

**B.E. MECHANICAL ENGINEERING****Regulation 2023****Semester I**

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
<b>THEORY</b>								
	-	Induction Program	-	-	-	-	-	-
1	U23MA201	Calculus for Engineers	BS	4	3	1	0	4
2	U23CS301	Problem Solving using C	ES	3	3	0	0	3
3	U23ME301	Engineering Graphics	ES	5	1	0	4	3
<b>THEORY CUM PRACTICAL</b>								
4	U23HS181	Technical English	HS	4	2	0	2	3
5	U23PH283	Engineering Physics	BS	5	3	0	2	4
<b>PRACTICALS</b>								
6	U23GE351	Engineering Practices Laboratory	ES	2	0	0	2	1
7	U23CS351	Problem Solving using C Laboratory	ES	4	0	0	4	2
<b>PROFESSIONAL DEVELOPMENT</b>								
8	U23EM751	Soft Skills	EM	2	0	0	2	1
<b>MANDATORY COURSE</b>								
9	U23MC901	தமிழர் மரபு / Heritage of Tamils	HSMC	1	1	0	0	1
<b>TOTAL</b>				<b>30</b>	<b>13</b>	<b>1</b>	<b>16</b>	<b>22</b>

**Semester II**

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
<b>THEORY</b>								
1	U23MA206	Complex Variables and Partial Differential Equations	BS	4	3	1	0	4
2	U23CS302	Data Structures and Algorithms	ES	3	3	0	0	3
3	U23ME401	Engineering Mechanics	PC	4	3	1	0	4
	U23NCC01	NCC Credit Course Level 1 <sup>#</sup>	--	2	2	0	0	2 <sup>#</sup>
<b>THEORY CUM PRACTICAL</b>								
4	U23HS18X	Language Elective	HS	4	2	0	2	3
5	U23CY281	Engineering Chemistry	BS	4	2	0	2	3
6	U23CS382	Python Programming	ES	5	3	0	2	4
<b>PRACTICALS</b>								
7	U23CS352	Data Structures and Algorithms Laboratory	ES	4	0	0	4	2
<b>PROFESSIONAL DEVELOPMENT</b>								
8	U23EM752	Logical Thinking	EM	2	0	0	2	1
<b>MANDATORY COURSE</b>								
9	U23MC902	தமிழரும் தொழில்நுட்பமும் / Tamils and Technology	HSMC	1	1	0	0	1
<b>TOTAL</b>				<b>31</b>	<b>17</b>	<b>2</b>	<b>12</b>	<b>25</b>

\* L T P C either 3 0 0 3 or 2 0 2 3, #-NCC Credit Course is offered for NCC Students only

**Semester III**

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
<b>THEORY</b>								
1	U23MA208	Linear Algebra and Numerical Methods	BS	4	3	1	0	4
2	U23ME402	Manufacturing Technology	PC	3	3	0	0	3
3	U23ME403	Engineering Thermodynamics	PC	4	3	1	0	4
<b>THEORY CUM PRACTICAL</b>								
4	U23EC381	Electronics and Microprocessors	ES	5	3	0	2	4
5	U23ME481	Fluid Mechanics and Machinery	PC	5	3	0	2	4
6	U23OXXXX	Open Elective – I*	OE	4	2	0	2	3
<b>PRACTICALS</b>								
7	U23ME451	Computer Aided Drafting and Modeling Laboratory	PC	2	0	0	2	1
8	U23ME452	Manufacturing Technology Laboratory	PC	2	0	0	2	1
<b>PROFESSIONAL DEVELOPMENT</b>								
9	U23EM753	Advanced Logical Thinking	EM	2	0	0	2	1
<b>MANDATORY COURSE</b>								
	U23MC904	Universal Human Values	MC	1	1	0	0	NC
<b>TOTAL</b>				<b>32</b>	<b>18</b>	<b>2</b>	<b>12</b>	<b>25</b>

**Semester IV**

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
<b>THEORY</b>								
1	U23MA209	Probability and Statistics	BS	4	3	1	0	4
2	U23ME404	Engineering Materials and Metallurgy	PC	3	3	0	0	3
	U23NCC02	NCC Credit Course Level 2 <sup>#</sup>	--	3	3	0	0	3*
<b>THEORY CUM PRACTICAL</b>								
3	U23EC383	Embedded Systems and IoT	ES	5	3	0	2	4
4	U23ME482	Strength of Materials	PC	5	3	0	2	4
5	U23ME483	Thermal Engineering	PC	5	3	0	2	4
6	U23OXXXX	Open Elective – II*	OE	4	2	0	2	3
<b>PRACTICALS</b>								
7	U23ME453	CAD/CAM Laboratory	PC	2	0	0	2	1
<b>PROJECT WORK</b>								
8	U23ME651	Project using Design Thinking (Product / Software Development Life Cycle)	PW	2	0	0	2	1
<b>MANDATORY COURSE</b>								
	U23MC903	Environmental Science	MC	1	1	0	0	NC
<b>TOTAL</b>				<b>34</b>	<b>21</b>	<b>1</b>	<b>12</b>	<b>24</b>

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**Semester V**

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
<b>THEORY</b>								
1	U23ME405	Metrology and Instrumentation	PC	3	3	0	0	3
2	U23ME406	Theory of Machines	PC	4	3	1	0	4
3	U23ME407	Machine Design	PC	4	3	1	0	4
4	U23ME5XX	Professional Elective I	PE	3	3	0	0	3
<b>THEORY CUM PRACTICAL</b>								
5	U23ME484	Heat and Mass Transfer	PC	5	3	0	2	4
6	U23OXXXX	Open Elective III*	OE	4	2	0	2	3
<b>PRACTICALS</b>								
7	U23ME454	Metrology and Dynamics Laboratory	PC	4	0	0	4	2
8	U23IMEXX	Industry Oriented Course	PC	2	0	0	2	1
<b>MANDATORY COURSE</b>								
9	U23EM754	Summer Internship	EM	-	-	-	-	1
<b>TOTAL</b>				<b>29</b>	<b>17</b>	<b>2</b>	<b>10</b>	<b>25</b>

**Semester VI**

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
<b>THEORY</b>								
1	U23AM408	Artificial Intelligence and Machine Learning in Mechanical Systems	PC	3	3	0	0	3
2	U23ME408	Finite Element Analysis	PC	3	3	0	0	3
3	U23ME409	Intelligent Robotic System	PC	3	3	0	0	3
4	U23ME5XX	Professional Elective II	PE	3	3	0	0	3
	U23NCC03	NCC Credit Course Level 3 <sup>#</sup>	--	3	3	0	0	3 <sup>#</sup>
<b>THEORY CUM PRACTICAL</b>								
5	U23ME485	Fluid Power Systems and Industrial Automation	PC	5	3	0	2	4
<b>PRACTICALS</b>								
6	U23AM458	Artificial Intelligence and Machine Learning in Mechanical Systems Laboratory	PC	2	0	0	2	1
7	U23ME455	Computer Aided Simulation and Analysis Laboratory	PC	2	0	0	2	1
<b>PROJECT WORK</b>								
8	U23ME652	Innovative / Multi-Disciplinary Project	PW	2	0	0	2	1
<b>TOTAL</b>				<b>26</b>	<b>18</b>	<b>0</b>	<b>8</b>	<b>19</b>

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**Semester VII**

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
<b>THEORY</b>								
1	U23CB101	Principles of Management	HS	3	3	0	0	3
2	U23CB102	Project Management and Finance	HS	1	1	0	0	1
3	U23ME410	Operations Research	PC	3	3	0	0	3
4	U23ME5XX	Professional Elective III	PE	3	3	0	0	3
5	U23ME5XX	Professional Elective IV	PE	3	3	0	0	3
<b>PROJECT WORK</b>								
6	U23ME653	Project Work – Phase I	PW	6	0	0	6	3
<b>TOTAL</b>				<b>19</b>	<b>13</b>	<b>0</b>	<b>6</b>	<b>16</b>

**Semester VIII**

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
<b>PROJECT WORK</b>								
1	U23ME654	Project Work – Phase II	PW	16	0	0	16	8
<b>TOTAL</b>				<b>16</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>8</b>

**Total Number of Credits: 164**

**SUMMARY**

Sl. No.	Course Category	Credits per Semester								Credits	Credit %
		I	II	III	IV	V	VI	VII	VIII		
1	HS	3	3	-	-	-	-	4	-	10	6.1
2	BS	8	7	4	4	-	-	-	-	23	14.0
3	ES	9	9	4	4	-	-	-	-	26	15.9
4	PC	-	4	13	12	18	15	3	-	65	39.6
5	PE	-	-	-	-	3	3	6	-	12	7.3
6	OE	-	-	3	3	3	-	-	-	9	5.5
7	PW	-	-	-	1	-	1	3	8	13	7.9
8	EM	1	1	1	-	1	-	-	-	4	2.4
9	MC	1	1	✓	✓	✓	-	-	-	2	1.2
10	NC	-	-	✓	✓	-	-	-	-	-	-
<b>Total</b>		<b>22</b>	<b>25</b>	<b>25</b>	<b>24</b>	<b>25</b>	<b>19</b>	<b>16</b>	<b>8</b>	<b>164</b>	<b>100</b>