

Core Module:

School Name: School of Basic and Applied Sciences
Department of Basic Sciences
Programme Name: Master of Science (Mathematics) (2 Years)
Scheme:2021-23

Semester-I

Sl. No	Course Code	Name of the Course				
			L	T	P	C
1	MSCM101	Linear Algebra	3	1	0	4
2	MSCM102	Real Analysis	3	1	0	4
3	MSCM104	Ordinary Differential Equations	3	1	0	4
4	MBS30T1001	Computer Programming in Python	3	0	0	3
5	MSCM211	Computer Programming Lab in Python	0	0	2	1
6	MLLUCT1001	Professional Communication – BEC 1	1	0	4	3
Total Credits						19

Semester-II

Sl No	Course Code	Name of the Course				
			L	T	P	C
1	MSCM201	Abstract Algebra	3	1	0	4
2	MSCM202	Complex Analysis	3	1	0	4
3	MSCM203	Partial Differential Equations	3	1	0	4
4	MSCM205	Topology	3	1	0	4
5	MSCM103	Mathematical Statistics	3	1	0	4
6	MSCM111	Mathematical Statistics Lab using R	0	0	2	1
7	MLEUCT1003	Creativity, Innovation and Entrepreneurship & IPR	1	0	0	1
8	MBS28T2111	Research Methodology	2	0	0	2
Total Credits						24

Semester-III

SI No	Course Code	Name of the Course				
			L	T	P	C
1	MSCM301	Functional Analysis	3	1	0	4
2	MBS30T1002	Operations Research	3	0	0	3
3	MSCM303	Integral Equations and Calculus of Variation	3	1	0	4
4	MBS30T5998	Project (Phase I)	0	0	6	3
5	MBS30P1997	Summer Internship	0	0	4	2
6	MLLUCT1003	Campus to Corporate	3	0	0	3
Total Credits						19

Semester-IV (Track-I)

SI No	Course Code	Name of the Course				
			L	T	P	C
1	MSCM402	Applied Numerical Analysis	3	0	0	3
2	MSCM411	Applied Numerical Analysis Lab	0	0	2	1
3	MSCM421	Advanced Optimization Techniques	3	1	0	4
4	MSCM427	Multivariable Statistical Techniques	3	1	0	4
5	MBS30P5999	Project (Phase II)	0	0	12	6
Total Credits						18

Semester-IV (Track-II)

SI No	Course Code	Name of the Course				
			L	T	P	C
1	MSCM402	Applied Numerical Analysis	3	0	0	3
2	MSCM411	Applied Numerical Analysis Lab	0	0	2	1
3	MBS30T5004	Differential Geometry and Tensors	3	1	0	4
4	MBS30T4003	Theory of Elasticity	3	1	0	4
5	MBS30P5999	Project (Phase II)	0	0	12	6
Total Credits						18

Semester-IV (Track-III)

SI No	Course Code	Name of the Course	
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			L	T	P	C
1	MSCM402	Applied Numerical Analysis	3	0	0	3
2	MSCM411	Applied Numerical Analysis Lab	0	0	2	1
3	MSCM323	Fuzzy Mathematics	3	1	0	4
4	MSCM427	Multivariable Statistical Techniques	3	1	0	4
5	MBS30P5999	Project (Phase II)	0	0	12	6
Total Credits						18

Semester-IV (Track-IV)

Sl No	Course Code	Name of the Course				
			L	T	P	C
1	MSCM402	Applied Numerical Analysis	3	0	0	3
2	MSCM411	Applied Numerical Analysis Lab	0	0	2	1
3	MSCM327	Measure Theory	3	1	0	4
4	MSCM401/MSCM425	Probability Theory/ Finite element Method (availability of faculty)	3	1	0	4
5	MBS30P5999	Project (Phase II)	0	0	12	6
Total Credits						18

Semester-IV (Track-V)

Sl No	Course Code	Name of the Electives				
			L	T	P	C
1	MSCM402	Applied Numerical Analysis	3	0	0	3
2.	MSCM411	Applied Numerical Analysis Lab	0	0	2	1
3	MSCM421	Advanced Optimization Techniques	3	1	0	4
4	MSCM325	Artificial Intelligence	3	1	0	4
5	MBS30P5999	Project (Phase II)	0	0	12	6
Total Credits						18

Semester-IV (Track-VI)

Sl No	Course Code	Name of the Electives				
			L	T	P	C
1	MSCM402	Applied Numerical Analysis	3	0	0	3
2.	MSCM411	Applied Numerical Analysis Lab	0	0	2	1

3	MBS30T4005	Computational Seismology	3	1	0	4
4	MSCM422/MBS30T4006	Mathematical Modeling/Computational Techniques	3	1	0	4
5	MBS30P5999	Project (Phase II)	0	0	12	6
Total Credits						18

Total Program Credits	80
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