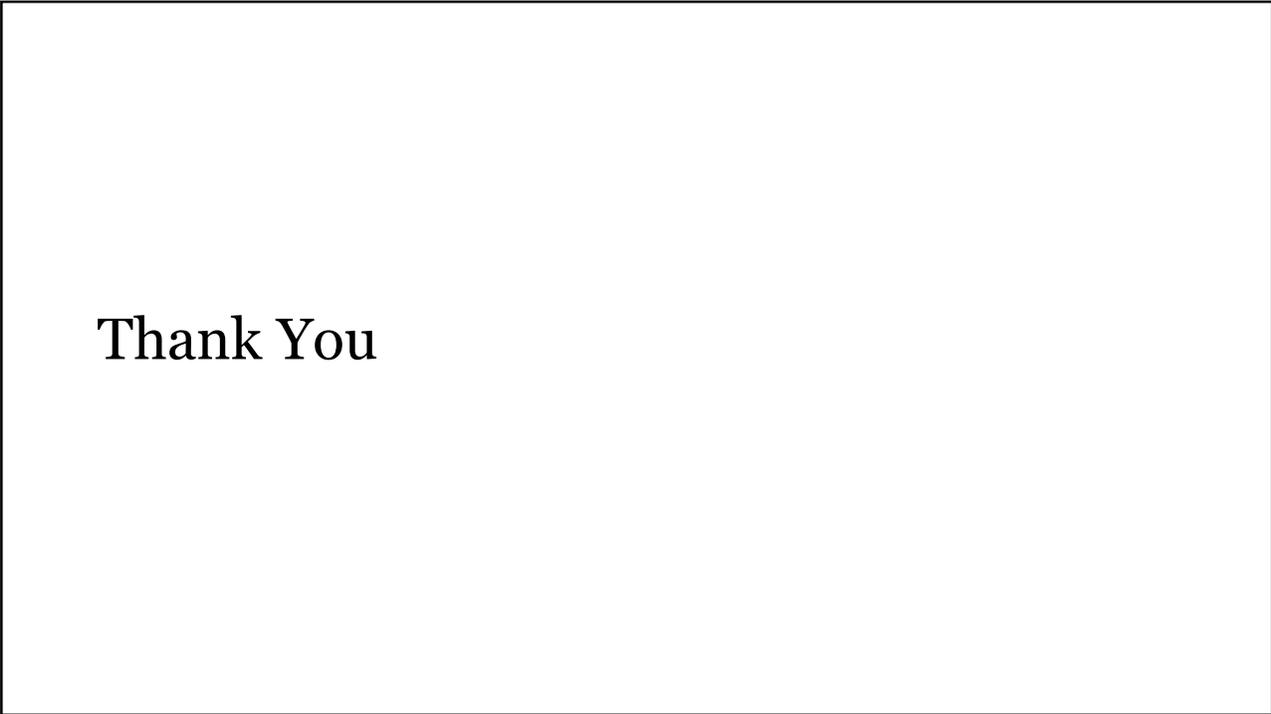
## Proposed Evaluation Scheme

Most courses shall be project-based courses.

Some courses could be done as Theory + Practice / Project courses if a new evaluation scheme (5<sup>th</sup> type) is approved as shown below: (Rationale: IIMs have a flexible evaluation scheme within certain boundary conditions)

S. No.	Type of Course	Particular	Suggested Distribution	Pass Criteria
5	Theory + Practice/Project (L-O-O)/ (L-T-O)/ (L-O-P)	Minor Test	20%	Must secure 30% marks out of combined marks of major test + minor test with overall 40% marks in total
		Major Test	40%	
		Continuous Evaluation Through Class Test / Practice / Assignments/Presentation/Quiz / Online Quiz	40%	

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	<b>THE NORTHCAP UNIVERSITY</b>	REVIEW DATE:
	<b>Inter-Office Memo</b>	SHEET 2 of 5

**GENERAL ACADEMIC CALENDAR FOR SESSION 2024-25**  
**ALL SCHOOLS (ODD SEMESTER, JULY DEC 2024)**

**ALL PROGRAMMES EXCEPT PhD**

Sr. No	Details	From	To
1	Registration of courses for all Programmes for July-Dec 2024	22 July 2024 (Monday)	25 July 2024 (Thursday)
2	Commencement of Classes odd semester (2024-25) for all programmes (Except 1st Year)	29 July 2024 (Monday)	
3	Orientation for First-year students (Batch 2024)	29 July 2024 (Monday)	
4	Induction Programme for first-year students (Batch 2024)	30 July 2024 (Tuesday)	17 August 2024 (Saturday)
5	Summer Internship Evaluation	31 August 2024 (Saturday)	
6	Submission of Final Result (Jan-June 2024) to COE	07 September 2024 (Saturday)	
7	Minor Test (Continuous Evaluations)	21 September 2024 (Saturday)	27 September 2024 (Friday)
8	Submission of Mid Term Attendance up to 20 September 2024.	23 September 2024 (Monday) by 04:00 PM	
9	Issue of Mid-Term Warning to Students for Shortage of Attendance	27 September 2024 (Friday)	
10	Mid-term Project / GP / Community Service Evaluation	30 September 2024 (Monday)	5 October 2024 (Saturday)
11	Aptitude Test	05 October 2024 (Saturday)	
12	Class Committee meetings	7 October 2024 (Monday)	10 October 2024 (Thursday)
13	Submission of checked answer scripts of minor test of COE & uploading of marks on ERP	19 October 2024 (Saturday)	
14	Momentum & Cerebration	24 October 2024 (Thursday)	25 October 2024 (Friday)
15	Open Elective/Programme Elective offered by Departments for Jan-June 2025	4 November 2024 (Monday)	
16	Submission of online feedback by students	11 November 2024 (Monday)	20 November 2024 (Wednesday)
17	Open Elective/Programme Elective to be opted by Students for next semester	11 November 2024 (Monday)	25 November 2024 (Monday)
18	Semester Ends	29 November 2024 (Friday)	
19	Display of pre-major evaluation on ERP	30 November 2024 (Saturday)	

	<b>THE NORTHCAP UNIVERSITY</b>	REVIEW DATE:
	<b>Inter-Office Memo</b>	SHEET 3 of 5

20	Convocation	Last week of November 2024 / First week of December 2024	
21	Submission of final attendance	30 November 2024 (Saturday) by 12:30 PM	
22	Preparation for exam (for students)	30 November 2024 (Saturday)	4 December 2024 (Wednesday)
23	Display of Open Elective / Programme Elective	2 December 2024 (Monday)	
24	List of detained students to be displayed on board / website	3 December 2024 (Tuesday) by 11:00 AM	
25	Major Tests (Regular Exam)	5 December 2024 (Thursday)	18 December 2024 (Wednesday)
26	Evaluation Activities	5 December 2024 (Thursday)	08 January 2025 (Wednesday)
27	Meeting of Timetable in-charges with Dean-Academic Affairs	09 December 2024 (Monday)	
28	Last date of any modification in Open / Programme Elective by students	09 December 2024 (Monday)	
29	Final list of Open / Programme Elective	13 December 2024 (Friday)	
30	Winter Internship (Only for Law)	19 December 2024 (Thursday)	19 Jan 2025 (Sunday)
31	Major Tests (Buffer Exam days for the clashing of Re-appear courses)	19 December 2024 (Thursday)	21 December 2024 (Saturday)
32	Display of Semester Results	08 January 2025 (Wednesday)	
33	Registration of courses for all programme for Jan-June 2025	11 January 2025 (Saturday)	14 January 2025 (Tuesday)
34	Commencement of classes for even semester (2024-25) for all programmes	15 January 2025 (Wednesday)	

	<b>THE NORTHCAP UNIVERSITY</b>	REVIEW DATE:
	<b>Inter-Office Memo</b>	SHEET 4 of 5

PhD PROGRAMMES (ODD SEMESTER)- JULY-DEC 2024			
35	NPET and Interview	29 June 2024 (Saturday)	
36	Display of NPET result of admission list of new applicants for PhD Programme	2 July 2024 (Tuesday)	
37	Last date of Fees submission of new PhD admissions	8 July 2024 (Monday)	
38	Submission of Pre PhD coursework of new scholars, to PhD cell	15 July 2024 (Monday)	
39	Online Registration on ERP for July-Dec 2024 (Scholars without coursework)	22 July 2024 (Monday)	25 July 2024 (Thursday)
	Online Registration on ERP for July-Dec 2024 (Scholars with coursework)	24 July 2024 (Wednesday)	25 July 2024 (Thursday)
40	Commencement of classes Odd Semester (2024-25) for all programmes	29 July 2024 (Monday)	
41	BDR for PhD Programme	21 August 2024 (Wednesday)	
42	SRC conduction window for all PhD Students	1 October 2024 (Tuesday)	22 November 2024 (Friday)
43	DRC of each dept./school	25 November 2024 (Monday)	29 November 2024 (Friday)
44	Submission of SRC forms & DRC formats [July-Dec 2024] and Pre PhD-Coursework finalization [Jan-June. 2025] of old scholars, to PhD cell	9 December 2024 (Monday)	
45	Last date of Application Form submission (Jan-June 2025 admission)	17 December (Tuesday)	
46	NPET and Interview	21 December 2024 (Saturday)	
47	Display of NPET result of admission list of new applicants for PhD Programme	24 December 2024 (Tuesday)	
48	Last date of Fees submission of new PhD admissions	2 January 2025 (Thursday)	
49	Submission of Pre PhD coursework of new scholars, to PhD cell	8 January 2025 (Wednesday)	
50	Online Registration on ERP for Jan-June 2025 (Scholars without coursework)	11 January 2025 (Saturday)	14 January 2025 (Tuesday)
	Online Registration on ERP for Jan-June 2025 (Scholars with coursework)	13 January 2025 (Monday)	14 January 2025 (Tuesday)
51	Commencement of classes even Semester (2024-25) for all programmes	15 January 2025 (Wednesday)	

**Kind Attention:**

**PhD Scholars- The dates for Minor & Major Examinations and Display of Semester Result of the PhD programme will remain same as per the general academic calendar of all programmes.**

	<b>THE NORTHCAP UNIVERSITY</b>	REVIEW DATE:
	<b>Inter-Office Memo</b>	SHEET 5 of 5

SUMMARY OF ACADEMIC CALENDAR		TOTAL NO. OF DAYS
Registration Days		04
Effective Teaching / Learning Days		83
Minor Test (Continuous Evaluations)		06
Preparation for exam		05
Total semester Teaching / Continuous Evaluation		98
Major Test		12
<b>LIST OF HOLIDAYS</b>		
Events	Date	No. of Days
Independence Day	15 August 2024 (Thursday)	01
Raksha Bandhan	19 August 2024 (Monday)	01
Janmashtami	26 August 2024 (Monday)	01
Mahatma Gandhi Jayanti	02 October 2024 (Wednesday)	01
Dussehra + Navami	11-12 October 2024 (Friday-Saturday)	02
Diwali / Govardhan Pooja / Bhai Dooj	31 Oct to 03 Nov. (Thursday-Sunday)	04
Guru Nanak Birthday	15 November 2024 (Friday)	1
Christmas	25 December 2024 (Wednesday)	1
Note: - 1. 14 August 2024 (Wednesday) will work as "Thursday" 2. 8 October 2024 (Tuesday) will work as "Friday" 3. 29 October 2024 (Tuesday) will work as "Friday"		



**MINUTES OF THE XIII MEETING OF  
ACADEMIC ADVISORY BOARD HELD ON 02  
APRIL 2024 (TUESDAY) AT 11:30 A.M.**

**THE NORTHCAP UNIVERSITY  
SECTOR - 23A  
GURUGRAM – 122 017**

## MINUTES OF THE THIRTEENTH ACADEMIC ADVISORY BOARD MEETING HELD ON 02 APRIL 2024 (TUESDAY)

The Thirteenth Academic Advisory Board Meeting was held on **Tuesday, 02 April 2024 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.	Mr. Avdhesh Mishra	Chancellor	Member
3.	Prof. Nupur Prakash	Vice Chancellor	Member
4.	Mr. Shiv Saran Mehra	Governing Body	Member
5.	Dr. Zorawar Daulet Singh	Governing Body	Member
6.	Prof. (Dr.) Ranbir Singh	Founder Vice Chancellor, National Law University, Delhi	External Member
7.	Prof. S. G. Deshmukh	Professor, IIT Delhi	External Member
8.	Mr. Indu Bhaskar	Scientist G & HOD (Retd.) DSIR, Team Leader (TPDU Program), DSIR, New Delhi	External Member
9.	Prof. Karmeshu	Former Professor & Dean, School of Computer & Systems Sciences, JNU, New Delhi	External Member
10.	Prof. Pritam Babu Sharma	Vice Chancellor, Amity University, Gurugram	External Member
11.	Dr. P. S. Rana	Chairman & MD Pathera Developers, Former Chairman CIDC.	External Member
12.	Dr. Pradeep Kumar	Professor, Indian Institute of Technology Roorkee	External Member
13.	Prof. Kehar Singh	Ex.– Dean & Emeritus Fellow, IIT, Delhi	External Member
14.	Ms. Ruby Rajvanshi	Former Director, Hatch India Pvt. Ltd.	External Member
15.	Prof. Anshul Kumar	Honorary Professor, CSE Department, IIT Delhi	External Member
16.	Mr. Nitiraj Singh	Head Strategic Business, NVIDIA, Gurugram	External Member
17.	Mr Sundeep Kumar	Former CEO Craft Baton, Dalmia Group	External Member
18.	Prof. Sharda Vashisth	Dy. Dean International Relations	Special Invitee
19.	Cmde. Diwakar Tomar NM (Retd.)	Registrar	Member Secretary

## WELCOME ADDRESS BY PRO-CHANCELLOR

Pro-Chancellor, The NorthCap University, Prof. Prem Vrat welcomed all members to the Thirteenth Academic Advisory Board Meeting and introduced the new members of the Academic Advisory Board viz. Mr. Sundeep Kumar, ex-CEO-Craft Baton and Ms Kavita Saraswat from World Bank (in absentia). For the benefit of Mr. Sundeep Kumar, Prof. Prem Vrat introduced all members of the Academic Advisory Board, one by one. Prof Prem Vrat also welcomed Dy Dean International Relations Dr Sharda Vashisth as a Special Invitee to the meeting. Prof. Prem Vrat stated that with increasing competition amongst the Higher Education Sector, especially in the Gurgaon region, it's very important for the university to maintain its high educational standards, and requested the esteemed members to put forth their views and suggestions, so that a clear cut roadmap can be established, which the university should follow to remain relevant and elevate its standards to greater heights. 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 then asked the Member Secretary to proceed with the agenda for the day.

## **ITEM NO.1: ACTION TAKEN ON THE TWELFTH ACADEMIC ADVISORY BOARD MEETING HELD ON 03 MARCH 2023**

The member secretary stated that the actions emanating from the 12<sup>th</sup> Academic Advisory Board meeting held on 03 March 2023 were acted upon by the university by clubbing them under 10 distinct categories. The summary of actions taken is given in table below:-

S. No	Category of Action	Actions Taken
1	Research Initiatives and Collaborative Activities	<ul style="list-style-type: none"> <li>16<sup>th</sup> meeting of DST-PURSE Program held in May 2023. Attended by 18 eminent academicians. 66 Research proposals examined. 90 Crore was allocated to 12 proposals.</li> <li>Two-day National Workshop on 'Creating a Multi-Disciplinary Research Environment in HEIs' funded by NAAC and AIU was held in May 2023.</li> <li>A 5-day workshop on "Linear Algebra and its Applications, 2023" was organized in August 2023, with the support of SERB (DST).</li> <li>Sanctioned funds worth Rs 75 Lakhs and USD 2000 for sponsored projects.</li> <li><b>UGC 12(B) Status granted on 21 Mar 2024</b></li> </ul>
2	Introduction of new programs	<ul style="list-style-type: none"> <li>BCA (Media &amp; IT)</li> <li>BCA (Game Development)</li> <li>B.Sc.(VFX &amp; Animation)</li> <li>B.Sc. (Sound Engineering)</li> <li>BSc.(Visual Communication)</li> <li>MCA</li> <li>LLB</li> </ul> <div style="display: flex; align-items: center; margin-left: 20px;"> <div style="font-size: 2em; margin-right: 5px;">}</div> <div> <p>Centre for Media &amp; Entertainment</p> <p>School of Engineering &amp; Tech.</p> <p>School of Law</p> </div> </div>

S. No	Category of Action	Actions Taken
		<p>Programs <b>to be launched in AY 2024-25</b></p> <ul style="list-style-type: none"> <li>• MA(English) Centre for Language Learning</li> <li>• BA(Journalism &amp; Media Production) Centre for Language Learning</li> <li>• MA(Psychology) Department of Psychology</li> </ul> <p><b>Centre for Distance and Online Education (CDOE)</b></p> <ul style="list-style-type: none"> <li>• Established post approval of UGC-DEB in Sep 2023</li> <li>• BBA and BCom</li> </ul>
3	International Conferences	<ul style="list-style-type: none"> <li>• Emphasis on greater participation by Faculty in International Conferences</li> <li>• Faculty participated in more than 20 International Conferences</li> <li>• Organised: <ul style="list-style-type: none"> <li>i. <b>Smart and AI Enabled Technology for Sustainable Development</b> in Sep 2023</li> <li>ii. <b>International Conference on Law &amp; Technology</b> in Mar 2023</li> <li>iii. <b>Sustainability, Technology, Resilience, Innovation, Development &amp; Entrepreneurship STRIDE</b> in Dec 2023</li> <li>iv. <b>International Conference on Recent Trends in Applied and Physical Sciences using Machine Learning</b> in April 2023</li> </ul> </li> </ul>
4	Academic Collaborations and Immersion Activities with International Universities	<ul style="list-style-type: none"> <li>• Collaborations with 31 foreign Universities</li> <li>• Immersion programs held with :- <ul style="list-style-type: none"> <li>➤ Arizona State University</li> <li>➤ Shibaura Institute of Technology, Japan</li> <li>➤ Esa Unggul University, Indonesia</li> </ul> </li> <li>• Dual degree, student mobility, International internship and more immersion programmes planned this year.</li> </ul>
5	Faculty Development Programs	<ul style="list-style-type: none"> <li>• FDPs have been conducted throughout the year..</li> <li>• On topics ranging from Technology, Research Methodology, Design Thinking, Contemporary Legal Systems to Data Analytics, Multidisciplinary Research, Capacity building and Leadership.</li> </ul>
6	Sustainability	<ul style="list-style-type: none"> <li>• Winner of <b>Exemplary Performance Award for Existing Buildings</b> by the Ministry of New and Renewable Energy.</li> <li>• Conferred <b>A Grade</b> and <b>Gold ranking</b> by R World Institutional Ranking as a <b>Sustainable Institution of India</b>.</li> <li>• Introduced certificate programme on '<b>Sustainable Development</b>'.</li> </ul>

S. No	Category of Action	Actions Taken
7	Strategic Implementation of Blended Teaching-Learning	<ul style="list-style-type: none"> <li>• Incorporate innovative teaching and learning methods.</li> <li>• Incorporate online teaching into on-campus programmes.</li> <li>• Courses offered in blended mode.</li> <li>• Reduces face to face lecture commitments, allowing faculty to focus on research.</li> </ul>
8	Community Service	<ul style="list-style-type: none"> <li>• 05 Villages adopted under the Unnat Bharat Abhiyan.</li> <li>• Rendering assistance through MOU with NGO, and through own efforts.</li> <li>• Visits to orphanage</li> <li>• Cleanliness drive in neighbourhood of Univ through social media influence.</li> <li>• Cancer screening, self-defence, tree plantation, water conservation activities etc.</li> </ul>
9	Establishment of NCU School of Business	<ul style="list-style-type: none"> <li>• Established in Aug 2023.</li> <li>• To provide High Quality education in Business Studies.</li> <li>• Dean plus 09 faculty members, including Professors of Practice appointed.</li> <li>• AICTE approval in progress</li> </ul>
10	Mental Health and Well Being	<ul style="list-style-type: none"> <li>• Aligned to recent thrust of Govt/ UGC on mental wellbeing of Faculty and Staff</li> <li>• A dedicated <b>professional Psychologist</b> has been onboarded in Nov 2023.</li> <li>• Regular workshops are being organised for students and staff, along with personalized 'one on one' sessions, on individual requests/ where considered necessary.</li> </ul>

## ITEM NO.2: PRESENTATION OF ANNUAL REPORT BY HON'BLE VICE CHANCELLOR NCU

Prof. (Dr.) Nupur Prakash briefly outlined the evolution of The NorthCap University over the last 26 years, starting from its journey as the Institute of Technology and Management (ITM) to its current avatar of being a leading private university of North India. In her annual report she touched upon the following aspects:

- Rankings, recognitions and prominent Quality benchmarks.
- QS I Gauge ratings of Platinum Badge in Engineering Category, Diamond Badge in University Category, Gold Badge for Law & Legal Studies, and Gold Badge for Management & Liberal Studies in 2023.
- Achievements in Sustainability and Green ratings.
- MoUs with various Universities and leading industries.
- New programs introduced in 2023, and those being launched in Academic Session 2024-25.

- Improved performance in research outcomes viz. publications, patents and cumulative H-index of greater than 30, making the university eligible to receive grants under the DST FIST and PURSE routes.
- Increase in PhD enrolments.
- Completed and ongoing research projects, grants sanctioned and consultancies.
- Internationalization activities at NCU.
- International Conferences.
- Important events such as Masterclass series, Faculty Development Programs, Technovation, Principals Conclave, Momentum, students' achievements etc.
- Convocation 2023.
- Fee Concession and Scholarship Distribution Ceremony, Hatch Scholarship for Girl students in STEM education.
- 'Lifetime Achievement' award and 'Amongst 100 Great IITian' award conferred upon Prof. Prem Vrat, 'Sherpa Kulpati' award and 'National Academic Achievement' award conferred upon Prof Nupur Prakash and 'Life-time Teaching Achievement' award and 'The Diversity and Empowerment Laureate' award conferred upon Prof Manjula Batra.
- Recruitments and Alumni Engagement
- Way forward.

Prof. (Dr.) Nupur Prakash then invited suggestions from the esteemed members on further improving the performance and academic outcomes of the university.

#### **Points discussed by the members:**

1. **Prof. P B Sharma:** He congratulated the Vice Chancellor for the remarkable achievements of the university. He also congratulated the Pro Chancellor Prof Prem Vrat for his outstanding contributions not only to the NorthCap University but also to various IITs and in different forums/ bodies at the national level. He stated that we are now in the age of transformation, and therefore we need to identify what transformations we want, and how to achieve them. He suggested that the full potential of faculty should be utilised to achieve the desired transformations.
  - He observed that the ratio of UG to PG students in NCU is not favourable as compared to other leading universities, and there is a need to bridge this gap.
  - NCU's applications/ proposals for research should also align themselves with National Missions & the needs of the nation, as the same on fructification can be game changers.
  - There should be a greater contribution from the PG student and research scholars towards activities that can lead to nation building.
  - Optimization in our work has been a standard practice so far, but now we need to incorporate 'maximization' in our endeavours too, and the efforts should be to maximize what we have, what we plan to do and what we aim to achieve.
  - Whilst it is important to be ambitious in our endeavours, it is also necessary to have clarity in the strategic planning required to achieve the desired goals, based on available resources and methods to be adopted to achieve them,
  - NCU should consider greater involvement in activities that align to the nation's priorities like focus on semi-conductor technology, make in India mission, Start-up mission etc.

2. **Prof. Ranbir Singh:** Whilst appreciating the annual report presented by Prof. (Dr.) Nupur Prakash, he stated the following:
- The visibility of NCU still is predominantly through its Engineering programmes, and efforts need to be taken to enhance the reputation of the School of Management & Liberal Studies and Schools of Law.
  - It is seen that NCU has several MOUs with International universities, but there is a need to have more MOUs with National universities/ organisations.
  - NCU should consider more programmes on outcome-based education.
  - More summer programmes should be conceived in conjunction with other institutions, which can also serve to showcase the capabilities of NCU.
  - There is need to increase the number of senior faculty members in the school of Law.
3. **Prof. PS Rana:** He mentioned that it was heartening to see the upward trend in the growth and quality of the university: Prof Rana further brought out the following:
- NCU should enhance its research activities and should identify its strong points/ areas of research that it is best at, and conduct annual conferences in those fields.
  - Take up Green Hydrogen as a focus area for skill development as well as research activities. In the coming times there is going to be a requirement for a large pool of skilled resources in various fields related to green hydrogen and clean energy.
4. **Prof. SG Deshmukh:** He complimented team NCU for the impressive strides taken towards improving the educational offerings in the past one year, which have resulted in laurels for the university. He further suggested the following:
- Industry 4.0 and related manufacturing technologies involving collaborative manufacturing should be pursued by the university. He further stated that Prof Prem Vrat has made concrete recommendations to the Govt. of India in this field, and activities in line with the same can be undertaken by the university.
  - Being located in the sports hub of the country, viz. Haryana, the university should examine starting a dedicated programme in Sports Analytics.
  - In the sustainability slide, achievements in 'each' Sustainability Development Goal (SDG) should be highlighted for better appreciation of all.
5. **Ms. Ruby Rajvanshi:** She complimented the management of NCU on the remarkable work done by the university in the past one year. Giving an industry perspective to the forum, she brought out that she does not see much visibility of core engineering disciplines in the offerings of NCU. Core engineering disciplines facilitate creating the basic infrastructure framework of any country, and the lack of such programmes she felt, will gradually erode our capability to make and sustain basic engineering structures and technologies. She also brought out that the industry is already facing a shortage of qualified technical professionals in this field. Prof Prem Vrat stated that the courses in basic engineering disciplines like mechanical, civil, electrical etc. were run by the university in the past, but had to be discontinued because of a significant drop in demand for these courses. He however suggested that one can examine reviving them at the post graduate level, and the industry could support this endeavour by encouraging its employees to do part time MTech courses. This endeavour may later percolate down to restarting of these programmes at the undergraduate level also, if the demand arises.

6. **Prof. Anshul Kumar:** The Professor appreciated the progress made by the university and stated that he was glad to observe that suggestions made during the last Academic Advisory Board meeting have been acted upon, particularly those pertaining to research and international conferences. He however stated that much more needs to be done and sustained efforts are required to be taken to reach the next higher level. In this regard he suggested that weak areas that need attention should be identified, and targets set for improving each of them. Suitable roadmaps should then be drawn up to achieve the desired outcomes, and the same should be pursued by working in a focused and time bound manner.
7. **Prof. Pradeep Kumar:** The professor said that the annual report presented by the Hon'ble Vice Chancellor was very impressive and all parameters of performance have been touched upon. He further stated that we must focus on each parameter more deeply and examine the real impact of them. As an example, he stated that out of the various patents filed, how many have been awarded. Likewise, out of the various papers published, how many were in reputed journals (Scopus indexed etc.). He suggested the following:
- While it was indicated that various companies visited the campus for placements, the actual number of placements made, streamwise, should be presented, which would give a clearer picture of the performance of various programmes. He stated that this information would be very useful and could also be linked back to the admissions process, as the two are interlinked. The Vice Chancellor clarified that comprehensive placements data is available and was in fact presented in a detailed manner to the UGC, during the UGC's inspection of the university for granting approval under section 12(b) of the UGC Act of 1956 in September last year.
  - Being strategically located in the heart of the industrial hub of Gurugram, NCU should consider starting 'Executive Programmes' for working professionals.
8. **Dr. Kehar Singh:** He complimented the university management and faculty for their sustained efforts over the past few years in bringing the university to its present position of strength. He thereafter brought out that certain areas where other universities have made good progress and where NCU needs to do more are:
- Being a non-residential university, the time available to faculty for research is less as compared to residential universities. Therefore, those faculty members who have shown a strong inclination and good aptitude for research, should be given lesser teaching load, say for a semester, so that they can focus their efforts and energy on research activities.
  - More emphasis on research activities will improve the ranking of the university not only in Haryana, but also at all India level.
  - At least one dedicated research scientist/ professor in each discipline of Basic sciences should be appointed to facilitate high quality research.
9. **Mr. Indu Bhaskar:** He observed that as compared to last year, there has been a significant improvement in the performance of the university on all fronts, and complimented NCU for the same. He also stated that having PhD scholars from organisations like ISRO and NTRO is a remarkable achievement. He further brought out the following:
- Placements in all institutions has shown a downward trend in recent times. Manpower downsizing is prevalent not only in India but globally as well, though the situation is expected to improve in 02 years.
  - The SERB has been repealed and subsumed in the National Research Foundation (NRF). Funds for research would now be available through NRF, which has a financial outlay of approx. Rs 80000 Cr, with an initial seed fund of Rs 2000 Cr. NCU will have to accordingly make suitable

pitch for research funds from NRF. He further brought out that NRF can source funds from private entities also. The Vice Chancellor informed that CSR funds will now also come in the ambit of NRF.

**10. Mr Nitiraj:** He congratulated the university for its recent achievements. He noted that research and research projects have shown an upward trend which augurs well for the university. He further suggested the following:

- NCU must focus its attention on programmes/ issues that will pay maximum dividends. The university must therefore be choosy and selective in identifying priorities and their respective way ahead.
- NCU must also focus on national issues and not just those of its own. As examples, he said that the National AI mission and National Quantum mission both rely heavily on Artificial Intelligence (AI), and NCU could therefore prioritize AI over other fields.
- Private institutions are investing heavily in AI. Several educational institutions use AI in their admissions and placements.
- AI can be used for Skill development. This would however require creation of necessary infrastructure. A robust and modern AI infrastructure would enable the students of NCU to have hands on training in AI and AI related fields, greatly enhancing their skills and employment prospects.
- If required, a separate brainstorming session focused purely on AI could be held.

**11. Mr Sundeep Kumar:** At the outset Mr Sundeep Kumar thanked the management of the university for getting him onboard as a member of the Academic Advisory Board. He thereafter expressed his views as follows:

- A university is best known from the quality of its students, and therefore it was necessary for the university to attract the best students. The university must therefore have that 'something extra' which makes it 'stand out' from the rest, which attracts the best students. So cutting edge offerings could be one option and the same should be identified by NCU. The student must get the belief that 'whatever' is the latest technology in the market, its best offerings are available at NCU. This also has an impact on recruiters, as they have a commensurate and corresponding confidence in the capabilities of the university.
- NCU should be known for specializations in its curriculum.
- One sure way to attract the brightest students is to have a good placements record, and NCU should look at improving the branding and positioning.
- The university should take necessary steps to improve its NIRF ranking, as from a prospective student's point of view, it is very important.

**12. Prof. Karmeshu:** He stated the following:

- Collaborative research should be encouraged as it is a non-zero-sum game and excitement of doing research should be driven from passion for research, and not just from the point of view of being number one in a field.
- Research at undergraduate level is also possible and students with this spark can be encouraged to do so. If papers can be published by undergraduate students, it gives good visibility to the university and may help in rankings.
- SDG goal 14 relates to ocean. Lot of research is being done by the Naval Research Board (NRB) of DRDO and the Naval Scientific and Technological Laboratory (NSTL) on subjects

related to ocean engineering and technology. The university could look at introducing a course in Ocean modelling etc.

- Analytical skills in mathematics are very poor these days and students should be encouraged to improve the same. A Mathematics club in the university could be set up for this purpose. He also suggested introducing a Statistics curriculum in the Mathematics department.

13. Besides the expert observations listed above, the following observations were also made:

- (a) **Mr Avdhesh Mishra.** The Chancellor stated that NIRF rankings are very important in present times and sought the assistance of the esteemed members of the Academic Advisory Board to help in improving the 'perception scores' of the university, whenever the opportunity arises/ presents itself. This would make a positive impact on the ranking of the university.
- (b) **Mr Shiv Saran Mehra.** Mr Mehra stated that the university should look at redundancies in the present programmes and focus more on modern and emerging technologies to make the offerings relevant and attractive for the students. He also brought out that private universities of Haryana are losing out in participating in several important national level activities espoused in NEP 2020 (like offering programmes in open and distance learning mode, setting up off campus centres etc.) since the state government through their Act does not allow them from doing so. He exhorted the esteemed members of the Academic Advisory Board to use their influence of being on several important government bodies to alleviate this skewed approach, so that the private universities get a level playing field in this regard.
- (c) **Dr Zorawar Daulet Singh.** Dr Zorawar stated that for a self-financed university it is very important to select the programmes carefully and then maximize the focus on them. NCU should seek to be a market leader in select programs. Being one stop shop of offerings only works if couple of highly value added and sought after programmes elevate the overall brand in the broader ecosystem. He also stated that acquiring accreditations by themselves do not create a positive market perception and excellence, and internal goals with a targeted approach to chase few clear objectives, are very necessary.

**The Governing Body members thanked all members of the Academic Advisory Board for the important suggestions given by them.**

### **ITEM NO.3: ENHANCING THE BRAND NCU FOR FULLY REALIZING ITS VISION STATEMENT**

The Member Secretary informed the members that aspects pertaining to enhancing the brand of NCU for fully realizing its vision statement were inherently deliberated during discussions that ensued post presentation of the Annual report by the Hon'ble Vice Chancellor. Based on the discussions, some of the issues which could lead to improving the brand positioning of the university, directly or indirectly, are:

- Introducing more specializations
- Improving placements
- Aligning NCUs endeavours with National endeavours; like AI mission, Quantum mission etc. for better visibility
- Strengthening and furthering international collaborations with foreign universities to dual degree programs etc.

- Starting Executive programmes for working professionals.
- Expanding the AI offerings
- Improving the UG to PG ratio in the university by enhancing enrolments of PG and PhD students.
- Improving NIRF ranking
- Preparing Institutional Development Plan and vision document.

**All members of the Academic Advisory Board agreed with the suggested measures for enhancing the brand of NCU for fully realizing its vision statement.**

**ITEM NO. 4: DISCUSSIONS ON MAJOR REFORMS IN ACCREDITATION OF HIGHER EDUCATION INSTITUTIONS PROPOSED BY DR. K. RADHAKRISHNAN, FORMER CHAIRMAN, ISRO COMMITTEE. (BASE DOCUMENT ATTACHED).**

The member secretary briefed the members about the salient features of the major reforms in accreditation of higher education institutions proposed by the standing committee under the chairmanship of Dr K Radhakrishnan, former chairman ISRO formed by the Ministry of Education, Government of India to review the existing process. He brought out that these reforms have been proposed to adopt a simple, trust-based, credible, objective and rationalized system for approval, accreditation and ranking of HEIs, with a technology-driven modern system that could replace or minimize manual involvement to make the accreditation process transparent and integrate the inputs of the stakeholders. The broad contours of the proposed reforms are:

- (a) Binary Accreditation (Either accredited or not accredited) rather than grades with an aim to encourage all the institutions to get on-boarded in the accreditation process thereby creating a quality culture in the higher education system.
- (b) Maturity-Based Graded Accreditation (Level 1 to 5) to encourage accredited Institutions to raise their bar, continuously improve, evolve in-depth or in-breadth in disciplines from 'Level 1' to 'Level 4' as Institutions of National Excellence, and then to 'Level-5' i.e. Institutions of Global Excellence for Multi-Disciplinary Research and Education. The metrics for both Binary and Maturity-Based Graded Accreditation shall focus on Processes, Outcomes and Impact across different attributes of HEIs (instead of mere input-centric). The new process shall consider the heterogeneity of HEIs in the country, categorize them based on their orientation/vision and heritage/legacy, and then seek information from the HEIs that are appropriate for their category rather than a one-size-fits-all model. There will be a special focus on rural and remote location institutions through mentoring and handholding.
- (c) One Nation One Data Platform has been proposed as part of the reform to ensure integrity and transparency in handling institutional data. To improve the validity and reliability of the data "Stakeholder validation" has been proposed to effectively integrate stakeholders as part of the accreditation and ranking process. The system shall be based on Trust and Data Driven with minimal visits to an institution for verification; however, carrying heavy penalties on giving wrong submissions.

The member secretary brought out the recommended reforms shall be implemented in two stages. In the first stage, the Binary accreditation will be implemented by May 2024 and no new applications will be accepted as per the present methodology thereafter. Institutions that have already applied and are applying in the next four months shall have the option to either go by the present process or by the new methodology of binary accreditation. The Maturity based Graded levels will be implemented by December 2024. All the recommendations are proposed to be fully implemented before the end of 2024. A target of 50% GER in higher education by 2037 has been set, along with enhancing the quality of education which is of paramount importance to the nation. The Base document of the proposed transformative reforms is attached as **Annexure 1**.

#### Points discussed

- Prof Prem Vrat brought out that the present accreditation system was inherently flawed, as a result of which reputed institutions like IISC Bangalore were ranked lower than some ordinary institutions of Noida. He emphasized that binary ranking at best should suffice, as institutions had the choice/ right to get accredited. Having said that, he opined that every institution must internally strengthen itself, because each institute knows its strengths and weaknesses best, and can take suitable actions accordingly. He queried as to the period for which the accreditation/ ranking would be valid, viz. 05 years etc.
- The Vice Chancellor stated that more details about the actual process and timelines will be available sometime in May 2024, with the final implementation by end 2024. She further highlighted that the new process aims to adopt a light but tight methodology of assessment, focused on outcomes and processes with minimal human intervention in terms of virtual assessment visits to campus etc.
- Prof PB Sharma opined that the proposed changes were hardly transformative in nature and that the standing committee has failed to achieve the intended purpose for which it was constituted in the first place.

**The members deliberated and debated the proposed transformative reforms by NAAC.**

#### **ITEM NO. 5: PRESENTATION BY DR. SHARDA VASHISTH, DY DEAN INTERNATIONAL AFFAIRS ON INTERNATIONAL COLLABORATIONS AT NCU, AND THE CHALLENGES FACED.**

Dr Sharda Vashisth, Dy Dean International Affairs made a presentation (**Annexure 2**) on the endeavours and steps taken by NCU in internationalizing the education environment in the university and in the process providing a high quality, diverse and modern experience to its student. She highlighted the following:

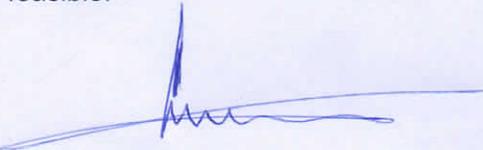
- International partners
- Immersion programmes
- Semester Exchange/ Research Exchange/ Internship Programs
- Pathways
- Challenges faced

Dr Sharda gave a detailed overview of the above aspects, highlighting some of the recent achievements under each category. She also informed the members of some of the ongoing dual degree/ pathway programmes under discussion, which are expected to fructify soon.

**All members of the Academic Advisory Board appreciated the significant steps taken by NCU at internationalising the education experience for its students.**

#### **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 schedules and providing valuable suggestions during the meeting. He stated that the University shall make all efforts to incorporate the recommendations to the maximum extent feasible.



**Commodore Diwakar Tomar NM (Retd.)**  
**Registrar**  
**Member Secretary**



## Major Reforms in Accreditation of Higher Education Institutions

Press Release Dt. 27 January 2024

The Indian higher education system is transforming rapidly through the implementation of National Education Policy (NEP 2020). A target of 50% GER in higher education by 2037 is set, along with enhancing the quality of education which is of paramount importance to the nation. The top Indian institutions are expected to compete with the best in the world. Achieving higher levels of quality is dependent upon processes such as the teaching-learning, research & Innovation, motivated teachers, enhancing employability skills, equity and societal integration, academic ambience, commitment to sustainability rather than mere infrastructure and inputs.

Accreditation and Ranking is an integral part of the transformation of higher education in India. In major development, the Ministry of Education, Government of India constituted an overarching committee with Dr. K. Radhakrishnan, Former Chairman of ISRO and Chairperson, Standing Committee of IIT Council as Chairman in November 2022 to propose transformative reforms for strengthening Assessment and Accreditation of higher education institutions in India.

The preliminary report of the committee was placed on the Government of India website for public consultation. The final report, incorporating several feedback received from stakeholders, was presented to the Hon'ble Minister of Education, Government of India *Shri. Dharmendra Pradhan* on 16th January 2024 which has been accepted by the Minister.

A set of transformative reforms have been proposed to strengthen the periodic approval, assessment & accreditation, and ranking of 'All HEIs' of India. These reforms have been proposed with a strategic intent to be consistent with the Vision of NEP 2020, adopt a simple, trust-based, credible, objective and rationalized system for approval, accreditation and ranking of HEIs, with a technology-driven modern system that could replace or minimize manual involvement to make the accreditation process to be transparent and integrate the inputs of the stakeholders. The recommendation also focuses on mentoring and incentivizing schemes for raising their participation as well as accreditation levels, towards eminence, significance and global acclaim.

The following are the salient features of the recommendations:

**Binary Accreditation** (Either accredited or not accredited) rather than grades with an aim to encourage all the institutions to get on-boarded in the accreditation process thereby creating a quality culture in the higher education system. The binary accreditation is also in line with the best practices followed from many leading countries in the world.

**Maturity-Based Graded Accreditation** (Level 1 to 5) to encourage accredited Institutions to raise their bar, continuously improve, evolve in-depth or in-breadth in disciplines from 'Level 1' to 'Level 4' as Institutions of National Excellence, and then to 'Level-5' i.e. Institutions of Global Excellence for Multi-Disciplinary Research and Education. The leveled accreditation shall enable Indian institutions to significantly improve their quality and position themselves among global top institutions.



The metrics for both Binary and Maturity-Based Graded Accreditation shall focus on Processes, Outcomes and Impact across different attributes of HEIs (instead of mere input-centric). The new process shall consider the heterogeneity of HEIs in the country, categorize them based on their orientation/vision and heritage/legacy, and then seek information from the HEIs that are appropriate for their category rather than a one-size-fits-all model. There will be a special focus on rural and remote location institutions through mentoring and handholding.

**One Nation One Data Platform** has been proposed as part of the reform to ensure integrity and transparency in handling institutional data. The new platform shall capture superset of data from HEIs for the varied purposes (of approval, accreditation, ranking) with an in-built design for collateral cross-checking to check authenticity of data. In addition, to improve the validity and reliability of the data “Stakeholder validation” has been proposed to effectively integrate stakeholders as part of the accreditation and ranking process.

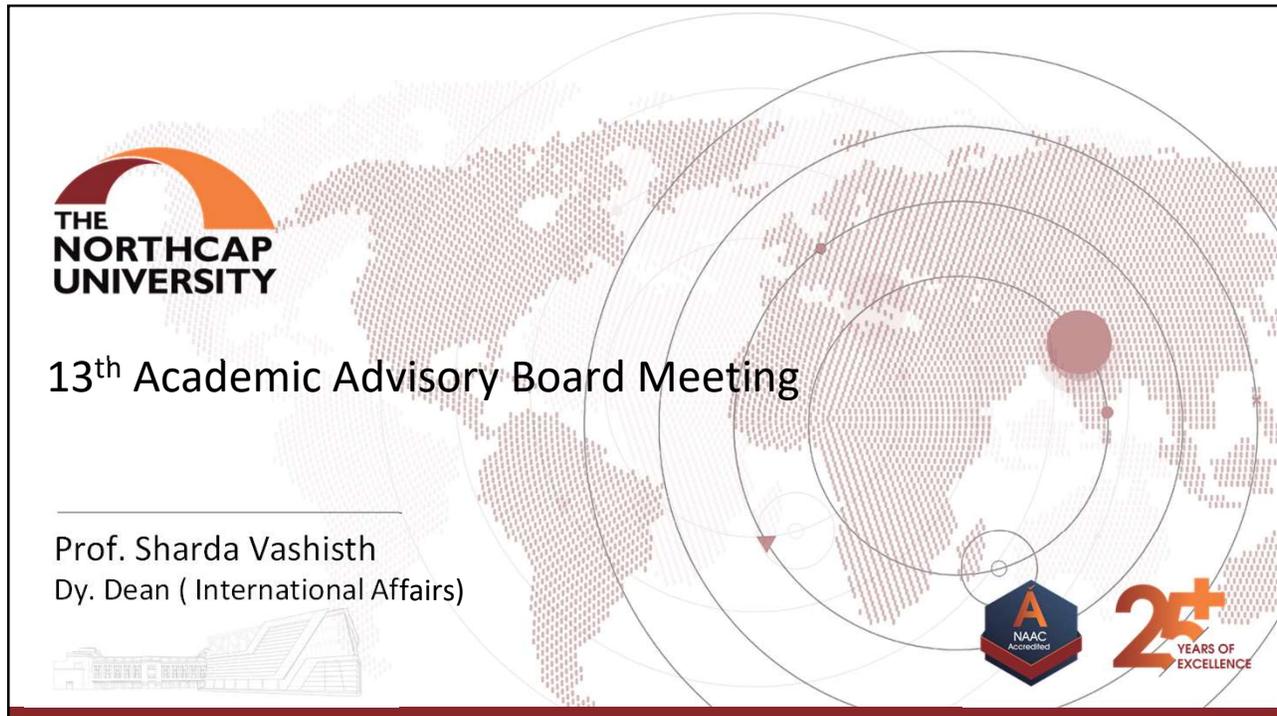
The system shall be based on Trust and Data Driven with minimal visits to an institution for verification; however, carrying heavy penalties on giving wrong submissions. In addition, there will be provision for customized ranking based on stakeholders such as industry, funding agencies, students etc.

The Executive Committee of NAAC (National Assessment and Accreditation Council) in its 104<sup>th</sup> meeting held on 27 Jan 2024 decided the following.

The recommended reforms shall be implemented in two stages. In the first stage, the Binary accreditation will be implemented in the next four months and no new applications will be accepted as per the present methodology thereafter. Institutions that have already applied and are applying in the next four months shall have the option to either go by the present process or by the new methodology of binary accreditation. The Maturity based Graded levels will be implemented by December 2024.

The methodologies and formats are being redesigned based on recommendations of Dr. Radhakrishnan committee report and the same shall also be reflected in the data collection and validation process using One Nation One Data Platform making the system friendly, easy and smooth.

By implementing all the recommendations comprehensively before the end of 2024, the Indian higher education system will be making a transformation, enhancing the quality and credibility of Indian institutions and thereby contributing to the socio-economic leadership of India as part of *Amrit Kaal* vision of Honourable Prime Minister *Shri Narendra Modi*.



**THE NORTHCAP UNIVERSITY**

## 13<sup>th</sup> Academic Advisory Board Meeting

Prof. Sharda Vashisth  
Dy. Dean ( International Affairs)



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### Outline of the Presentation



- International Partners
- Immersion Programs
- Semester Exchange/Research Exchange/Internship Programs
- Pathways
- Challenges

[www.ncuindia.edu](http://www.ncuindia.edu)

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## International MOUs

Partnership with 32 international universities


3

	<h3>MOUs under discussion</h3>	

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## Immersion Programs 2023-24

S. No.	University/Country	Dates
1	Arizona State University, USA	19 – 30 June, 2023
2	Esa Unggul University, Indonesia	23 – 29 July, 2023
3	Shibaura Institute of Technology, Japan	29 July- 5 Aug 2023
4	11th ASIAN YOUTH Leaders Travel and Learning Camp (AYLTLC), Singapore	15-19 Feb 2024

# 3 More Immersion Programs are open for nomination

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## Semester Exchange

University	Semester	
	Spring 23	Fall 24
Shibaura Institute of Technology, Japan	3	4
University of North Florida, USA	2	2
Sunway University, Malaysia	1	Open for nomination
Other Cintana alliance universities	-	Open for nomination

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Research Exchange/Internships

University	Summer 2024
Shibaura Institute of Technology, Japan	2 nominated + Nomination open throughout the year
Coventry University, UK	2
Texas University, USA	1
Bocconi University, Milan, Italy	2





**Università Bocconi**  
MILANO

7

Dual Degrees  
Accelerated degrees





**Ripudaman Singh**

***Congratulations***

**Accelerated Master's Program 2023**

Master's in Software Engineering program



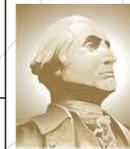

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## Dual degrees/Pathway programs under discussion

S. No.	University/Country	Programme	Pathway
1	Salem State University, Massachusetts, USA	1. BTech(CSE) 2. BCA	2+2
2	Queensland University of Technology, Brisbane, Australia	BTech(CSE)	2+2
3	The George Washington University, USA	MBA BBA BTech	1+1 3+1 4+1
4	Raymond A. Mason School of Business-William and Mary, USA	BCom BBA	3+1
5	Loyola Marymount University, Los Angeles, USA	BTech LLM BBA/Bcom/BA Psychology	3.5+1.5 Acceptance of 3 year degree program to Master's
6	University of East Anglia, Norwich, United Kingdom	BTech(CSE) Full Stack BBA/Bcom/BA Psychology	2+2/3+1



NORWICH UNITED KINGDOM



THE GEORGE WASHINGTON UNIVERSITY  
WASHINGTON, DC

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## Challenges faced

- ❖ Despite the agreement between ASU and Cintana to **exempt English proficiency tests**, student enrolling in the Accelerated Master's in Software Engineering program at ASU has not been granted this exemption.
- ❖ We have **not received an encouraging response** from our partner universities regarding the NCU immersion program.
- ❖ The articulation process for mapping courses for dual degrees and pathways is **progressing slowly** due to the delayed responses from our partners.

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## 2023 : International Student Startup Competition

NCU hosted students from international universities from Philippines, Indonesia, Ecuador and Montenegro for a week-long startup competition where the winners **were awarded the Summer Immersion Programme to Arizona State University.**



University of Dinja Gorica (Montenegro)



Universitas Esa Unggul (Indonesia)



Universidad Internacional del Ecuador



Mapúa University (Philippines)

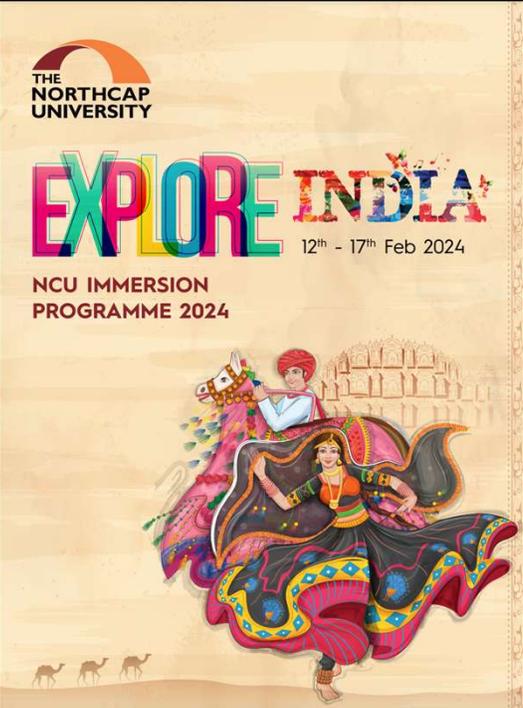




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### NCU Immersion Program 2024

- 12-17 Feb 2024
- Program Fee: \$500
- Flyer and Brochure were approved on **17<sup>th</sup> November 2023**
- Information shared with all partner universities



EXPLORE INDIA

12<sup>th</sup> - 17<sup>th</sup> Feb 2024

NCU IMMERSION PROGRAMME 2024

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**THE NORTHCAP UNIVERSITY**

**15 May 2024**

**THE XXXIV MEETING OF ACADEMIC COUNCIL**

Nitin Malik  
Dy. Dean (RDIL & PhD)

NAAC Accredited A

25+ YEARS OF EXCELLENCE

1

**THE NORTHCAP UNIVERSITY**

**Index**

1. Amendments in PhD rules and regulations
2. Ph.D. Admissions in Jan-June 2024
3. Ph.D. Viva-voce held in 2024

NAAC Accredited A

25+ YEARS OF EXCELLENCE

2

1

## 1. Amendments in PhD rules and regulations



a) The Ph.D. Degree in NCU shall be awarded discipline wise which are as follows.

Current	Revised
<ul style="list-style-type: none"> <li>Ph.D. in Engineering and Technology</li> <li>Ph.D. in Applied Sciences (Physics/ Chemistry/ Mathematics)</li> <li>Ph.D. in English</li> <li>Ph.D. in Management Studies</li> <li>Ph.D. in Legal Studies</li> <li>Ph.D. in Liberal Studies</li> </ul>	<ul style="list-style-type: none"> <li>Ph.D. in Engineering and Technology</li> <li>Ph.D. in Applied Sciences (Physics/ Chemistry/ Mathematics)</li> <li>Ph.D. in English</li> <li>Ph.D. in Management Studies</li> <li>Ph.D. in Legal Studies</li> <li><del>Ph.D. in Liberal Studies</del></li> <li><b>Ph.D. in Economics</b></li> <li><b>Ph.D. in Psychology</b></li> </ul>



3

b) Addition of Chartered Accountant (CA) / Company Secretary (CS) / Cost and works accountants (ICWA) as eligibility for PhD admission in SOM&LS



Chartered Accountant (CA) / Company Secretary (CS) / Cost and works accountants (ICWA) degree with minimum 55% marks in aggregate or equivalent CGPA.

 विश्वविद्यालय अनुदान आयोग University Grants Commission (विश्व शिक्षण, विश्व शांति) (Ministry of Education, Govt. of India) संसदीय मंत्रालय, नई दिल्ली-110002 Bhamburda Street, Calcutta House, New Delhi-110002 Ph. - 011-23226288/23293337 Fax - 011-232218698 Email - ugc@ugc.gov.in	 भारत सरकार Ministry of Education D.O.No.9-35/2016 (CPP-1D)	15 <sup>th</sup> April, 2021
<b>PUBLIC NOTICE</b>		
<b>CA / CS / ICWA Qualification to be treated equivalent to PG Degree</b>		
UGC had received requests from the Institute of Chartered Accountants of India, the Institute of Company Secretaries of India and the Institute of Cost Accountants of India to consider the qualification being awarded by them, i.e., Chartered Accountant (CA), Company Secretary (CS) and Cost and Works Accountants (ICWA) respectively, equivalent to Post Graduation Degree.		
The Commission in its 550 <sup>th</sup> meeting held on 18 <sup>th</sup> February, 2021 decided that:		
<b>"CA/CS/ICWA qualification be considered equivalent to PG Degree."</b>		
 (Rajnish Jain)		

4

2

### c) Direct admission to PhD Program after Four Years Undergraduate Program (FYUP) in Applied Sciences and SoL



- As of now, direct admission to PhD program after FYUP is available in Engineering and SOM but not in Applied Sciences and SoL
- Additionally, the eligibility for direct admission to PhD program after FYUP has been
  - 1) Qualifying degree in relevant branch
  - 2) From institute or university within 100 NIRF ranking or NAAC grade A/A+/A++ in the year of consideration
  - 3) Minimum 8.5 CGPA or equivalent percentage in aggregate.



5

Cont. ...



This has been revised across all domain / schools

- Four-year undergraduate degree in any branch with minimum 75% marks in aggregate or equivalent CGPA.
- The credits to be earned in such cases varies between 26 and 40 credits depending upon the competency of the scholar as decided by the DRC/SRC of the scholar



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### d) Re-registration in PhD after 6 years as per UGC Rules & Regulations



#### As per UGC

“A maximum of an additional two (2) years can be given through a process of re-registration as per the Statute/Ordinance of the Higher Educational Institution concerned; provided, however, that the total period for completion of a Ph.D. programme should not exceed eight (8) years from the date of admission in the Ph.D. programme.

Provided further that, female Ph.D. scholars and Persons with Disabilities (having more than 40% disability) may be allowed an additional relaxation of two (2) years; however, the total period for completion of a Ph.D. programme in such cases should not exceed ten (10) years from the date of admission in the Ph.D. programme.

#### Adopted

**“A maximum of an additional two years can be given through a process of re-registration as per the PhD Rules & Regulations provided that the total period for completion of a Ph.D. programme should not exceed eight years from the date of admission in the Ph.D. programme.”**

Provided further that, female Ph.D. scholars and Persons with Disabilities (having more than 40% disability) may be allowed an additional relaxation of two years; however, the total period for completion of a Ph.D. programme in such cases should not exceed ten years from the date of admission in the Ph.D. programme.”

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### e) Weightage of qualifying degree marks and interview in accordance with UGC rules & regulations.



Candidates who have valid score in the National tests shall be exempted from NPET. The following weightage shall be assigned to various components for their admission as per UGC rules & regulations.

Weightage	Earlier	Now
Qualifying Degree Marks	60	70
Interview Marks	40	30



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**Regular Reporting items on PhD related matters**



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**2. No. of Ph.D. admission in Jan-June 2024 semester**



Sr. No.	Dept./ School/Discipline	No. of Candidates taken Admission	No. of candidates availing University Fellowship
1.	CSE	09	
2.	MDE	05	
3.	CLL	0	
4.	APS	01 (NET)	
5.	SOL	01	
6.	SOM	07 (3 NET)	02 01 (Rs. 35000/-) 01 (Rs. 25000/-)
7.	<b>Total</b>	<b>23</b> <b>(4 NET)</b>	<b>02</b>



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### 3. No. of Viva-voce held in 2024



Sr. No.	Name of the Scholar	Dept./School	Topic
1	Garima Sharma	CSE	METAHEURISTIC-BASED SELECTION OF FUSED DEEP AND GEOMETRIC FEATURES FOR MULTI-CLASS FACIAL EXPRESSION RECOGNITION
2	Renu	APS	A STUDY OF SYNTHESIS AND APPLICATIONS OF CYCLODEXTRIN BASED NANOCOMPOSITES IN PHOTOCATALYTIC DEGRADATION OF ORGANIC POLLUTANTS
3	Ghanishtha Narang	EECE	SYSTEM MODELING AND PERFORMANCE ANALYSIS OF FREE SPACE OPTICAL COMMUNICATION SYSTEM USING CHAOTIC SCHEMES
4	Deepika	EECE	EMBEDDED IMPLEMENTATION OF TRAFFIC SIGN DETECTION AND RECOGNITION SYSTEM FOR REAL TIME APPLICATIONS



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The Academic Council is requested to take note and ratify amendments in PhD rules and regulations as proposed in 31<sup>st</sup> BDR meeting dated 13<sup>th</sup> May 2024 & approve this item.



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**Thank You!**

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