**Scheme ofBSc (H) Mathematics 2021-24**

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| **Sem** | **Course 1** | **Course 2** | **Course 3** | **Course 4** | **Course 5** | **Course 6** | **Course 7** | **Comm. services** | **GP** | **Cont. hrs.** | **Credits** |
| I | CLL 101Effective Communication-I2.5(2-0-1) | MAL 101N Fundamentals of Mathematics 4(3-1-0) | PYL 102N Fundamentals of Physics 4(3-0-2) | MAL109 Introduction to Statistics 4(4-0-0) | CHL100 Environmental Studies3(3-0-0) | CHL111 Fundamentals of Chemistry4(3-0-2) |  | MAS 100 (70 hrs) | MAR100(1) | 24 | 22.5 |
| II | CLL 102Effective Communication-II2.5(2-0-1) | MAL315 Number Theory 4(3-1-0) |  | MAL209 Data Analysis 4(3-0-2) | MAL 106N Basics of Computer Programming4(3-0-2) | BSL101 Entrepreneurship 3(2-0-2) | CLL 120 HVPE2(2-0-0) | MAS 100(70 hrs)(2 Crdt) | MAR110(1) | 25 | 22.5 |
| III | MAL 102Analysis I4(3-1-0) |  MAL 313Integral & Vector Calculus4(3-1-0)  |  PE 1 MAL105N Group Theory 4(3-1-0) |  PE 2 MAL303 Linear Programming & applications 4(3-1-0) | Open Elective I3(3-0-0) | MAL 304NProbability and Statistics4(3-1-0)  |  | MAS 200(35 hrs) | MAR200(1) | 23 | 24 |
| IV |  MAL 104Differential Equations I4(3-1-0)  |  PE 3 MAL307 Discrete Mathematics4 (3-1-0) | PE 4MAL205N Higher Algebra 4 (3-1-0)  |  PE 5 MAL317 Mathematical Modeling 4(3-1-0) | Open Elective II3(3-0-0) | Foreign Language 3(1-2-0) |  | MAS 200(35 hrs)(2 Crdt) | MAR210(1) | 22 | 25 |
|  |  MAI 240 Summer Internship 3(0-0-6)  |
| V | MAL 208Linear Algebra4(3-1-0)  | MAL 206 Mathematical Statistics 3(2-0-2)  | PE 6 MAL203 Differential Equations II 4(3-1-0) | PE 7MAL321 Mathematical Methods4 (3-0-2) | Open Elective III3(3-0-0) | MAD 350Project4(0-0-8) |  | MAS 300 (70 hrs) | MAR300(1) | 20 | 23 |
| VI | MAL 310Numerical Analysis3(2-0-2) | MAL 320Creativity and innovation outcome (1) | PE 8 MAL311 Intro to complex Analysis 4(3-1-0) | PE 9 MAL201 Analysis II 4 (3-1-0) | Open Elective IV3(3-0-0) | MAD 360Project4(0-0-8) |  | MAS 300(70 hrs)(2 Crdt) | MAR310(1) | 15 | 22 |
|  |  |  | Total  | 127 | 142 |

**Scheme ofBSc (H) Mathematics 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.** | **Credits** |
| I | CLL 101Effective Communication-I2.5(2-0-1) | MAL 101N Fundamentals of Mathematics 4(3-1-0) | PYL 102N Fundamentals of Physics 4(3-0-2) | ENL101 Statistics & Research Methodology-I 4(4-0-0)  | CHL100 Environmental Studies3(3-0-0) | PSL101 Understanding the Constitution 3(3-0-0)  |  | MAS 100 (70 hrs) | MAR100(1) | 22 | 21 |
| II | CLL 102Effective Communication-II2.5(2-0-1) | BSL102 FINE ARTS 2(1-0-2) | PCL102 Psychology for living 3(2-1-0)  | CHL111 Fundamentals of Chemistry4(3-0-2) | MAL 106N Basics of Computer Programming4(3-0-2) | BSL101 Entrepreneurship 3(2-0-2) | CLL 120 HVPE2(2-0-0) | MAS 100(70 hrs)(2 Crdt) | MAR110(1) | 25 | 23.5 |
| III | MAL 102Analysis I4(3-1-0) |  MAL 313Integral & Vector Calculus4(3-1-0)  |  PE 1 MAL105N Group Theory 4(3-1-0) |  PE 2 MAL303 Linear Programming & applications 4(3-1-0) | Open Elective I3(3-0-0) | MAL 304NProbability and Statistics4(3-1-0)  |  | MAS 200(35 hrs) | MAR200(1) | 23 | 24 |
| IV |  MAL 104Differential Equations I4(3-1-0)  |  PE 3 MAL201 Analysis II 4 (3-1-0) | PE 4MAL205N Higher Algebra 4 (3-1-0)  |  PE 5 MAL317 Mathematical Modeling 4(3-1-0) | Open Elective II3(3-0-0) | Foreign Language 3(1-2-0) |  | MAS 200(35 hrs)(2 Crdt) | MAR210(1) | 22 | 25 |
|  |  MAI 240 Summer Internship 3(0-0-6)  |
| V | MAL 208Linear Algebra4(3-1-0)  | MAL 206 Mathematical Statistics 3(2-0-2)  | PE 6 MAL203 Differential Equations II 4(3-1-0) | PE 7MAL321 Mathematical Methods/MAL 209 Data Analysis 4 (3-0-2) | Open Elective III3(3-0-0) | MAD 350 Project4(0-0-8) |  | MAS 300 (70 hrs) | MAR300(1) | 20 | 23 |
| VI | MAL 310Numerical Analysis3(2-0-2) | MAL 320Creativity and innovation outcome (1) | PE 8 MAL311 Intro to complex Analysis 4(3-1-0) | PE 9 MAL 307 Discrete Mathematic s/CSL 313 Machine Learning 4 (3-1-0/2-0-4) | Open Elective IV3(3-0-0) | MAD 360Project4(0-0-8) |  | MAS 300(70 hrs)(2 Crdt) | MAR310(1) | 15 | 22 |
|  |  |  | Total  | 127 | 142 |

**SCHEME OF B.Sc. (HONS) MATHS 2019-22**

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| **Sem** | **Course 1** | **Course 2** | **Course 3** | **Course 4** | **Course 5** | **Course 6** | **GP** | **Comm. services** | **Cont hrs** | **Credits** |
| **I** | MAL 101Calculus and Geometry3-1-0( 4) | MAL 103Intro to Probability 3-1-0( 4) | MAL 105Algebra I3-1-0( 4) | CLL 101 Effective Comm.-I1-0-2 (2)  | CHL100EVS3-0-0 (3) | Foreign LanguageElective(1-2-0)3 | MAR100 (1) | MAS 100 (70 hrs) | 21 | **21** |
| **II** | MAL 102Analysis I3-1-0( 4) | MAL 104Differential Equations I3-1-0( 4) | MAL 108Algebra II3-1-0( 4) | SML 150Leadership2-1-0(3) | CLL 102Effective Comm.-II1-0-2 (2) | CLL 120Human Values(2-0-0)2 | MAR110(1) | MAS 100(70 hrs)(2 Crdt) | 20 | **22** |
| **III** | MAL 201Analysis II3-1-0( 4) | MAL 203Differential Equations II3-1-0( 4) | MAL 205Algebra III (3-1-0) 4 | MAL 207Operations Research(3-1-0) 4 | Open Elective I3 (3) |  | MAR200(1) | MAS 200(35 hrs) | 19 | **20** |
| **IV** | SML300Entrepreneurship2-1-0 (3) | MAL 206MathematicalStatistics3-1-0( 4) | MAL 308Linear Algebra (3-1-0) 4 | Prog. Elective II3-0-2 (4)*(Image Processing./**DBMS. /**Data Visual. Tech.)* | Prog. Elective I3-0-2 (4)*(Lin. Prog/ Math. Modelling/* *Data Struc. Algos* | Open Elective II3 (3) | MAR210(1) | MAS 200(35 hrs)**(2** Crdt) | 24 | **25** |
| **V** |  MAL 321Mathematical Methods3-1-0(4) | MAL 310Numerical Analysis 2-1-2 (4) | MAL316Data Analysis (3-0-2) 4 | Prog. Elective III(MOOC)3-0-2 (4)*(Mechanics/ Statis. Modeling./ Number theory)* | Open Elective III3 (3) |  | MAR300(1) | MAS 300 (70 hrs) | 22 | **20** |
| **VI** | MAL 311Intro. to Complex Analysis3-1-0( 4) | MAL 313Integral & Vector Calculus3-1-0( 4) | Prog. Elective IV (MOOC)3-0-2 (4)*(Financial Maths/**Metric Space./**Predictive Analytics*  | Open Elective IV 3 (3) | MAD 350 Project(0-0-6)3 | Creativity and innovation outcome (1)MAL 320 | MAR310(1) | MAS 300(70 hrs)(2 Crdt) | 16 | **22** |
|  | Total  |  | 122 | 130 |