



**St. PETER'S**  
**COLLEGE OF ENGINEERING AND TECHNOLOGY**

(An Autonomous Institution)

Affiliated to Anna University | Approved by AICTE|

Avadi, Chennai 600 054



**REGULATIONS 2024**

**B. E MECHANICAL ENGINEERING**

**CHOICE BASED CREDIT SYSTEM**

**CURRICULUM FOR 1 TO VIII SEMESTERS**

**SEMESTER I**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			CONTACT TOTAL PERIODS	CREDIT S
				L	T	P		
1.		Induction Programme	-	-	-	-	-	0
<b>THEORY</b>								
2.	24EN1R001	Professional English - I	HSMC	2	0	2	4	3
3.	24TA1R001	தமிழர் மரபு/ Heritage of Tamils	HSMC	1	0	0	1	1
4.	24MA1R001	Matrices and Calculus	BSC	3	1	0	4	4
5.	24PH1R001	Engineering Physics	BSC	3	0	0	3	3
6.	24BE1R001	Basics of Electrical and Electronics Engineering	ESC	2	0	2	4	3
7.	24GE1R001	Problem Solving and Python Programming	ESC	3	0	0	3	3
<b>PRACTICAL</b>								
8.	24GE1R002	Problem Solving and Python Programming Laboratory	ESC	0	0	3	3	1.5
9.	24PH1R003	Physics Laboratory	BSC	0	0	3	3	1.5
		<b>TOTAL</b>		<b>14</b>	<b>1</b>	<b>10</b>	<b>25</b>	<b>20</b>

**SEMESTER II**

SEMESTER II								
SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.	24EN2R002	Professional English - II	HSMC	2	0	2	4	3
2.	24TA2R002	தமிழரும் தொழில்நுட்பமும் / Tamils and Technology	HSMC	1	0	0	1	1
3.	24MA2R002	Transforms and Partial Differential Equations	BSC	3	1	0	4	4
4.	24CY1R001	Engineering Chemistry	BSC	3	0	0	3	3
5.	24PH2R002	Material Science	BSC	3	0	0	3	3
6.	24GE2R004	Engineering Graphics	ESC	2	0	4	6	4
PRACTICAL								
7.	24CY1R002	Chemistry Laboratory	BSC	0	0	3	3	1.5
8.	24GE2R006	Basics of Civil and Mechanical Laboratory	ESC	0	0	3	3	1.5
		TOTAL		14	1	12	27	21

### SEMESTER-III

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIOD	CREDIT
				L	T	P		
THEORY								
1.	24MA2R003	Statistics and Numerical Methods	BSC	3	1	0	4	4
2.	24GE3R005	Engineering Mechanics	ESC	3	1	0	4	4
3.	24ME3R001	Engineering Thermodynamics	PCC	3	0	0	3	3
4.	24ME3R002	Manufacturing Processes	PCC	3	0	0	3	3
5.	24GE3R007	Human Values and Ethics	HSMC	2	0	0	2	2
LAB INTEGRATED THEORY								
6.	24GE2R005	Design Thinking	ESC	3	0	2	5	4
7.	24CE3R005	Fluid Mechanics and Machinery	PCC	3	0	2	5	4
PRACTICALS								
8.	24ME3R003	Computer Aided Machine Drawing Laboratory	PCC	0	0	4	4	2
TOTAL				20	2	8	30	26

### SEMESTER-IV

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIOD	CREDITS
				L	T	P		
THEORY								
1.	24GE4R008	Environmental Science and Sustainability	BSC	2	0	0	2	2
2.	24ME4R004	Engineering Materials and Metallurgy	PCC	3	0	0	3	3
3.	24ME4R005	Theory of Machines	PCC	3	0	0	3	3
4.	24ME4R006	Fluid Power Automation	PCC	3	0	0	3	3
5.	24ME4R007	Metal Cutting and Machine Tools	PCC	3	0	0	3	3
LAB INTEGRATED THEORY								
6.	24CE4R013	Strength of Materials	PCC	3	0	2	5	4
7.	24ME4R008	Thermal Engineering	PCC	3	0	2	5	4
PRACTICALS								
8.	24ME4R009	Theory of Machines Lab	PCC	0	0	4	4	2
9.	24ME4R010	Manufacturing Technology Lab	PCC	0	0	4	4	2
TOTAL				20	0	12	32	26

**SEMESTER-V**

SEMESTER V								
SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIOD	CREDITS
				L	T	P		
THEORY								
1.	24ME5R010	Design of Machine Elements	PCC	3	0	0	3	3
2.	24ME5R011	Industrial Management	HSMC	3	0	0	3	3
3.		Professional Elective-I	PEC	3	0	0	3	3
4.		Professional Elective-II	PEC	3	0	0	3	3
5.		Open Elective – I	OEC	3	0	0	3	3
LAB INTEGRATED THEORY								
6.	24ME5R012	Heat and Mass Transfer	PCC	3	0	2	5	4
7.	24ME5R013	Metrology and Measurements	PCC	3	0	2	5	4
MANDATORY COURSE								
8.		Mandatory Course I <sup>s</sup>	MCC	2	0	0	2	0
PRACTICALS								
9.	24ME5R014	CAD/CAM Laboratory	PCC	0	0	4	4	2
10.	24ME5R015	Industrial Training Internship*	EEC	0	0	2	2	1
TOTAL				23	0	10	33	26

\*Two weeks Summer Internship carries one credit and it will be done during IV semester summer vacation and same will be evaluated in V semester.

\$ Mandatory Course-I is a Non-credit Course (Student shall select one course from the list given under MC- I)

**SEMESTER-VI**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIOD	CREDITS
				L	T	P		
THEORY								
1.	24ME6R016	Design of Transmission systems	PCC	3	0	0	3	3
2.	24ME6R017	Automated Production System	PCC	3	0	0	3	3
3.		Professional Elective III	PEC	3	0	0	3	3
4.		Professional Elective IV	PEC	3	0	0	3	3
5.		Open Elective – II	OEC	3	0	0	3	3
LAB INTEGRATED THEORY								
6.	24ME6R018	Mechatronics	PCC	2	0	2	4	4
7.	24ME6R019	Finite Element and Analysis	PCC	3	0	4	5	5
MANDATORY COURSE								
8.		Mandatory Course II <sup>s</sup>	MCC	2	0	0	2	0
PRACTICALS								
9.	24ME6R020	Societal Project	EEC	0	0	0	2	2
TOTAL				22	0	6	28	26

\$ Mandatory Course-II is a Non-credit Course (Student shall select one course from the list given under MC- II)

**SEMESTER-VII**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIOD	CREDITS
				L	T	P		
THEORY								
1.		Professional Elective V	PEC	3	0	0	3	3
2.		Professional Elective VI	PEC	3	0	0	3	3
3.		Open Elective – III	OEC	3	0	0	3	3
PRACTICALS								
4.	24ME7R021	Industrial Training Internship#	EEC	0	0	2	2	1
5.	24ME7R022	Project Work - I	EEC	0	0	2	10	5
TOTAL				9	0	4	21	15

#Two weeks Summer Internship carries one credit and it will be done during VI semester summer vacation and same will be evaluated in VII semester.

\*If students undergo internship in Semester VII, then the courses offered during semester VII will be offered during semester VIII.

**SEMESTER-VIII**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIOD	CREDITS
				L	T	P		
PRACTICALS								
1	24ME8R023	Project Work - II	EEC	0	0	20	20	10
TOTAL				0	0	20	20	10

**Total Credits: 170**

\*If students undergo internship in Semester VII, then the courses offered during semester VII will be offered during semester VIII.

**Summary of Credits:**

<b>CATEGORY</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>	<b>VII</b>	<b>VIII</b>	<b>Credits</b>	<b>(%)</b>
<b>BSC</b>	8.5	11.5	4	2					26	15%
<b>HSMC</b>	4	4	2		3				13	8%
<b>ESC</b>	7.5	5.5	8						21	12%
<b>PCC</b>			12	24	13	15			64	38%
<b>PEC</b>					6	6	6		18	11%
<b>EEC</b>					1	2	6	10	19	11%
<b>OEC</b>					3	3	3		9	5%
<b>Non-Credit*/ (Mandatory)</b>									0	0%
<b>TOTAL</b>	<b>20</b>	<b>21</b>	<b>26</b>	<b>26</b>	<b>26</b>	<b>26</b>	<b>15</b>	<b>10</b>	<b>170</b>	<b>100%</b>