

## **Scheme of Studies & Syllabus**

### **Master of Technology Mechanical Engineering (2021-22)**

The department of Mechanical Engineering offers the following programmes during the academic year 2021-22.

- Master of Technology (M.Tech.) in Mechanical Engineering with specialization in
  - Thermal Engineering
  - Mechanical Engineering Design and
  - Production and Industrial Engineering

M.Tech. in Mechanical Engineering programme for working professional will impart research based knowledge in the selected disciplines of mechanical engineering. The programme will be of 3 years with 6 semesters for working professional under part time. The programme has total credits of 57. The curriculum is designed in such a way that there are subjects relevant to overall mechanical engineering and specialization based seminar, minor project, and dissertation in three specializations mentioned above. Students can opt for any one of these specializations by taking the seminar, minor project and dissertation in those specializations.

## Master of Technology in 'Mechanical Engineering'- (2021-22)

Semester	Semester Course Code, Course Name (L-T-P) Credits				Lecture course	L	T	P	Contact Hour per week	Credits
1	<b>MEL-510</b> Introduction to FEM (2-1-0) 3	<b>MEL-613-IP</b> Project Management (2-1-0) 3	<b>MEL-580</b> Advanced Fluid Dynamics (2-0-2) 3	<b>MEP601</b> Laboratory Training, I 0-0-4 (2)	3	6	2	6	14	11
2	<b>MEL-550</b> Advanced Heat and Mass Transfer (2-1-0) 3	<b>MEL-560</b> Advanced Machine Design (2-1-0) 3	<b>MEL-530</b> Advanced Manufacturing Processes (2-1-0) 3	<b>MEP602</b> Laboratory Training, II 0-0-4 (2)	3	6	3	4	13	11
3	<b>MEL-570</b> Production and Operation Management (2-1-0) 3	<b>MEC-620</b> Seminar (Specialization based) 0-0-4 (2) Credits	*Open Elective-1 (2-1-0) 3 Credits		2	4	2	4	10	8
4	<b>MAL616</b> Research Methodology (2-1-0) 3	<b>MED 612</b> Minor Project (Specialization based) 0-0-6 (3)	<b>MEL614</b> Technical Writing Skills 2-0-0 (2)		2	4	1	6	11	8
5	*Open Elective-2 (2-1-0) 3 Credits	<b>MED-600</b> Project Part -1 (Specialization based) (00-12) 6 Credits			1	2	1	12	15	9
6	<b>MED-610</b> Project Part -2 (Specialization based) (0-0-20) 10 credits				0	0	0	20	12	10
					<b>Total Credits=</b>					<b>57</b>

\*Open electives can be chosen from the list of Open Elective courses offered by the University. These may be run as Regular or MOOC (full/blended).