

COURSE STRUCTURE OF UG-PG INTEGRATED COURSE IN MATHEMATICS

S.No.	Nature of Course	Course Code	Course Title	Credits
Semester I				
1.	Major*		Differential Calculus	4
2.	Minor		From other Departments	4
3.	Multidisciplinary Course		From other Departments/Swayam	3
			Trigonometry and Theory of Equations (For other Departments)	
4.	Ability Enhancement Course		From other Departments/Swayam	2
5.	Skill Enhancement Course		MATLAB /From other Departments/Swayam	3
6.	Value Added Course		History of Mathematics in India 1 /From other Departments/Swayam	2
7.	Value Added Course		From other Departments/Swayam	2
	Total Credits			20
	*This course is minor for students of other departments			
Semester II				
1	Major*		Analytical Geometry and Tensor	4
2.	Minor		From other Departments	4
3.	Multidisciplinary Course		From other Departments/Swayam	3
			Matrix Theory (For other Departments)	
4.	Ability Enhancement Course		From other Departments/Swayam	2
5.	Skill Enhancement Course		LaTeX /From other Departments/Swayam	3
6.	Value Added Course		History of Mathematics in India 2 /From other Departments/Swayam	2
7.	Value Added Course		From other Departments/Swayam	2
		Total Credits		20

	*This course is minor for students of other departments			
	Summer Internship A	For those who want to Exit		4
	Semester III			
1.	Major*		Real Analysis 1	4
2.	Major*		Ordinary Differential Equations	4
3.	Minor		From other Departments	4
4.	Multidisciplinary Course		From other Departments/Swayam	3
			Sets, Relations and Functions (For other Departments)	
5.	Ability Enhancement Course		From other Departments/Swayam	2
6.	Skill Enhancement Course		From other Departments/Swayam	3
	Total			20
	*This course is minor for the students of other departments of odd semesters			
Semester IV				
1.	Major*		Basic Linear Algebra	4
2.	Major*		Real Analysis II	4
3.	Major*		Probability and Probability Distributions	4
4.	Major		Elementary Number Theory	2
5.	Minor		From other Departments	4
6.	Ability Enhancement Course		From other Departments/Swayam	2
		Total		20
	*This course is minor for the students of other departments of even semesters			
	Summer Internship B	For those who want to Exit		4
Semester V				

1.	Major*		Introduction to Group Theory	4
2.	Major*		Multivariate Calculus	4
3.	Major*		Statics	4
4.	Major		Metric Space	2
5.	Internship			2
6.	Minor		From other Departments	4
			Total	20
*This course is minor for the students of other departments of odd semesters				
Semester VI				
1.	Major*		Numerical Methods	4
2.	Major*		Introduction to Rings and Fields	4
3.	Major*		Dynamics	4
4.	Major*		Complex and Partial Differential Equations	4
5.	Minor		From other Departments	4
			Total	20
*This course is minor for students of other departments of even semesters				
Semester VII				
1.	Major*		Linear Algebra	4
2.	Major*		Real Analysis	4
3.	Major*		Discrete Mathematics	4
4.	Major*		ODE and Laplace Transformation	4
5.	Minor		From other Departments	4
			Total	20
*This course is minor for students of other departments of odd semesters				
Semester VIII (without Project)				
1.	Major*		Topology	4
2.	Major*		Advanced Numerical Analysis	4
3.	Major*		Operations Research and Statistics	4
4.	Major		Measure and Integration	4
5.	Minor		From other Departments	4
			Total	20
*This course is minor for the students of other departments of even semesters				
Semester VIII (with Project)				
1.	Major		Topology	4

2.	Project			12
3.	Minor			4
		Total		20
Semester IX				
1.	Major		Complex Analysis	4
2	Major		Algebra 1	4
3	Major		Functional Analysis	4
4	Major		Partial Differential Equations and Fourier Analysis	4
5.	Major		Algebra II	4
		Total		20
Semester X				
1.	Major		Elective 1/Swayam	4
2	Major		Elective 2/Swayam	4
3	Major		Elective 3/Swayam	4
4	Major		Swayam	4
5	Major		Swayam	4
		Total		20
OR				
	Project			20