**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-I2.5(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 Studies3(3-0-0) | CSL106FOCP-I4 (2-0-4) |  | MAS 100 (70 hrs) | MAR100(1) | 26 | 22.5 |
| II | CLL 102 Effective Communication-II2.5(2-0-1) | MAL 209 Data Analysis 4(3-0-2) |  | MAL 152 Engineering Maths II 4(3-0-2) | CSL108FOCP-II(2-0-4)4 | BSL101 Entrepreneurship (2-0-2)3 | CLL 120 HVPE2(2-0-0) | MAS 100(70 hrs)(2 Crdt) | MAR111 (1) | 25 | 22.5 |
| III | MAL 102Analysis I4(3-1-0) |  MAL 313Integral & Vector Calculus4(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 I3(3-0-0) | MAL 304NProbability and Statistics4(3-1-0)  |  | MAS 200(35 hrs) | MAR200(1) | 26 | 24 |
| IV |  MAL 104Differential Equations I4(3-1-0)  |  PE 3MAL307 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 II3(3-0-0) | Foreign Language 3(1-2-0) |  | MAS 200(35 hrs)(2 Crdt) | MAR210(1) | 25 | 25 |
|  |  MAI 240 Summer Internship (0-0-6) 3 3 |
| V | MAL 208Linear Algebra4(3-1-0)  | MAL 206 Mathematical Statistics 3(2-0-2)  | PE 6 CSL236 Introduction to AI and ML 4 (3-0-1) | PE 7CSL232 Business Intelligence and Data Visulaization 4(2-0-4) | Open Elective III3(3-0-0) | MAD 350 Project4(0-0-8) |  | MAS 300 (70 hrs) | MAR300(1) | 21 | 23 |
| VI | MAL 310Numerical Analysis3(2-0-2) | CLP300Campus to Corporate(1-0-0)1 | PE 8CSL313 Machine Learning 4(2-0-4) | PE 9 CSL311 Big Data 4(2-0-4) | Open Elective IV3(3-0-0) | MAD 350 Project4(0-0-8) |  | MAS 300(70 hrs)(2 Crdt) | MAR310(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-I2.5(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 Studies3(3-0-0) | CSL106FOCP-I4 (2-0-4) |  | MAS 100 (70 hrs) | MAR100(1) | 26 | 22.5 |
| II | CLL 102 Effective Communication-II2.5(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) | CSL108FOCP-II(2-0-4)4 | BSL101 Entrepreneurship (2-0-2)3 | CLL 120 HVPE2(2-0-0) | MAS 100(70 hrs)(2 Crdt) | MAR111 (1) | 26 | 23.5 |
| III | MAL 102Analysis I4(3-1-0) |  MAL 313Integral & Vector Calculus4(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 I3(3-0-0) | MAL 304NProbability and Statistics4(3-1-0)  |  | MAS 200(35 hrs) | MAR200(1) | 26 | 24 |
| IV |  MAL 104Differential Equations I4(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 II3(3-0-0) | Foreign Language 3(1-2-0) |  | MAS 200(35 hrs)(2 Crdt) | MAR210(1) | 26 | 25 |
|  |  MAI 240 Summer Internship (0-0-6) 3  |
| V | MAL 208Linear Algebra4(3-1-0)  | MAL 206N Mathematical Statistics 3(2-0-2)  | PE 6 CSL236 Introduction to AI and ML 4 (3-0-2) | PE 7CSL232 Business Intelligence and Data Visualization 4(2-0-4) | Open Elective III3(3-0-0) | MAD 350 Project4(0-0-8) |  | MAS 300 (70 hrs) | MAR300(1) | 22 | 23 |
| VI | MAL 310Numerical Analysis3(2-0-2) | CLP300Campus to Corporate(1-0-0)1 | PE 8CSL313 Machine Learning 4(2-0-4) | PE 9 CSL311 Big Data 4(2-0-4) | Open Elective IV3(3-0-0) | MAD 360 Project4(0-0-8) |  | MAS 300(70 hrs)(2 Crdt) | MAR310(1) | 19 | 22 |
|  |  |  | Total  | 145 | 143 |