Objectives:

(i) A student should be able to recall basic facts about mathematics and should be able to display knowledge of conventions such as notations, terminology and recognize basic geometrical figures and graphical displays ,state important facts resulting from their studies.

(ii) A student should get a relational understanding of mathematical concepts and concerned structures, and should be able to follow the patterns involved, mathematical reasoning.

(iii) A student should get adequate exposure to global and local concerns that explore them many aspects of Mathematical Sciences.

(iv) A student be able to apply their skills and knowledge ,that is, translate information presented verbally into mathematical form, select and use appropriate mathematical formulae or techniques in order to process the information and draw the relevant conclusion.

(v) A student should be made aware of history of mathematics and hence of its past, present and future role as part of our culture.

Eligibility: F.Y.B.Sc. ,as per University rules

Structure of the course:

	Semester I		**Semester II**	
Paper I	MT 211	Multivariable Calculus I	MT 221	Linear Algebra
Paper II	MT 212(A)	Discrete Mathematics	MT 222(A)	Multivariable Calculus II
	MT212(B)	Laplace Transform and Fourier Series	MT222(B)	Numerical methods and it's applications
Paper III	MT213	Practical based on MT211,MT212	MT223	Practical based on MT221,MT222

(v) A student should be made aware of history of mathematics and hence of its past, present and future role as part of our culture.

Eligibility: S.Y.B.Sc.(With Mathematics)or T.Y.B.Sc Computer Science as per University rules.

Structure of the course:

Semester- III		**Semester- IV**	
MT 331 :	Metric Spaces	MT 341:	Complex Analysis
MT 332 :	Real Analysis-I	MT 342:	Real Analysis-II
MT 333 :	Problem Course on MT 331 and MT 332	MT 343:	Problem Course on MT 341 and MT 342
MT 334 :	Group Theory	MT 344:	Ring Theory
MT 335 :	Ordinary Differential Equations	MT 345:	Partial Differential Equations
MT 336 :	Problem Course on MT 334 and MT 334	MT 346:	Problem Course on MT 344 and MT 345
Select Any Two out of six courses		**Select Any Two out of six courses**	
MT 337:A.	Operations Research	MT 347: A	Optimization Techniques
MT 337:B.	Dynamical System	MT 347:B	Differential Geometry
MT 337: C	C- Programming I	MT 347 :C	C- Programming II
MT 337:D.	Lattice Theory	MT 347: D	Graph theory
MT 337: E	Financial Mathematics	MT 347: E	Lebesgue Integration
MT 337:F	Number Theory	MT 347: F	Computational Geometry
MT 338:	Practical based on papers selected from 337 A to 337 F	MT 348 :	Practical based on papers selected from 347 A to 347 F

Note.

1.Papers MT 331 to MT 336 are compulsory , a student can opt any two papers from MT337 A to MT 337 F in first semester.

2.Papers MT 341 to MT 346 are compulsory , a student can opt any two papers from MT347 A to MT 347 F in second semester.

3.For MT 331 to MT 337 and MT 341 to MT 347 each course is of 50 marks (40 marks theory and 10 marks internal examination).

4.Papers MT 338 and MT 348 are practicals and each course is of 50 marks (32 marks theory, 8 marks oral and 10 marks internal examination).

Medium of Instruction: English

Examination:

A) Pattern of examination: Semester wise.

B) Standard of passing : 20 Marks out of 50 marks for each papers. (But for passing a student should obtain minimum 16 marks out of 40 in the theory and oral examination and overall total marks for theory, oral and internal should be minimum 20).