

Department of Mathematics

1.3.1. List and description of the courses which address the Gender, Environment and Sustainability, Human Values, Professional Ethics and Indian Knowledge System into the Curriculum

S.No.	Course Code	Name of the Course	EVS	PE	Outcome
2023-2024					
1	MA2031	Allied III: Probability Theory and Distributions		<input checked="" type="checkbox"/>	To impart knowledge on the basic concepts of Probability theory and Probability distributions and to apply the theory in real life situations.
2	MA2041	Allied IV: Applied Statistics		<input checked="" type="checkbox"/>	To acquire the knowledge of correlation theory and testing hypothesis and to solve problems.
3	MC2053	Major Core IX: Computer Oriented Numerical Methods	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To provide suitable and effective numerical methods, for computing approximate numerical values of certain raw data and to lay foundation of programming techniques to solve mathematical problems.
4	MC2062	Major Core XI: Mechanics	<input checked="" type="checkbox"/>		To visualize the application of Mathematics in Physical Sciences and develop the capacity to predict the effects of force and motion.
5	MC2064	Major Core XIII: Linear Programming	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To formulate real life problems into mathematical problems and solve decision making problems by optimizing the objective function.
6	MC2065	Elective II: (a) Astronomy	<input checked="" type="checkbox"/>		To introduce space science, familiarize the important features of the planets, sun, moon and stellar universe, predict lunar and solar eclipses and study the seasonal changes.
7	MC2067	Elective II: (c) Web Designing with HTML		<input checked="" type="checkbox"/>	To understand the importance of the web as a medium of communication and to create an effective web page with graphic design principles.
8	MP231EC1	Elective Course I: a) Number theory and Cryptography		<input checked="" type="checkbox"/>	To gain deep knowledge about Number theory and know the concepts of Cryptography.
9	MP232EC1	Elective Course III: a) Mathematical Statistics		<input checked="" type="checkbox"/>	To enhance knowledge in mathematical statistics and acquire basic knowledge about various distributions.
10	MP232EC2	Elective Course III: b) Statistical Data Analysis using R Programming		<input checked="" type="checkbox"/>	To equip individuals with the skills to proficiently analyze data, employ statistical methods, and utilize R programming for effective data interpretation and decision-making in various fields.
11	MP232EC4	Elective Course IV: a) Operations Modeling	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To analyze different situations in the industrial/ business scenario involving limited resources and to finding the optimal solution within constraints.
12	PM2034	Elective III - (a) Algebraic Number Theory and Cryptography		<input checked="" type="checkbox"/>	To gain deep knowledge about Number theory and Cryptography.
13	PM2035	Elective III - (b) Stochastic Processes	<input checked="" type="checkbox"/>		To understand the stochastic models and relate the models studied to real life probabilistic situations.
14	PM2043	Core XIV - Operations Research	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To learn optimizing objective functions and solve decision making problems.
2022-2023					
15	MA2031	Allied III: Probability Theory and Distributions		<input checked="" type="checkbox"/>	To impart knowledge on the basic concepts of Probability theory and Probability distributions and to apply the theory in real life situations.
16	MA2041	Allied IV: Applied Statistics		<input checked="" type="checkbox"/>	To acquire the knowledge of correlation theory and testing hypothesis and to solve problems.
17	MC2053	Major Core IX: Computer Oriented Numerical Methods	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To provide suitable and effective numerical methods, for computing approximate numerical values of certain raw data and to lay foundation of programming techniques to solve mathematical problems.
18	MC2062	Major Core XI: Mechanics	<input checked="" type="checkbox"/>		To visualize the application of Mathematics in Physical Sciences and develop the capacity to predict the effects of force and motion.
19	MC2064	Major Core XIII: Linear Programming	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To formulate real life problems into mathematical problems and solve decision making problems by optimizing the objective function.

20	MC2065	Elective II: (a) Astronomy	<input checked="" type="checkbox"/>		To introduce space science, familiarize the important features of the planets, sun, moon and stellar universe, predict lunar and solar eclipses and study the seasonal changes.
21	MC2067	Elective II: (c) Web Designing with HTML		<input checked="" type="checkbox"/>	To understand the importance of the web as a medium of communication and to create an effective web page with graphic design principles.
22	PM2013	Core III - Probability and Statistics		<input checked="" type="checkbox"/>	To upgrade the knowledge in Probability theory and solve Statistical problems.
23	PM2015	Elective I - (a) Numerical Analysis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To study the various behaviour pattern of numbers and various techniques of solving applied scientific problems.
24	PM2025	Elective II - (a) Classical Dynamics	<input checked="" type="checkbox"/>		To gain deep insight into the concepts of dynamics.
25	PM2034	Elective III - (a) Algebraic Number Theory and Cryptography		<input checked="" type="checkbox"/>	To gain deep knowledge about Number theory and Cryptography.
26	PM2035	Elective III - (b) Stochastic Processes	<input checked="" type="checkbox"/>		To understand the stochastic models and relate the models studied to real life probabilistic situations.
27	PM2043	Core XIV - Operations Research	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To learn optimizing objective functions and solve decision making problems.
2021-2022					
28	MA2031	Allied III: Probability Theory and Distributions		<input checked="" type="checkbox"/>	To impart knowledge on the basic concepts of Probability theory and Probability distributions and to apply the theory in real life situations.
29	MA2041	Allied IV: Applied Statistics		<input checked="" type="checkbox"/>	To acquire the knowledge of correlation theory and testing hypothesis and to solve problems.
30	MC1755	Elective I: (a) Numerical Methods	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To study Numerical differentiation and Numerical integration using different formulae and develop various methods for solving applied scientific problems.
31	MC1762	Major Core XI: Mechanics	<input checked="" type="checkbox"/>		To study the application of Mathematics in Physical Sciences and solve related problems.
32	MC1764	Major Core XIII: Operations Research	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To formulate real life problems into mathematical problems and solve decision making problems by optimizing the objective function.
33	MC1765	Elective II: a) Astronomy	<input checked="" type="checkbox"/>		To identify, classify and compare the stars and the large scale structures of our Universe.
34	MC1767	Elective II: (c) Web Designing with HTML		<input checked="" type="checkbox"/>	To understand the importance of the web as a medium of communication and create an effective web page with graphic design principles.
35	PM2013	Core III - Probability and Statistics		<input checked="" type="checkbox"/>	To upgrade the knowledge in Probability theory and solve Statistical problems.
36	PM2015	Elective I - (a) Numerical Analysis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To study the various behaviour pattern of numbers and various techniques of solving applied scientific problems.
37	PM2025	Elective II - (a) Classical Dynamics	<input checked="" type="checkbox"/>		To gain deep insight into the concepts of dynamics.
38	PM2034	Elective III - (a) Algebraic Number Theory and Cryptography		<input checked="" type="checkbox"/>	To gain deep knowledge about Number theory and Cryptography.
39	PM2035	Elective III - (b) Stochastic Processes	<input checked="" type="checkbox"/>		To understand the stochastic models and relate the models studied to real life probabilistic situations.
40	PM2043	Core XIV - Operations Research	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To learn optimizing objective functions and solve decision making problems.
2020-2021					
41	MA1731	Allied III: Probability Theory and Distributions		<input checked="" type="checkbox"/>	To impart knowledge on the basic concepts of Probability theory and Probability distributions and to apply the theory in real life situations.
42	MA1741	Allied IV: Applied Statistics		<input checked="" type="checkbox"/>	To acquire the knowledge of correlation theory and testing hypothesis and to solve problems.
43	MC1755	Elective I: (a) Numerical Methods	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To study Numerical differentiation and Numerical integration using different formulae and develop various methods for solving applied scientific problems.

44	MC1762	Major Core XI: Mechanics	<input checked="" type="checkbox"/>		To study the application of Mathematics in Physical Sciences and solve related problems.
45	MC1764	Major Core XIII: Operations Research	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To formulate real life problems into mathematical problems and solve decision making problems by optimizing the objective function.
46	MC1765	Elective II: a) Astronomy	<input checked="" type="checkbox"/>		To identify, classify and compare the stars and the large scale structures of our Universe.
47	MC1767	Elective II: (c) Web Designing with HTML		<input checked="" type="checkbox"/>	To understand the importance of the web as a medium of communication and create an effective web page with graphic design principles.
48	PM2013	Core III - Probability and Statistics		<input checked="" type="checkbox"/>	To upgrade the knowledge in Probability theory and solve Statistical problems.
49	PM2015	Elective I - (a) Numerical Analysis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To study the various behaviour pattern of numbers and various techniques of solving applied scientific problems.
50	PM2025	Elective II - (a) Classical Dynamics	<input checked="" type="checkbox"/>		To gain deep insight into the concepts of dynamics.
51	PM1735	Elective III - (b) Stochastic Processes	<input checked="" type="checkbox"/>		To understand the stochastic models and relate the models studied to real life probabilistic situations.
52	PM1743	Core XIV - Operations Research	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To learn optimizing objective functions and solve decision making problems.
2019-2020					
53	MA1731	Allied III: Probability Theory and Distributions		<input checked="" type="checkbox"/>	To impart knowledge on the basic concepts of Probability theory and Probability distributions and to apply the theory in real life situations.
54	MA1741	Allied IV: Applied Statistics		<input checked="" type="checkbox"/>	To acquire the knowledge of correlation theory and testing hypothesis and to solve problems.
55	MC1755	Elective I: (a) Numerical Methods	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To study Numerical differentiation and Numerical integration using different formulae and develop various methods for solving applied scientific problems.
56	MC1762	Major Core XI: Mechanics	<input checked="" type="checkbox"/>		To study the application of Mathematics in Physical Sciences and solve related problems.
57	MC1764	Major Core XIII: Operations Research	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To formulate real life problems into mathematical problems and solve decision making problems by optimizing the objective function.
58	MC1765	Elective II: a) Astronomy	<input checked="" type="checkbox"/>		To identify, classify and compare the stars and the large scale structures of our Universe.
59	MC1767	Elective II: (c) Web Designing with HTML		<input checked="" type="checkbox"/>	To understand the importance of the web as a medium of communication and create an effective web page with graphic design principles.
60	PM1713	Core III - Probability and Statistics		<input checked="" type="checkbox"/>	To upgrade the knowledge in Probability theory and solve Statistical problems.
61	PM1715	Elective I - (a) Numerical Analysis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To study the various behaviour pattern of numbers and various techniques of solving applied scientific problems.
62	PM1725	Elective II - (a) Classical Dynamics	<input checked="" type="checkbox"/>		To gain deep insight into the concepts of dynamics.
63	PM1735	Elective III - (b) Stochastic Processes	<input checked="" type="checkbox"/>		To understand the stochastic models and relate the models studied to real life probabilistic situations.
64	PM1743	Core XIV - Operations Research	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	To learn optimizing objective functions and solve decision making problems.