**Scheme ofBSc Data Science 2021-24**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sem** | **Course 1** | | **Course 2** | | **Course 3** | **Course 4** | **Course 5** | **Course 6** | **Course 7** | **Comm. services** | **GP** | **Cont. hrs.a** | **Cred.a** |
| I | CLL 101 Effective Communication-I  2.5(2-0-1) | | MAL 151 Engineering Maths 1  4(3-0-2) | | PYL 102N Fundamentals of Physics  4(3-0-2) | MAL109 Introduction to Statistics (4-0-0)4 | CHL100 Environmental Studies  3(3-0-0) | CSL106  FOCP-I  4 (2-0-4) |  | MAS  100  (70 hrs) | MAR100  (1) | 26 | 22.5 |
| II | CLL 102 Effective Communication-II  2.5(2-0-1) | | MAL 209 Data Analysis 4(3-0-2) | |  | MAL 152 Engineering Maths II 4(3-0-2) | CSL108  FOCP-II  (2-0-4)4 | BSL101 Entrepreneurship (2-0-2)3 | CLL 120 HVPE  2(2-0-0) | MAS  100  (70 hrs)  (2 Crdt) | MAR111  (1) | 25 | 22.5 |
| III | MAL 102  Analysis I  4(3-1-0) | | MAL 313  Integral & Vector Calculus  4(3-1-0) | | PE 1  CSL209 Data Structures  4(3-0-2) | PE 2  CSL 225 Programming for Data Science  4 (2-0-4) | Open Elective I  3(3-0-0) | MAL 304N  Probability and Statistics  4(3-1-0) |  | MAS  200  (35 hrs) | MAR  200  (1) | 26 | 24 |
| IV | MAL 104  Differential Equations I  4(3-1-0) | | PE 3  MAL307 Discrete Mathematics  4 (3-1-0) | | PE 4  DBMS  4(3-0-2) | PE 5  CLL227 Applied Computational Statistics 4(2-0-4) | Open Elective II  3(3-0-0) | Foreign Language  3(1-2-0) |  | MAS  200  (35 hrs)  (2 Crdt) | MAR  210  (1) | 25 | 25 |
|  | | MAI 240 Summer Internship (0-0-6) 3 3 | | | | | | | | | | | |
| V | MAL 208  Linear Algebra  4(3-1-0) | | MAL 206 Mathematical Statistics  3(2-0-2) | | PE 6  CSL236 Introduction to AI and ML 4 (3-0-1) | PE 7  CSL232 Business Intelligence and Data Visulaization  4(2-0-4) | Open Elective III  3(3-0-0) | MAD 350 Project  4(0-0-8) |  | MAS  300  (70 hrs) | MAR  300  (1) | 21 | 23 |
| VI | MAL 310  Numerical Analysis  3(2-0-2) | | CLP300  Campus to Corporate  (1-0-0)1 | | PE 8  CSL313 Machine Learning  4(2-0-4) | PE 9  CSL311 Big Data  4(2-0-4) | Open Elective IV  3(3-0-0) | MAD 350 Project  4(0-0-8) |  | MAS  300  (70 hrs)  (2 Crdt) | MAR  310  (1) | 19 | 22 |
|  |  | |  | Total | | | | | | | | 142 | 142 |

**Scheme ofBSc Mathematics with specialization in Data Science 2020-23**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sem** | **Course 1** | | **Course 2** | | **Course 3** | **Course 4** | **Course 5** | **Course 6** | **Course 7** | **Comm. services** | **GP** | **Cont. hrs.a** | **Cred.a** |
| I | CLL 101 Effective Communication-I  2.5(2-0-1) | | MAL 151 Engineering Maths 1  4(3-0-2) | | PYL 102N Fundamentals of Physics  4(3-0-2) | ENL101 Statistics & Research Methodology-I (4-0-0)4 | CHL100 Environmental Studies  3(3-0-0) | CSL106  FOCP-I  4 (2-0-4) |  | MAS  100  (70 hrs) | MAR100  (1) | 26 | 22.5 |
| II | CLL 102 Effective Communication-II  2.5(2-0-1) | | BSL102 FINE ARTS (1-0-2)2 | | PCL102 Psychology for living (2-1-0)3 | MAL 152 Engineering Maths II 4(3-0-2) | CSL108  FOCP-II  (2-0-4)4 | BSL101 Entrepreneurship (2-0-2)3 | CLL 120 HVPE  2(2-0-0) | MAS  100  (70 hrs)  (2 Crdt) | MAR111  (1) | 26 | 23.5 |
| III | MAL 102  Analysis I  4(3-1-0) | | MAL 313  Integral & Vector Calculus  4(3-1-0) | | PE 1  CSL209 Data Structures  4(3-0-2) | PE 2  CSL 225 Programming for Data Science  4 (2-0-4) | Open Elective I  3(3-0-0) | MAL 304N  Probability and Statistics  4(3-1-0) |  | MAS  200  (35 hrs) | MAR  200  (1) | 26 | 24 |
| IV | MAL 104  Differential Equations I  4(3-1-0) | | PE 3  MAL209 Data Analysis  4 (3-0-2) | | PE 4  DBMS  4(3-0-2) | PE 5  CLL227 Applied Computational Statistics 4(2-0-4) | Open Elective II  3(3-0-0) | Foreign Language  3(1-2-0) |  | MAS  200  (35 hrs)  (2 Crdt) | MAR  210  (1) | 26 | 25 |
|  | | MAI 240 Summer Internship (0-0-6) 3 | | | | | | | | | | | |
| V | MAL 208  Linear Algebra  4(3-1-0) | | MAL 206N Mathematical Statistics  3(2-0-2) | | PE 6  CSL236 Introduction to AI and ML 4 (3-0-2) | PE 7  CSL232 Business Intelligence and Data Visualization  4(2-0-4) | Open Elective III  3(3-0-0) | MAD 350 Project  4(0-0-8) |  | MAS  300  (70 hrs) | MAR  300  (1) | 22 | 23 |
| VI | MAL 310  Numerical Analysis  3(2-0-2) | | CLP300  Campus to Corporate  (1-0-0)1 | | PE 8  CSL313 Machine Learning  4(2-0-4) | PE 9  CSL311 Big Data  4(2-0-4) | Open Elective IV  3(3-0-0) | MAD 360 Project  4(0-0-8) |  | MAS  300  (70 hrs)  (2 Crdt) | MAR  310  (1) | 19 | 22 |
|  |  | |  | Total | | | | | | | | 145 | 143 |