

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

DEPARTMENT: DEPARTMENT OF APPLIED MATHEMATICS AND SCIENTIFIC COMPUTING

PROGRAM: M.TECH. APPLIED MATHEMATICS AND SCIENTIFIC COMPUTING

Courses:

S. No.	COURSE CODE	COURSE TITLE	COURSE AREA	CREDIT	L	T	P	THEORY	PRACTICAL
1	AMC-501	Applied Optimization Techniques	PCC	3	3	0	0	3	0
2	AMS-501	Ethics in Artificial Intelligence and Data Science	SSC	2	2	0	0	2	0
3	AMC-503	Stochastic Processes	PCC	3	3	0	0	3	0
4	AMC-505	Numerical Linear Algebra	PCC	3	3	0	0	3	0
5	AMC-507	Advanced Data Structures and Algorithms	PCC	4	3	0	2	3	0
6	AMC-509	Programming Lab	PCC	3	0	0	6	0	3
7	AMT-501	Deep Learning	STAR	3	3	0	0	3	0
8	AML-501	Approximation Theory	PEC	3	3	0	0	3	0
9	AML-502	Advanced Transform Techniques	PEC	3	3	0	0	3	0
10	AML-503	Applied Soft Computing	PEC	3	3	0	0	3	0
11	AML-504	Applied Operations Research	PEC	3	3	0	0	3	0
12	AML-505	Mathematical Finance	PEC	3	3	0	0	3	0
13	AML-506	Mathematical and Computational Biology	PEC	3	3	0	0	3	0
14	AML-507	Computational Differential Equations	PEC	3	3	0	0	3	0
15	AML-508	Advanced Decision Making	PEC	3	3	0	0	3	0
16	AML-509	Integral Equations	PEC	3	3	0	0	3	0
17	AML-510	Advanced Evolutionary Algorithms	PEC	3	3	0	0	3	0

18	AML-511	Logistics and Supply Chain Management	PEC	3	3	0	0	3	0
19	AML-512	Advanced Computational Fluid Dynamics	PEC	3	3	0	0	3	0
20	AML-513	Game Theory & Industrial Organization	PEC	3	3	0	0	3	0
21	AML-514	Explainable Artificial Intelligence	PEC	3	3	0	0	3	0
22	AML-515	Stochastic Differential Equations	PEC	3	3	0	0	3	0