

**School of Mathematics**  
**Course list-Vasanth 2024**

Sl. No.	Course Code	Course Name	Assigned Faculty Name (s)
<b>First year courses</b>			
1.	MAT121	Matrices and Calculus (4 credits)	Dr. Md. Ramiz Reza, Dr. Sarbeswar Pal
2.	IDC121	Mathematical Tools II	Prof. Utpal Manna
<b>Second year course</b>			
3.	MAT221	Introduction to Probability	Dr. Srilakshmi K
<b>Third year courses</b>			
4.	MAT/MSM321	Complex Analysis (Minor- 4 <sup>th</sup> year) (Core for BS-MS, i2M, MSc, IPHD)	Dr. Shrihari Sridharan
5.	MAT/MSM322	Fields, Modules and Algebras (Core for BS-MS, MSc, IPHD)	Dr. Geetha T
6.	MAT/MSM323	General Topology (Minor- 3 <sup>rd</sup> year) (Core for BS-MS, i2M, MSc, IPHD)	Dr. Sachindranath Jayaraman
7.	MAT/MSM324	Theory of Ordinary Differential Equations (Core for BS-MS, i2M, MSc, IPHD)	Prof. M. P. Rajan
8.	MAT/MSM325	Probability Theory and Stochastic Processes (Core for BS-MS, i2M, MSc, IPHD)	Dr. Priyanka Majumdar
9.	DSC3202/DSC322/I2M321	Scientific Computing (4 credits) (Core for i2M, Elective for MSc, IPHD (3credits))	Dr. Amal Medhi
10.	I2M322/MAT3202	Mathematical Modelling (Core for i2M, Elective for MSc, IPHD)	Dr. K. Sudarshan Kumar
<b>Fourth year courses</b>			
11.	MAT/MSM421	Functional Analysis (Core for BS-MS.,i2M, MSc, IPHD)	Prof. B. Rajeev
12.	MAT422/MAT4212	Algebraic Topology (Core for BS-MS, IPHD, Elective for MSc)	Dr. Viji Thomas
13.	MAT/MSM423/MAT6203	Differential Geometry (Core for BS-MS, MSc, IPHD, Stream for PhD)	Dr. Saikat Chatterjee

14.	MAT424/MAT4214	Number Theory and Cryptography (Core for BS-MS, IPHD, Elective for MSc)	Dr. P. Devaraj
15.	I2M421/MAT4201	Variational Methods and Control Theory (Core for i2M, Elective for MSc, IPHD)	Dr. Dhanya Rajendran
16.	I2M422/MAT4202	High Performance Computing (Core for i2M, Elective for MSc, IPHD)	Dr. Nagaiah Chamakuri
17.	I2M423/MAT4205/6205	Finite Element Methods (Core for i2M, stream for PhD, elective for BS-MS, MSc, and IPHD)	Dr. Asha Dond
18.	MAT6201	Topics in Analysis II (Stream for PhD)	Dr. Md. Ramiz Reza/ Dr. P. Devaraj/ Dr. K. R. Arun
19.	MAT4204/6204	Topics in Applied Mathematics (Stream for PhD, Elective for MSc, IPHD)	Dr. K. R. Arun
20.	MAT4226/6202	Topics in Algebra II (Stream for PhD and IPHD)	Dr. Viji Thomas, Dr. Sarbeswar Pal, Dr. Saikat Chatterjee, Dr. Geetha T, Dr. Srilakshmi K
21.	DSC4101	Survival Analysis (Elective for i2 M, BSMS, MSc, IPHD)	Dr. Shyamal Ghosh
22.	MAT4223/6223	Approximation Theory (Elective for i2 M, BS-MS, MSc and IPHD)	Dr. Shrihari Sridharan
23.	MAT620	Research Methodology (Ph.D only, non credit course)	Dr. Sheetal Dharmatti
24.	MAT4125/6125	Some topics in Euclidean Harmonic Analysis (Elective for i2 M, BS-MS, MSc, IPHD, PhD)	Dr. Samya Kumar Ray