

**13. Courses of Study and Scheme of Assessment  
ME INDUSTRIAL ENGINEERING**

**(2021 REGULATIONS)  
(Minimum No. of credits to be earned:70\*)**

Course Code	Course Title	Periods / Week			Credits	Maximum Marks			CAT
		Lecture	Tutorial	Practical		CA	FE	Total	
<b>I SEMESTER</b>									
21MN01	Statistical Inference and Multivariate Analysis	3	1	0	4	50	50	100	PC
21MN02	Engineering Economy	3	0	0	3	50	50	100	PC
21MN03	Modeling and Analysis of Manufacturing Systems	3	1	0	4	50	50	100	PC
21MN04	Operations Management	3	0	0	3	50	50	100	PC
21MN05	Advanced Operations Research	3	2	0	5	50	50	100	PC
21MN06	Research Methodology and IPR	2	0	0	2	50	50	100	RMC
21MN72	Audit Course – I	2	0	0	Grade	100	0	100	MC
21MN51	Optimization Techniques Laboratory	0	0	4	2	50	50	100	PC
21MN52	Work Systems and Ergonomics Laboratory	0	0	4	2	50	50	100	PC
<b>Total 31hrs</b>		<b>19</b>	<b>4</b>	<b>8</b>	<b>25</b>	<b>500</b>	<b>400</b>	<b>900</b>	
<b>II SEMESTER</b>									
21MN07	Discrete Event System Simulation	3	0	0	3	50	50	100	PC
21MN08	Supply Chain Management	3	0	0	3	50	50	100	PC
21MN__	Professional Elective – I	3	0	0	3	50	50	100	PE
21MN__	Professional Elective – II	3	0	0	3	50	50	100	PE
21MN__	Professional Elective – III	3	0	0	3	50	50	100	PE
21MN82	Audit Course – II	2	0	0	Grade	100	0	100	MC
21MN61	System Simulation Laboratory	0	0	4	2	50	50	100	PC
21MN62	Data Analytics Laboratory	0	0	4	2	50	50	100	PC
21MN63	Industry Visit and Technical Seminar	0	0	4	2	50	50	100	EEC
<b>Total 29hrs</b>		<b>17</b>	<b>0</b>	<b>12</b>	<b>21</b>	<b>500</b>	<b>400</b>	<b>900</b>	
<b>III SEMESTER</b>									
21MN__	Professional Elective – IV	3	0	0	3	50	50	100	PE
21_____	Open Elective	3	0	0	3	50	50	100	OE
21MN71	Project Work - I	0	0	12	6	50	50	100	EEC
<b>Total 18hrs</b>		<b>6</b>	<b>0</b>	<b>12</b>	<b>12</b>	<b>150</b>	<b>150</b>	<b>300</b>	
<b>IV SEMESTER</b>									
21MN81	Project Work - II	0	0	24	12	50	50	100	EEC

<b>Total 24 hrs</b>		<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>	<b>50</b>	<b>50</b>	<b>100</b>	
<b>PROFESSIONAL ELECTIVE THEORY COURSES (Four to be opted)</b>									
21MN21	Lean Six Sigma in Manufacturing and Service	3	0	0	3	50	50	100	PE
21MN22	Logistics Strategies and Distribution Management	3	0	0	3	50	50	100	PE
21MN23	Costing and Product Analysis	3	0	0	3	50	50	100	PE
21MN24	Project Management	3	0	0	3	50	50	100	PE
21MN25	Sequencing and Scheduling	3	0	0	3	50	50	100	PE
21MN26	Value Engineering	3	0	0	3	50	50	100	PE
21MN27	Enterprise Resource Planning	3	0	0	3	50	50	100	PE
21MN28	Human Factors and Ergonomics	3	0	0	3	50	50	100	PE
21MN29	Total Productive Maintenance	3	0	0	3	50	50	100	PE
21MN30	Human Resource Management	3	0	0	3	50	50	100	PE
21MN31	Sustainability Management	3	0	0	3	50	50	100	PE
21MN32	Entrepreneurship Development	3	0	0	3	50	50	100	PE
21MN33	Industrial Internet of Things	3	0	0	3	50	50	100	PE
<b>OPEN ELECTIVE THEORY COURSES (One to be opted)</b>									
21MN91	Business Analytics in Practice	3	0	0	3	50	50	100	OE
21MN92	Life Cycle Assessment and Eco-Design	3	0	0	3	50	50	100	OE
21MN93	Systems Engineering and Management	3	0	0	3	50	50	100	OE

\* Indicated is the minimum number of credits to be earned by a student.

**CAT – Category; PC – Professional Core; PE - Professional Elective; RMC - Research Methodology and IPR; EEC – Employability Enhancement Course; MC - Mandatory Course; Grade – Completed / Not Completed; OE – Open Elective.**