

I-YEAR-I-SEMESTER												
Course Code	Title of the course	Category	Periods						Sessionals Marks	Semester end Exam marks	Total Marks	Credits
			L	T	P	E	O	Total				
MEC111	Engineering Mathematics - I	BS	3	0	0	2	4	9	40	60	100	3
MEC112	Engineering Physics	BS	3	0	0	1	3	7	40	60	100	3
MEC113	Engineering Chemistry	BS	3	0	0	1	3	7	40	60	100	3
MEC114	Biology for Engineers	BS	2	1	0	1	3	7	100	---	100	3
MEC115	Engineering Graphics	ES	2	0	3	1	4	10	40	60	100	3.5
MEC116	Engineering Physics Lab	BS	0	0	3	0	1	4	50	50	100	1.5
MEC117	Engineering Chemistry Lab	BS	0	0	3	0	1	4	50	50	100	1.5
MEC118	Engineering Workshop	ES	0	0	3	0	1	4	50	50	100	1.5
MEC119	Human Values and Professional Ethics(Mandatory non-credit course)	MC	0	0	0	3	1	4	50		50	0
Total			13	1	12	9	21	56	460	390	850	20
I-YEAR-II-SEMESTER												
Course Code	Title of the course	Category	Periods						Sessionals Marks	Semester end Exam marks	Total Marks	Credits
			L	T	P	E	O	Total				
MEC121	Engineering Mathematics - II	BS	2	1	0	2	4	9	40	60	100	3
MEC122	Communicative English	HS	3	0	0	0	2	5	40	60	100	3
MEC123	Problem solving with C	ES	3	0	0	0	2	5	40	60	100	3
MEC124	Basic Electronics Engineering	ES	3	0	0	1	3	7	40	60	100	3
MEC125	*Advanced Engineering Graphics	SC	1	0	2	2	4	10	50	50	100	2
MEC126	English Language Laboratory	HS	0	0	3	0	1	4	50	50	100	1.5
MEC127	Problem solving with C– lab.	ES	0	0	3	3	3	9	50	50	100	1.5
MEC128	Environmental studies (Mandatory non-credit course)	MC	0	0	0	3	3	6	50		50	0
Total			12	1	8	11	22	55	360	390	750	17

II-YEAR-I-SEMESTER												
Course Code	Title of the course	Category	Periods					Sessionals Marks	Semester end Exam marks	Total Marks	Credits	
			L	T	P	E	O					Total
MEC211	Engineering Mathematics - III	BS	2	1	0	2	4	9	40	60	100	3
MEC212	Material science & Metallurgy	PC	3	0	0	1	2	6	40	60	100	3
MEC213	Engineering Mechanics	PC	2	1	0	2	4	9	40	60	100	3
MEC214	Mechanics of solids	PC	2	1	0	2	4	9	40	60	100	3
MEC215	Basic Thermodynamics	PC	2	1	0	2	4	9	40	60	100	3
MEC216	Manufacturing Processes	PC	3	0	0	2	2	7	40	60	100	3
MEC217	Mechanics of solids-Lab	PC	0	0	3	0	1	4	50	50	100	1.5
MEC218	Manufacturing- Lab	PC	0	0	3	0	1	4	50	50	100	1.5
Total			14	4	6	11	22	57	340	460	800	21

II-YEAR-II-SEMESTER												
Course Code	Title of the course	Category	Periods					Sessionals Marks	Semester end Exam marks	Total Marks	Credits	
			L	T	P	E	O					Total
MEC 221	Engineering Mathematics - IV	BS	2	1	0	2	4	9	40	60	100	3
MEC 222	Basic Electrical Engineering	ES	2	1	0	1	3	7	40	60	100	3
MEC 223	Applied Thermal Engineering-I	PC	2	1	0	2	4	9	40	60	100	3
MEC 224	Kinematics of Machinery	PC	2	1	0	2	4	9	40	60	100	3
MEC 225	Metal cutting, Machine Tools & Metrology	PC	3	0	0	2	2	7	40	60	100	3
MEC 226	Computer Aided Modelling	SC	1	0	2	2	4	10	50	50	100	2
MEC 227	Machine Tools Lab	PC	0	0	3	0	1	4	50	50	100	1.5
MEC 228	**Basic Electrical & Electronics Engineering-Lab	ES	0	0	3	0	1	4	50	--	50	1.5
Total			12	4	8	11	23	59	350	400	750	20

III-YEAR-I-SEMESTER												
Course Code	Title of the course	Category	Periods						Sessionals Marks	Semester end Exam marks	Total Marks	Credits
			L	T	P	E	O	Total				
MEC 311	***Open Elective-I	OE	3	0	0	1	2	6	40	60	100	3
MEC 312	Humanities Elective	HS	3	0	0	1	2	6	40	60	100	3
MEC 313	Design Thinking	ES	3	0	0	1	2	6	40	60	100	3
MEC 314	Dynamics of Machinery	PC	2	1	0	2	4	9	40	60	100	3
MEC 315	Applied Thermal Engineering-II	PC	2	1	0	2	4	9	40	60	100	3
MEC 316	Design of Machine Elements-I	PC	2	1	0	2	4	9	40	60	100	3
MEC 317	Applied Mechanics-Lab	PC	0	0	3	0	1	4	50	50	100	1.5
MEC 318	Thermal Engineering Lab	PC	0	0	3	0	1	4	50	50	100	1.5
MEC 319	Quantitative Aptitude-I & Verbal Aptitude	HS	0	0	3	1	3	7	100	0	100	1.5
MEC 320	Industrial Training-I	PR	0	0	0	0	0	0	--	100	100	2
Total			15	3	9	10	23	60	440	560	1000	24.5

III-YEAR-II-SEMESTER												
Course Code	Title of the course	Category	Periods						Sessionals Marks	Semester end Exam marks	Total Marks	Credits
			L	T	P	E	O	Total				
MEC 321	***Open Elective-II	OE	3	0	0	0	2	5	50	50	100	3
MEC 322	Professional Elective-I	PE	3	0	0	1	2	6	40	60	100	3
MEC 323	Professional Elective-II	PE	3	0	0	1	3	7	40	60	100	3
MEC 324	Finite Element Analysis	SC	2	0	0	2	4	10	40	60	100	2
MEC 325	Fluid Mechanics & Hydraulic Machinery	PC	2	1	0	2	3	8	40	60	100	3
MEC 326	Design of Machine Elements-II	PC	2	1	0	2	4	9	40	60	100	3
MEC 327	Fluid Mechanics & Hydraulic Machinery -Lab	PC	0	0	3	0	1	4	50	50	100	1.5
MEC 328	Computer Aided Design & Manufacturing Lab	SC	1	0	3	0	2	5	50	50	100	2.5
MEC 329	Quantitative Aptitude-II & Soft Skills	HS	0	0	3	2	3	8	100	0	100	1.5
Total			16	2	9	10	24	62	450	450	900	22.5

IV-YEAR-I-SEMESTER												
Course Code	Title of the course	Category	Periods						Sessionals Marks	Semester end Exam marks	Total Marks	Credits
			L	T	P	E	O	Total				
MEC 411	***Open Elective-III/Emerging subject	OE	3	0	0	0	2	5	40	60	100	3
MEC 412	Professional Elective-III	PE	3	0	0	1	2	6	40	60	100	3
MEC 413	Professional Elective-IV	PE	3	0	0	1	3	7	40	60	100	3
MEC 414	Professional Elective-V	PE	3	0	0	1	3	7	40	60	100	3
MEC 415	Heat Transfer	PC	2	1	0	2	4	9	40	60	100	3
MEC 416	Metrology & Mechatronics-Lab	PC	0	0	3	0	1	4	50	50	100	1.5
MEC 417	Heat Transfer-Lab	PC	0	0	3	0	1	4	50	50	100	1.5
MEC 418	****Industrial Training-II	PR	0	0	0	0	0	0	--	100	100	2
MEC 419	Project Phase-I	PR	0	0	4	0	4	8	--	100	100	2
MEC 4110	Automotive Engineering	SC	2	0	0	2	4	10	40	60	100	2
Total			16	1	10	7	24	60	340	660	1000	24

IV-YEAR-I-SEMESTER												
Course Code	Title of the course	Category	Periods						Sessionals Marks	Semester end Exam marks	Total Marks	Credits
			L	T	P	E	O	Total				
MEC 421	***Open Elective-IV/Emerging subject	OE	3	0	0	0	2	5	40	60	100	3
MEC 422	Project Phase-II/Industrial Internship	PR	0	0	16	0	16	32	100	100	200	8
Total			3	0	16	0	18	37	140	160	300	11

Professional Elective-I	Production Planning & Control	Gas Turbines & Jet Propulsions	Automation in manufacturing	Non-Destructive Testing
Professional Elective-II	Refrigeration & Air-conditioning	Power plant Engineering	Nano Technology	Quality & Reliability engineering
Professional Elective-III	Mechanical Measurements	Computational Fluid dynamics	Condition monitoring	Industrial tribology
Professional Elective-IV	Non-Conventional Energy Sources	Managerial Economics & Financial Accountancy	Unconventional machine process	Artificial intelligence
Professional Elective-V	Operations Research	Alternate fuels	Advanced mechanics of materials	Product Design & Manufacturing
Humanities Electives	Industrial Engineering Management	Statistical Quality Control	Entrepreneurship development	Supply chain management

***Open Elective-III/Emerging subject	Mechatronics
***Open Elective-IV/Emerging subject	Robotics

Note: Open electives-I & II are offered by other departments. The CSE/IT departments are requested to offer PYTHON-programming & Data structures as open electives.

Note: In Open electives-III & IV/Emerging subjects -only emerging subjects will be offered by the parent department. The subjects could be Mechatronics, Robotics, Additive manufacturing, Condition monitoring etc. (will be decided by the department)