

### Part III

M.Sc.

(Applied Mathematics)

Course Structure (M.Sc. Applied Mathematics)

#### Semester I

S.No.	Course Code	Course	Category	L	T	P	Credit
1	MA401	Linear Algebra	C	3	1	0	4
2	MA405	Real Analysis	C	3	1	0	4
3	MA407	Ordinary Differential Equations	C	3	1	0	4
4	MA409	Numerical Analysis	C	3	1	0	4
5	MA417	Number Theory	C	3	1	0	4
6	MA421	Introduction to MATLAB	SEC	0	0	3	2
7	EN521	Advanced course in Professional Communications	AECC	2	0	0	2
		<b>Total Credits</b>					<b>24</b>

#### Semester II

S.No.	Course Code	Course	Category	L	T	P	Credit
1	MA404	Abstract Algebra	C	3	1	0	4
2	MA406	Operations Research	C	3	1	0	4
3	MA408	Partial Differential Equations	C	3	1	0	4
4	MA410	Complex Analysis	C	3	1	0	4
5	MA414	Functional Analysis	C	3	1	0	4
6	MA416	Probability and Stochastic Process	C	3	1	0	4
		<b>Total Credits</b>					<b>24</b>

#### Semester III

S.No.	Course Code	Course	Category	L	T	P	Credit
1	—	Select any one course	GE	3	0	0	3
2	MA507	Optimization Techniques	C	3	1	0	4
3	MA513	Methods of Applied Mathematics	C	3	1	0	4
4	MA515	Numerical Solutions of ODE and PDE	C	3	1	0	4
5		DSE-I	DSE	3	0	0	3
6	MA519	Minor Project	Project	0	0	8	4
7	MA521	ODE and PDE lab using MATLAB	SEC	0	0	2	1
		<b>Total Credits</b>					<b>23</b>

#### Semester IV

S.No.	Course Code	Course	Category	L	T	P	Credit
1	—	DSE-II	DSE	3	0	0	3
2	MA508	Topology	C	3	1	0	4
3	—	DSE-III	DSE	3	0	0	3
4	MA520	Major Project	Project	0	0	30	15
5	GP502	General Proficiency		0	0	0	0
		<b>Total Credits</b>					<b>25</b>
		<b>Overall Credits</b>					<b>96</b>

Abbreviation: C: Core Courses, SEC: Skill Enhancement Course, AECC: Ability Enhancement Compulsory Course . GE: Generic Elective, DSE: Discipline Specific Elective

*[Handwritten signatures and marks]*