

MSc APPLIED MATHEMATICS (2013 Regulations)
(Minimum Credits to be earned: 91)

Course code	Course title	Hours / week			Credits	Maximum marks		
		Lecture	Tutorial	Practical		CA	FE	Total
SEMESTER 1								
THEORY								
13SA11	Real Analysis	4	-	-	4	50	50	100
13SA12	Discrete Mathematics	4	-	-	4	50	50	100
13SA13	Applied Linear Algebra	4	-	-	4	50	50	100
13SA14	Numerical Analysis	4	-	-	4	50	50	100
13SA15	Programming in C	3	-	-	3	50	50	100
PRACTICAL								
13SA16	Professional Communication	2	-	-	2	100	-	100
13SA17	C Programming Lab	-	-	3	1.5	100	-	100
13SA18	Numerical Analysis Lab	-	-	2	1	100	-	100
		21	-	5	23.5			
SEMESTER 2								
THEORY								
13SA21	Topology and Functional Analysis	4	-	-	4	50	50	100
13SA22	Applied Probability	4	-	-	4	50	50	100
13SA23	Differential Equations	4	-	-	4	50	50	100
13SA24	Data Structures and Algorithms	3	-	-	3	50	50	100
13SA25	Object Oriented Programming In C++	3	-	-	3	50	50	100
13SA__	Elective I	3	-	-	3	50	50	100
PRACTICAL								
13SA26	UNIX and OOPS Lab	1	-	4	3	100	-	100
13SA27	RDBMS Lab	2	-	3	3.5	100	-	100
13SA28	Data Structures Lab	-	-	3	1.5	50	50	100
		24	-	10	29	-	-	-
SEMESTER 3								
THEORY								
13SA31	Complex Variables and Integral Transforms	4	-	-	4	50	50	100
13SA32	Operations Research	4	-	-	4	50	50	100
13SA33	Data Mining	3	-	-	3	50	50	100
13SA34	Soft Computing	3	-	-	3	50	50	100
13SA__	Elective II	3	-	-	3	50	50	100
13SA__	Elective III	3	-	-	3	50	50	100
PRACTICAL								
13SA36	Soft Computing Lab	-	-	2	1	100	-	100
13SA37	Java Lab	2	-	3	3.5	100	-	100
13SA38	Mini- Project & Seminar	-	-	-	2	100	-	100
		22	-	5	26.5	-	-	-
SEMESTER 4								
13SA41	Project Work	-	-	-	12	50	50	100
					12	-	-	-

Legend : L – Lecture : T-Tutorial: P-Practical: CA – Continuous Assessment marks; FE – Final Examination mark.

ELECTIVES

- 13SA51 Advanced Data Structures and Algorithms
- 13SA52 Computer Graphics
- 13SA53 Computer Networks
- 13SA54 Number Theory and Cryptography
- 13SA55 Digital Image Processing
- 13SA56 Graph Theory and its Applications
- 13SA57 Intelligent Information Retrieval
- 13SA58 Machine Learning
- 13SA59 Mathematical Finance
- 13SA60 Numeric Solutions to Partial Differential Equations
- 13SA61 Stochastic Differential Equations
- 13SA62 Wavelet Transform

ONE CREDIT COURSES

- 13SAK01 Abstract Algebra
- 13SAK02 Algebraic Number Theory
- 13SAK03 Basics of Astronomy
- 13SAK04 Finite Element Method
- 13SAK05 Measure Theory
- 13SAK06 Reliability Engineering
- 13SAK07 Software Engineering
- 13SAK08 Statistical Quality Control
- 13SAK09 Support Vector Machine and its Applications