

NATIONAL INSTITUTE OF TECHNOLOGY, Bhopal-462003
DEPARTMENT OF MATHEMATICS, BIOINFORMATICS & COMPUTER APPLICATIONS
M. Tech. in Agile Software Engineering
SCHEME OF STUDY



SCHEME M. Tech. (Agile Software Engineering)
(Revised 2025)

First Semester:

Course No.	Subject	Schemes of studies periods per week			Total Credits
		L	T	P	
MC MT 1511	Linear Algebra	3	-	-	3
MC SE 1512	Software Architecture and Design	3	-	-	3
MC SE 1513	DevOps Tool and Chains	3	-	-	3
	Department Elective - 1	3	-	-	3
	Department Elective - 2	3	-	-	3
MC SE 1514	DevOps Tool and Chains Lab	-	-	2	1
MC SE 1515	Lab	-	-	2	1
MC SE 1516	Seminar-I	-	-	2	1
MC SE 1517	Minor Project-1 (Self Learning)				2
Total Hours: 23		Total Semester Credits			20
Total Credits: 20					

- Communication Skill will be Audit Course of 2 credits which will not be counted in SGPA/CGPA calculation

Second Semester:

Course No.	Subject	Schemes of studies Periods per week			Total Credits
		L	T	P	
MC SE 2521	Design Patterns	3	-	-	3
MC SE 2522	Software Testing – Techniques and Tools	3	-	-	3
	Department Elective - 3	3	-	-	3
	Department Elective - 4	3	-	-	3
	Open Elective	3	-	-	3
MC SE 2523	Software Testing Lab	-	-	2	1
MC SE 2524	Agile Testing Lab	-	-	2	1
MC SE 2525	Seminar-II	-	-	2	1
MC SE 2526	Minor Project-2 (Self Learning)				2
Total Hours: 23		Total Semester Credits			20
Total Credits: 40					

Third Semester:

Course No.	Subject	Schemes of studies Periods per week			Total Credits
		L	T	P	
MC SE 3611	Dissertation Phase-I	-	-	40	20
Total Hours: 40 Total Credits: 60		Total Semester Credits			20

Fourth Semester:

Course No.	Subject	Schemes of studies Periods per week			Total Credits
		L	T	P	
MC SE 4621	Dissertation Phase-II	-	-	40	20
Total Hours: 40 Total Credits: 80		Total Semester Credits			20

List of Courses (Elective-Departmental / Open)

List of Departmental Elective		List of Open Electives
MC SE 551	Neural Network	To be offered by different departments.
MC SE 552	Machine Learning	
MC SE 553	Deep learning	
MC SE 554	Agile Software Development	
MC SE 555	Data Warehousing and Data Mining	
MC SE 556	Cloud Computing and Virtualization	
MC SE 557	Web Search and Information Retrieval	
MC SE 558	Edge Computing	
MC SE 559	Data Security & Data Privacy	
MC SE 560	Internet of Things	
MC SE 561	Data Science & Analytics	
MC SE 562	Mobile Computing and Application Development	
MC SE 563	Software Quality Engineering	
MC SE 564	Service Oriented Architecture	
MC SE 565	Requirement Engineering	
MC SE 566	Software Agents	
MC SE 567	Cyber Security	
MC MT 524	Research Methodology	