

Scheme and Syllabus

Master of Science /Arts in Mathematics

(M.Sc. / M.A. Mathematics)

IEC School of Basic & Applied Sciences



Atal Shiksha Nagar (Kallujhanda), P.O.
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M.Sc. /M.A. MATHEMATICS

Semester -I				
Subject Code	Paper		L	Credits
MM-701	Real Analysis	Core Discipline	4	4
MM-702	Integral Transform	Core Discipline	4	4
MM-703	Ordinary Differential Equation	Core Discipline	5	5
MM-704	Numerical Analysis	Core Discipline	4	4
MM-705	Discrete Mathematics	Core Discipline	4	4
TOTAL			21	21
Semester- II				
Subject Code	Paper		L	Credits
MM-801	Complex Analysis	Core Discipline	5	5
MM-802	Abstract Algebra	Core Discipline	5	5
MM-803	Partial Differential Equation	Core Discipline	5	5
MM-804	Integral Equation and Boundary Value Problem	Core Discipline	5	5
MM-805	Operation Research	Core Discipline	5	5
TOTAL			25	25
Semester -III				
Subject Code	Paper		L	Credits
MM-901	Functional Analysis	Core Discipline	4	4
MM-902	Mathematical biology	Core Discipline	4	4
MM-903	Advanced Mathematical Statistics	Core Discipline	4	4
MM-904	Advanced Operation Research	Core Discipline	4	4
MM-905	Programming In Matlab (Elective)	Core Discipline	4	4
TOTAL			20	20
Semester -IV				
Subject Code	Paper		L	Credits
MM-1001	Advanced Special Function	Core Discipline	4	4
MM-1002	Financial Mathematics	Core Discipline	4	4

MM-1003	Environmental Studies	Core Discipline	4	4
MM-1004	Advanced Numerical Methods	Core Discipline	4	4
MM-1005	Dissertation	Core Discipline		8
TOTAL			18	24
(Total Credits 1st + 2nd +3rd +4th Semester)				90

Core papers:12

DSE: 6/12

GE: 2/4

LIST OF DISCIPLINE SPECIFIC ELECTIVE PAPERS (Major) Total 6 out

of 12

- DSE 1: Advanced Mathematical Statistics
- DSE 2: Advanced Operation Research
- DSE 3: Advanced Numerical Methods
- DSE 4: Wavelet
- DSE 5: Financial Mathematics
- DSE 6: Mathematical Biology
- DSE 7: Fuzzy Sets and its Applications
- DSE 8: Graph Theory and its Applications
- DSE 9: Fixed Point Theory and Its Applications
- DSE10: Fluid Mechanics
- DSE 11: Environmental Studies
- DSE 12: Quality Management

LIST OF GENERAL ELECTIVE PAPERS (Minor) Total 2 out of 4

- GE1: Programming in C
- GE 2: Programming in C++
- GE 3: Programming in MATLAB
- GE 4: Entrepreneurship Development