

DEPARTMENT OF MECHANICAL AND INDUSTRIAL ENGINEERING

M. Tech. (CAD, CAM and Robotics)

[illegible]

Program Elective Courses (CAD, CAM and Robotics)

Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight (%)				
S. No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
1.	MIN-500	Instrumentation and Experimental Methods	PEC	4	3	1	2/2	3	-	20	20	20	40	-
2.	MIN-508	Advanced Automatic Control	PEC	4	3	1	0	3	-	25	-	25	50	-
3.	MIN-509	Extended Finite Element Methods	PEC	4	3	1	0	3	-	25	-	25	50	-
4.	MIN-515	Manufacturing System Analysis	PEC	4	3	1	0	3	-	25	-	25	50	-
5.	MIN-516	Artificial Intelligence	PEC	4	3	1	0	3	-	25	-	25	50	-
6.	MIN-517	Automated Materials Handling Systems	PEC	4	3	1	0	3	-	25	-	25	50	-
7.	MIN-527	Computational Fluid Dynamics & Heat Transfer	PEC	4	3	1	0	3	-	25	-	25	50	-
8.	MIN-547	Product and Process Optimization	PEC	4	3	1	0	3	-	25	-	25	50	-
9.	MIN-550	Advanced Machine Design	PEC	4	3	1	0	3	-	25	-	25	50	-
10.	MIN-551	Dynamics of Mechanical Systems	PEC	4	3	1	0	3	-	25	-	25	50	-
11.	MIN-552	Advanced Mechanics of Solids	PEC	4	3	1	0	3	-	25	-	25	50	-
12.	MIN-557	Finite Element Methods	PEC	4	3	1	0	3	-	25	-	25	50	-
13.	MIN-558	Fracture Mechanics	PEC	4	3	1	0	3	-	25	-	25	50	-
14.	MIN-560	Mechanics of Composite Materials	PEC	4	3	1	0	3	-	25	-	25	50	-
15.	MIN-561	Advanced Mechanical Vibrations	PEC	4	3	1	2/2	3	-	20	20	20	40	-
16.	MIN-563	Mechatronics	PEC	4	3	1	2/2	3	-	20	20	20	40	-
17.	MIN-565	Smart Materials, Structures, and Devices	PEC	4	3	1	0	3	-	25	-	25	50	-
18.	MIN-566	Computer Aided Analysis of Mechanical Systems	PEC	4	3	1	0	3	-	25	-	25	50	-
19.	MIN-567	Computer Graphics	PEC	4	3	1	2/2	3	-	20	20	20	40	-
20.	MIN-568	Advanced Robotics	PEC	4	3	1	2/2	3	-	20	20	20	40	-
21.	MIN-569	Expert System Design	PEC	4	3	1	0	3	-	25	-	25	50	-
22.	MIN-575	Product Design and Development	PEC	4	3	1	0	3	-	25	-	25	50	-
23.	MIN-576	Machine Tool Design and Numerical Control	PEC	4	3	1	0	3	-	25	-	25	50	-
24.	MIN-577	Industrial Automation	PEC	4	3	1	0	3	-	25	-	25	50	-
25.	MIN-578	Computer Aided Process Planning	PEC	4	3	1	0	3	-	25	-	25	50	-
26.	MIN-579	Information Systems and Data Management	PEC	4	3	1	0	3	-	25	-	25	50	-
27.	MIN-582	Flexible Manufacturing Systems	PEC	4	3	1	0	3	-	25	-	25	50	-
28.	MIN-584	Operations Research	PEC	4	3	1	0	3	-	25	-	25	50	-
29.	MIN-602	Bond Graph Modelling of Engineering Systems	PEC	4	3	1	2/2	3	-	20	20	20	40	-
30.	MIN-611	Nanomechanics to Multiscale Modeling	PEC	4	3	1	0	3	-	25	-	25	50	-