

Name of the Faculty : ENGINEERING & TECHNOLOGY

Name of the Course : Master of Technology (Mechanical Engineering) : 2022-23 onwards

Sr. No.	Semester/Year	Subject Code	Nomenclature	Theory/Practical I	Core/AECC/SEC/DSE/GE	ERP	Theory/Practical (Result Combined or Separate)	L	T	P	Credits	Theory					Practical					Practical (Internal)					Overall Pass Marks	Scheme of Examinations (Theory+Internal +Practical+Oral/ Theory+Internal +Practical/ Theory+Practical)			
												Max	Pass	Midterm	Assignment	Professional Activities	Max	Pass	Demonstration/Presentation	Viva-Voce	Max	Pass	Attendance	Project/ Laboratory Work	Mid Term	Conduct/ Demonstration			Max	Pass	
1	1st	13210101	Computer Aided Engineering	Theory	CORE	Core	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+Internal	
2	1st	13210102	Research Methodology and IPR	Theory	CORE	Core	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+Internal	
3	1st	13210103	Advanced Fluid Mechanics	Theory	CORE	Core	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+Internal	
Choose one of the following from PE-I																															
4	1st	13210104	Advanced Design of Mechanical Systems	Theory	PE-I	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+Internal	
5	1st	13210105	Statistics for Decision Making	Theory	PE-I	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+Internal	
6	1st	13210106	Numerical & Optimization Methods	Theory	PE-I	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+Internal	
7	1st	13210107	Design of Solar and Wind System	Theory	PE-I	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+Internal	
9	1st	13210108	Computer Aided Engineering Lab	Practical	CORE	Core	Separate	0	0	2	1								20	20	40	16	10	10	10	30	60	24	40	Practical + Internal	
10	1st	13210109	Research Methodology and IPR Lab	Practical	CORE	Core	Separate	0	0	2	1								20	20	40	16	10	10	10	30	60	24	40	Practical + Internal	
11	1st	13210110	Seminar	Practical	CORE	Core	Separate	0	0	2	1											20				80	100	40	40	Internal	
8	1st	--	VAC	Theory	VAC	Core	Separate	2	0	0	2	30	12	10	5	5	20	8										20	Theory+Internal		
Total Credits for the semester								14	0	6	17																				
12	2nd	13210201	Finite Element Analysis	Theory	CORE	Core	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+ Internal	
13	2nd	13210202	Vibration and Condition Monitoring	Theory	CORE	Core	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+ Internal	
14	2nd	13210203	Advance Heat Transfer	Theory	CORE	Core	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+ Internal	
Choose one of the following from PE-II																															
15	2nd	13210204	Advanced Mechanics of Solids	Theory	PE-II	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+ Internal	
16	2nd	13210205	Analysis of Manufacturing Processes	Theory	PE-II	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+ Internal	
17	2nd	13210206	Production & Operations Management	Theory	PE-II	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+ Internal	
18	2nd	13210207	Energy Conservation and Management	Theory	PE-II	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+ Internal	
19	2nd	13210208	Manufacturing Simulation Lab	Practical	CORE	Core	Separate	0	0	2	1								20	20	40	16	10	10	10	30	60	24	40	Practical + Internal	
20	2nd	13210209	Vibration and Condition Monitoring Lab	Practical	CORE	Core	Separate	0	0	2	1								20	20	40	16	10	10	10	30	60	24	40	Practical + Internal	
21	2nd	13210210	Seminar	Practical	CORE	Core	Separate	0	0	2	1											20				80	100	40	40	Internal	
Total Credits for the semester								12	0	6	15																				
22	3rd	13210301	Computer Integrated Manufacturing System	Theory	CORE	Core	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+ Internal	
Choose one of the following from PE-III																															
23	3rd	13210302	Industrial Automation and Robotics	Theory	PE-III	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+ Internal	
24	3rd	13210303	Reliability Based Design	Theory	PE-III	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+ Internal	
25	3rd	13210304	Technology & Manufacturing Strategies	Theory	PE-III	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+ Internal	
26	3rd	13210305	Thermodynamics and Combustion	Theory	PE-III	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+ Internal	
Choose one of the following from PE-IV																															
27	3rd	13210306	Advance Operation Research	Theory	PE-IV	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+ Internal	
28	3rd	13210307	Artificial Intelligence in Automation	Theory	PE-IV	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16											40	Theory+ Internal	

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												Max	Pass	Midterm	Assignment	Professional Activities	Max	Pass	Demonstration/Presentation	Viva-Voce	Max	Pass			Attendance	Project/ Laboratory Work	Mid Term	Conduct/ Demonstration	Max	Pass	
29	3rd	13210308	Machine Learning for Applications in Mechanical Engineering	Theory	PE-IV	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16										40	Theory+ Internal		
30	3rd	13210309	Air Conditioning & System Design	Theory	PE-IV	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16										40	Theory+ Internal		
Choose one of the following from PE-V																															
31	3rd	13210310	Advance Tribology	Theory	PE-V	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16										40	Theory+ Internal		
32	3rd	13210311	Hydraulic & Pneumatic Systems	Theory	PE-V	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16										40	Theory+ Internal		
33	3rd	13210312	I.C. Engines Process Modeling	Theory	PE-V	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16										40	Theory+ Internal		
34	3rd	13210313	Gas Turbines	Theory	PE-V	DSE	Separate	3	0	0	3	60	24	20	10	10	40	16										40	Theory+ Internal		
36	3rd	13210314	Computer Integrated Manufacturing System Lab	Practical	CORE	Core	Separate	0	0	2	1								20	20	40	16	10	10	10	30	60	24	40	Practical +Internal	
37	3rd	13210315	Identification of Research Problem	Practical	CORE	Core	Separate	0	0	2	1								20	20	40	16	10	10	10	30	60	24	40	Practical +Internal	
35	3rd	--	Value Added Courses-II	Theory	VAC	DSE	Separate	2	0	0	2	30	12	10	5	5	10	8										20	Theory+ Internal		
Total Credits for the semester								14	0	4	16																				
38	4th	13210401	Dissertation	Practical	CORE	Core	Separate	0	0	20	W	20							40	40	80	32	20	20	20	60	120	48	40	Practical+ Internal	
Total Credits for the semester								0	0	20	w	20																			

Total credits for Degree = 68

Note: Student can opt for any of the Open Elective, Value Added Course and Ability Enhancement Courses subject outside from the Parent Institute leading to Holistic Development of student. It may include Yoga, Dance, Fashion, Agriculture, Medicine, etc. These courses as mentioned in the curriculum can be opted from the University Pool which is circulated before the commencement of semester classes.