



GOVERNMENT COLLEGE OF ENGINEERING, SALEM
(NAAC Accredited with A⁺, An Autonomous Institution, Affiliated to Anna University, Chennai)

UNDERGRADUATE CURRICULUM

(Applicable to the students admitted in B.E. Programme, from the Academic Year 2026-2027)

Programme: B.E. Mechanical Engineering (Working Professionals)

Regulations: 2026

Overview of Credits

Sem	BS	HM	ES(G)	ES(PC)	ES(PE)	OE	SD	MC	Total
I	3			20				3	26
II		2		19			1	3	25
III				17	3		1		21
IV				7	9	3	3		22
V		3		12	6				21
VI							10		10
Total	3	5	0	75	18	3	15	6	125
% of Category	2.40	4.00	0.00	60.00	14.40	2.40	12.00	4.80	100

Abbreviations:

Course Type:

- T** - Theory
- L** - Laboratory
- LIT** - Laboratory Integrated Theory
- CDP** - Capstone Design Project
- PW** - Project Work
- IOC** – Industry Oriented Course

Category :

- BS** - Basic Science
- HM**- Humanities
- ES** - Engineering Science [General (**G**)
Programme Core (**PC**)
Programme Elective (**PE**)]
- OE** - Open Elective
- SD** - Skill Development
- MC** - Mandatory Course

Others :

- L** - Lecture
- T** - Tutorial
- P** - Practical
- SL** - Term work (TW) + Self Learning (SL)
- TH** - Total Number of Teaching – Learning Hours per Semester

Semester I													
Sl. No.	Course Code	Course Name	Course Type	Hours per Semester					Credits	Category	Weightage		
				L	T	P	SL	TH			CA %	ES %	Total
1.	26MAC04	Partial Differential Equations and Complex Variables	T	45	15	0	30	90	3	BS	40	60	100
2.	26ME301	Engineering Thermodynamics	T	45	15	0	60	120	4	ES(PC)	40	60	100
3.	26ME302	Fluid Mechanics and Machinery	T	45	0	0	45	90	3	ES(PC)	40	60	100
4.	26ME303	Materials Engineering	LIT	45	0	45	30	120	4	ES(PC)	50	50	100
5.	26ME304	Manufacturing Technology	LIT	45	0	45	30	120	4	ES(PC)	50	50	100
6.	26ME305	Mechanics of Materials	T	45	0	0	45	90	3	ES(PC)	40	60	100
7.	26CE306	Strength of Materials and Fluid Mechanics Laboratory	L	0	0	45	15	60	2	ES(PC)	60	40	100
8.	26MCC02	Environmental Science and Engineering	T	45	0	0	45	90	3	MC	40	60	100
Total								780	26				

Semester II													
Sl. No.	Course Code	Course Name	Course Type	Hours per Semester					Credits	Category	Weightage		
				L	T	P	SL	TH			CA %	ES %	Total
1.	26ME401	Theory of Machines	LIT	45	0	45	30	120	4	ES(PC)	50	50	100
2.	26ME402	Thermal Engineering	LIT	45	0	45	30	120	4	ES(PC)	50	50	100
3.	26ME403	Metal cutting and Machine Tools	LIT	45	0	45	30	120	4	ES(PC)	50	50	100
4.	26ME404	Solar and Wind Energy	T	45	0	0	45	90	3	ES(PC)	40	60	100
5.	26ME405	Machine Drawing	LIT	45	0	45	30	120	4	ES(PC)	50	50	100
6.	26ENC03	Placement and Soft Skills Laboratory	L	0	0	45	15	60	2	HM	60	40	100
7.	26MCC03	Universal Human Values	T	45	0	0	45	90	3	MC	40	60	100
8.	26MEICXX	Industry Oriented Course - I	IOC	15	0	0	15	30	1	SD	100	-	100
Total								750	25				

Semester III													
Sl. No.	Course Code	Course Name	Course Type	Hours per Semester					Credits	Category	Weightage		
				L	T	P	SL	TH			CA %	ES %	Total
1.	26ME501	Design of Machine and Power Transmission Elements	T	45	15	0	60	120	4	ES(PC)	40	60	100
2.	26ME502	Heat and Mass Transfer	T	45	15	0	60	120	4	ES(PC)	40	60	100
3.	26ME503	Industrial Engineering and Management	T	45	0	0	45	90	3	ES(PC)	40	60	100
4.	26ME504	Metrology and Quality Control	LIT	45	0	45	30	120	4	ES(PC)	50	50	100
5.	26MEPEXX	Programme Elective - I	T	45	0	0	45	90	3	ES(PE)	40	60	100
6.	26ME505	Heat Transfer Laboratory	L	0	0	45	15	60	2	ES(PC)	60	40	100
7.	26MEICXX	Industry Oriented Course - II	IOC	15	0	0	15	30	1	SD	100	-	100
8.	26MCC04	Disaster Management and Preparedness	T	30	0	0	30	60	0	MC	100	-	100
9.	26MCC05	Indian Constitution	T	30	0	0	30	60	0	MC	100	-	100
Total								750	21				

Semester III													
Sl. No.	Course Code	Course Name	Course Type	Hours per Semester					Credits	Category	Weightage		
				L	T	P	SL	TH			CA %	ES %	Total
For Honours Degree													
1.	26MED01	Capstone Design Project Level-I	CDP	0	0	90	90	180	6	SD	60	40	100
OR													
1.	26MEHXX	Honours Elective - I	T	45	0	0	45	90	3	ES(PE)	40	60	100
2.	26MEHXX	Honours Elective - II	T	45	0	0	45	90	3	ES(PE)	40	60	100
For Minor Degree													
1.	26MEMXX	Minor Elective - I	T	45	0	0	45	90	3	OE	40	60	100
2.	26MEMXX	Minor Elective - II	T	45	0	0	45	90	3	OE	40	60	100
TOTAL								180	6				

Semester IV													
Sl. No.	Course Code	Course Name	Course Type	Hours per Semester					Credits	Category	Weightage		
				L	T	P	SL	TH			CA %	ES %	Total
1.	26ME601	Hydraulics and Pneumatics	LIT	45	0	45	30	120	4	ES(PC)	50	50	100
2.	26ME602	Smart Manufacturing	T	45	0	0	45	90	3	ES(PC)	40	60	100
3.	26MEPEXX	Programme Elective - II	T	45	0	0	45	90	3	ES(PE)	40	60	100
4.	26MEPEXX	Programme Elective - III	T	45	0	0	45	90	3	ES(PE)	40	60	100
5.	26MEPEXX	Programme Elective - IV	T	45	0	0	45	90	3	ES(PE)	40	60	100
6.	26MEOE0X	Open Elective - I	T	45	0	0	45	90	3	OE	40	60	100
7.	26ME603	Mini Project	PW	0	0	45	45	90	3	SD	100	-	100
Total								660	22				

Semester IV													
Sl. No.	Course Code	Course Name	Course Type	Hours per Semester					Credits	Category	Weightage		
				L	T	P	SL	TH			CA %	ES %	Total
For Honours Degree													
1.	26MED02	Capstone Design Project Level-II	CDP	0	0	90	90	180	6	SD	60	40	100
OR													
1.	26MEHXX	Honours Elective - III	T	45	0	0	45	90	3	ES(PE)	40	60	100
2.	26MEHXX	Honours Elective - IV	T	45	0	0	45	90	3	ES(PE)	40	60	100
For Minor Degree													
1.	26MEMXX	Minor Elective - III	T	45	0	0	45	90	3	OE	40	60	100
2.	26MEMXX	Minor Elective - IV	T	45	0	0	45	90	3	OE	40	60	100
TOTAL								180	6				

Semester V													
Sl. No.	Course Code	Course Name	Course Type	Hours per Semester					Credits	Category	Weightage		
				L	T	P	SL	TH			CA %	ES %	Total
1.	26HSC01	Operations Research	T	45	0	0	45	90	3	HM	40	60	100
2.	26ME701	Finite Element Analysis	T	45	0	0	45	90	3	ES(PC)	40	60	100
3.	26ME702	Automobile Technology	LIT	45	0	45	30	120	4	ES(PC)	50	50	100
4.	26ME703	Total Quality Management	T	45	0	0	45	90	3	ES(PC)	40	60	100
5.	26MEPEXX	Programme Elective - V	T	45	0	0	45	90	3	ES(PE)	40	60	100
6.	26MEPEXX	Programme Elective - VI	T	45	0	0	45	90	3	ES(PE)	40	60	100
7.	26ME705	Simulation Laboratory	L	0	0	45	15	60	2	ES(PC)	60	40	100
Total								630	21				

Semester V													
Sl. No.	Course Code	Course Name	Course Type	Hours per Semester					Credits	Category	Weightage		
				L	T	P	SL	TH			CA %	ES %	Total
For Honours Degree													
1.	26MED03	Capstone Design Project Level-III	CDP	0	0	90	90	180	6	SD	60	40	100
OR													
1.	26MEHXX	Honours Elective - V	T	45	0	0	45	90	3	ES(PE)	40	60	100
2.	26MEHXX	Honours Elective - VI	T	45	0	0	45	90	3	ES(PE)	40	60	100
For Minor Degree													
1.	26MEMXX	Minor Elective - V	T	45	0	0	45	90	3	OE	40	60	100
2.	26MEMXX	Minor Elective - VI	T	45	0	0	45	90	3	OE	40	60	100
TOTAL								180	6				

Semester VI													
Sl. No.	Course Code	Course Name	Course Type	Hours per Semester					Credits	Category	Weightage		
				L	T	P	SL	TH			CA %	ES %	Total
1.	26ME801	Project Work	PW	0	0	225	75	300	10	SD	60	40	100
TOTAL								300	10				
Total Credits of the Programmes									125				

Programme Electives

Sl. No.	Course Code	Course Name	Course Type	Hours per Semester					Credits	Category	Weightage		
				L	T	P	SL	TH			CA %	ES %	Total
Programme Elective - I													
1.	26MEPE01	Advanced Strength of Materials	T	45	0	0	45	90	3	ES(PE)	40	60	100
2.	26MEPE02	Renewable Energy Systems	T	45	0	0	45	90	3	ES(PE)	40	60	100
3.	26MEPE03	Advanced I.C Engine Technologies	T	45	0	0	45	90	3	ES(PE)	40	60	100
4.	26MEPE04	Composite Materials	T	45	0	0	45	90	3	ES(PE)	40	60	100
5.	26MEPE05	Applications of IoT & IIoT in Mechanical Engineering	T	45	0	0	45	90	3	ES(PE)	40	60	100
Programme Elective - II													
6.	26MEPE06	Tribology in Design	T	45	0	0	45	90	3	ES(PE)	40	60	100
7.	26MEPE07	Energy Efficient Buildings Design	T	45	0	0	45	90	3	ES(PE)	40	60	100
8.	26MEPE08	Refrigeration & HVAC Systems	T	45	0	0	45	90	3	ES(PE)	40	60	100
9.	26MEPE09	Mechatronics	T	45	0	0	45	90	3	ES(PE)	40	60	100
10.	26MEPE10	AIML	T	45	0	0	45	90	3	ES(PE)	40	60	100
11.	26PSC01	Applied Design Thinking	T	45	0	0	45	90	3	ES(PE)	40	60	100

Programme Elective - III													
12.	26MEPE11	Design of Production Tooling and Press Tools	T	45	0	0	45	90	3	ES(PE)	40	60	100
13.	26MEPE12	Power Plant Engineering	T	45	0	0	45	90	3	ES(PE)	40	60	100
14.	26MEPE13	Cryogenic Engineering	T	45	0	0	45	90	3	ES(PE)	40	60	100
15.	26MEPE14	Non-Traditional Machining Process	T	45	0	0	45	90	3	ES(PE)	40	60	100
16.	26MEPE15	Computer Integrated Manufacturing	T	45	0	0	45	90	3	ES(PE)	40	60	100
17.	26PSC02	Startup Fundamentals	T	45	0	0	45	90	3	ES(PE)	40	60	100
Programme Elective - IV													
18.	26MEPE16	Digital Twin	T	45	0	0	45	90	3	ES(PE)	40	60	100
19.	26MEPE17	Electric Vehicle Fuel Cell Technology	T	45	0	0	45	90	3	ES(PE)	40	60	100
20.	26MEPE18	Gas Dynamics and Jet Propulsion	T	45	0	0	45	90	3	ES(PE)	40	60	100
21.	26MEPE19	Design for Manufacturing and Assembly	T	45	0	0	45	90	3	ES(PE)	40	60	100
22.	26MEPE20	Engineering System Modelling and Simulation	T	45	0	0	45	90	3	ES(PE)	40	60	100
Programme Elective - V													
23.	26MEPE21	Integrated Product Design and Development	T	45	0	0	45	90	3	ES(PE)	40	60	100
24.	26MEPE22	Instrumentation in Thermal Engineering	T	45	0	0	45	90	3	ES(PE)	40	60	100
25.	26MEPE23	Heat Transfer in Electronics and Instrumentation	T	45	0	0	45	90	3	ES(PE)	40	60	100
26.	26MEPE24	Mechanical Behaviour of Materials and Characterization	T	45	0	0	45	90	3	ES(PE)	40	60	100
27.	26MEPE25	Python Programming	T	45	0	0	45	90	3	ES(PE)	40	60	100

Programme Elective - VI													
28.	26MEPE26	Supply Chain Management	T	45	0	0	45	90	3	ES(PE)	40	60	100
29.	26MEPE27	Professional Ethics and Human Values	T	45	0	0	45	90	3	ES(PE)	40	60	100
30.	26MEPE28	Entrepreneurship Development	T	45	0	0	45	90	3	ES(PE)	40	60	100
31.	26MEPE29	Product Planning and Cost Control	T	45	0	0	45	90	3	ES(PE)	40	60	100
32.	26MEPE30	Industrial Safety	T	45	0	0	45	90	3	ES(PE)	40	60	100

Open Electives

Sl. No.	Course Code	Course Name	Course Type	Hours per Semester					Credits	Category	Weightage		
				L	T	P	SL	TH			CA %	ES %	Total
1.	26MEOE01	Design of Machine Elements and Machining	T	45	0	0	45	90	3	OE	40	60	100
2.	26MEOE02	Internal Combustion Engines	T	45	0	0	45	90	3	OE	40	60	100
3.	26MEOE03	Refrigeration and Air conditioning	T	45	0	0	45	90	3	OE	40	60	100
4.	26MEOE04	Power Plant Engineering	T	45	0	0	45	90	3	OE	40	60	100
5.	26MEOE05	Hydraulics and Pneumatics	T	45	0	0	45	90	3	OE	40	60	100
6.	26MEOE06	Industrial Engineering and Management	T	45	0	0	45	90	3	OE	40	60	100
7.	26MEOE07	Renewable Energy Sources	T	45	0	0	45	90	3	OE	40	60	100
8.	26MEOE08	Robotics and Automation	T	45	0	0	45	90	3	OE	40	60	100
9.	26MEOE09	Total Quality Management	T	45	0	0	45	90	3	OE	40	60	100
10.	26MEOE10	Automotive Systems	T	45	0	0	45	90	3	OE	40	60	100

List of Honours Courses

Sl. No.	Course Code	Course Name
1.	26MEH01	Electric and Hybrid Vehicle Technology
2.	26MEH02	Advanced Energy Storage Technologies
3.	26MEH03	Design of Solar and Wind Systems
4.	26MEH04	Smart Materials and Structures
5.	26MEH05	Mechanical Vibrations
6.	26MEH06	Advanced Materials Technology
7.	26MEH07	Additive Manufacturing
8.	26MEH08	Non Destructive Testing and Failure Analysis
9.	26MEH09	Industrial Layout Design and Safety
10.	26MEH10	Digital Manufacturing and IOT