

School of Mathematics Course List-Varsha 2023

Course Number	Course Name	Faculty List
MAT211	Multivariable Calculus	Dr. P. Devaraj/ Dr. Dhanya Rajendran
MAT311/MSM311	Real Analysis (Core for BS-MS Maths 3rd year, Maths minor 3rd year , IPhD Maths 1st year, i2 Maths 3rd year, MSc Maths 1st year)	Dr. Saikat Chatterjee
MAT312/MSM312	Theory of Groups and Rings (Core for BS-MS Maths 3rd year, Maths minor 5th year , IPhD Maths 1st year, i2 Maths 3rd year, MSc Maths 1st year)	Dr. Geetha Thangavelu
MAT313/MSM313	Linear Algebra (Core for BS-MS Maths 3rd year, Maths Minor 4th year , IPhD Maths 1st year, i2 Maths 3rd year, MSc Maths 1st year)	Dr. Sarbeswar Pal
MAT314/MSM314	Numerical Analysis (Core for BS-MS Maths 3rd year, IPhD Maths 1st year, i2 Maths 3rd year, MSc Maths 1st year)	Dr. Asha Dond
MAT315/MSM315/DSC311	Mathematical Statistics + Lab (4 credits) (Core for BS-MS Maths 3rd year, IPhD Maths 1st year, i2 Maths 3rd year, MSc Maths 1st year, BS-MS DSc 3rd year)	Dr. Priyanka Majumder
MAT3101/ /MAT511B/ DSC313	Discrete Mathematics (2 credits) (Core for BS-MS DSc 3rd year; Elective for IPhD Maths 1st year, BS-MS Maths 5th year)	Dr. Srilakshmi Krishnamoorthy
MAT3102/ MAT511B DSC312	Optimisation Techniques (2 credits) (Core for BS-MS DSc 3rd year Elective for IPhD Maths 1st year, BS-MS Maths 5th year)	Dr. Dhanya Rajendran

i2M315/ AOE3106/ MAT511B/DSC316/	Machine Learning (Core for i2 Maths 3rd year, BS-MS DSc 3rd year; Elective for BS-MS Maths 5th year; Open elective (Data Science minor))	Dr. Nagaiah Chamakuri
MAT411/MSM411	Measure Theory (Core for BS-MS Maths 4th year, i2 Maths 4th year, IPhD Maths 2nd year, MSc Maths 2nd year)	Dr. Sheetal Dharmatti
MAT412/6102/MSM4102	Commutative Algebra (Core for BS-MS Maths 4th year, IPhD 2nd year; Elective for MSc Maths 2nd year; Stream for PhD Maths 1st year)	Dr. Viji Thomas
MAT413/MSM413/6103	Analysis on Manifolds (Core for BS-MS Maths 4th year, IPhD 2nd year, MSc Maths 2nd year; Stream for PhD Maths 1st year)	Dr. Md. Ramiz Reza
MAT414/MSM414/6104	Partial Differential Equations (Core for BS-MS Maths 4th year, i2 Maths 4th year, IPhD Maths 2nd year, MSc Maths 2nd year; Stream for PhD Maths 1st year)	Dr. Sudarshan Kumar
i2M411/MAT511B/i2M4101	Applied Stochastic Analysis (Core for i2 Maths 4th year; Elective for BS-MS Maths 5th year, MSc Maths 2nd year, IPhD Maths 2nd year)	Prof. B. Rajeev
i2M412/i2M4102/ MAT511B/6105	Numerical Solutions of Differential Equations (Core for i2 Maths 4th year; Elective for IPhD Maths 2nd year, MSc Maths 2nd year, BS-MS Maths 5th year; Stream for PhD Maths 1st year)	Dr. K. R. Arun
MAT6101	Topics in Analysis I (Stream for PhD Maths 1st year)	Dr. Shrihari Sridharan, Dr. Dhanya Rajendran, Dr. Sachindranath Jayaraman

i2M4122/MAT511B/MAT6122	Financial Engineering (Elective for i2 Maths 4th year, MSc Maths 2nd year, IPhD Maths 2nd year, BS-MS Maths 5th year, PhD Maths 1st year)	Prof. M. P. Rajan
MAT4121/6121/MSM4121/MAT511B	Complex Dynamics (Elective for BS-MS 5th year, MSc Maths 2nd year, IPhD Maths 2nd year, PhD Maths 1st year)	Dr. Shrihari Sridharan
DSC411/DSC4101/MAT511B	Statistical Modelling (Elective for i2 Maths 4 th year and BS MS 5th year)	Dr. Shyamal Ghosh
DSC414/DSC4104/MAT511B	Artificial Intelligence (Elective for i2 Maths 4 th year and BS MS 5th year)	Dr. Saptarshi Bej
DSC314	Data Structures (4 credits) (Core for 2 nd year IPHD/ 4 th year i2 Maths and BS MS)	TBA
MAT4120/MAT6120/MSM4120/MAT511B	Numerical Linear Algebra (Elective for i2 Math 4th year, MSc Math 2nd year, IPhD Math 2nd year, BS-MS Math 5th year, PhD Math 1st year)	Dr. Sachindranath Jayaraman

*TBA-To be announced