



School of Mechanical Engineering
Program Structure of B. Tech. Four Year Full Time Degree
2018-22 (Entry Batch 2018 Onwards)

1 st Semester								2 nd Semester							
Sl. No.	AICTE CODE	Course Code	Course Title	L	T	S/P	C	Sl. No.	AICTE Code	Course Code	Course Title	L	T	S/P	C
1.	BSC	MTL1012	Engineering Mathematics-I	3	0	0	3	1	BSC	MTL1026	Engineering Mathematics-II	3	0	0	3
2	ESC	ECL1010	Basic Electronics	3	0	2	4	2	ESC	MEP 1116	Engineering Graphics	1	0	3	2.5
3	BSC	PHL1012	Engineering Physics	3	0	2	4	3	ESC	CSL3029	Programming in PYTHON-I (PL-2)PCC	2	0	4	4
4	ESC	CSL1022	Introduction to 'C' Programming-	2	0	4	4	4	BSC	MEL1112	Materials Science and Engineering	3	0	2	4
5	HSMC	LNL1411	Professional Communication	2	0	2	3	5	ESC	MEL1012	Engineering Mechanics	3	1	0	4
6	ESC	MEL1001	Introduction to Mechanical Engineering	1	0	0	1	6	MC	PCL 1067	Discourse of Human Values – AICTE MC-HS	3	0	0	3
7	ESC	MEP1043	Engineering Workshop	0	0	2	1	7		PCC1002	Soft Skills Module-II	1	0	0	1
	MC		Induction Program					8		LNP1142	Language Lab	0	0	2	1
	MC	PCN1010	NSS (Non-Credit)-UGC								TOTAL	16	1	11	22.5
			TOTAL	14	0	12	20								
Total Credits								Total Credits							
20								22.5							

3 rd Semester								4 th Semester							
Sl. No.	AICTE code	Course Code	Course Title	L	T	S/P	C	Sl. No	AICTE code	Course Code	Course Title	L	T	S/P	C
1	HSMC	PCL2042	Introduction to Logic-AICTE	3	0	0	3	1	PCC	MEL 2232	Fluid Machines	3	0	2	4
2	PCC	MEL2015	Kinematics of Machines	3	0	0	3	2	PCC	MEL 2212	Thermal Engineering	3	0	2	4
3	PCC	MEL2231	Fluid Mechanics	3	0	2	4	3	PCC	MEL 2113	Manufacturing Processes-1	3	0	2	4
4	PCC	MEL2014	Strength of Materials	3	1	2	5	4	PCC	MEL 2018	Dynamics of Machines	3	0	2	4
5	BSC	MTL6066	Numerical Methods	3	0	0	3	5	PCC	MEL 2017	Machine Design	3	1	0	4
6	PCC	MEL2211	Thermodynamics	3	0	0	3	6	PCC	MEL 2016	Mechanics of Materials	3	0	0	3
7	MC	BTL2304	Environmental Studies-AICTE	3	0	0	NC		MC		Constitution of India- AICTE	2	0	0	NC
			TOTAL	21	1	4	21				TOTAL	20	1	8	23
Total Credits							21	Total Credits							23

5 th Semester								6 th Semester							
Sl. No.	AICTE code	Course Code	Course Title	L	T	S/P	C	Sl. No.	AICTE code	Course Code	Course Title	L	T	S/P	C
1	PCC	MEL3221	Heat and Mass Transfer	3	0	2	4	1	OEC		Open Elective-I	3	0	0	3
2	PCC	MEL3131	Industrial Engineering	3	0	0	3	2	PEC		School Elective -II	3	0	0	3
3	PCC	MEL3019	Design of Machine Elements	3	0	0	3	3	ESC	MEL3121	Metrology and Measurements	3	0	2	4
4	PCC	MEL3132	Metal Cutting and Machine Tool	3	0	2	4	4	PCC	MEL3222	Internal Combustion Engines	3	0	2	4
5	ESC	MEL3021	CAD/CAM	3	0	2	4	5	PEC		School Elective-III	3	0	0	3
6	PEC		School Elective -I	3	0	0	3	6	HSMC	MEL2133	Operations Research	3	0	0	3
7	ESC	MEL3020	Finite Element Analysis	3	0	0	3		ESC	MEP3020	FEM Lab	0	0	2	1
	PW	MED 4920	Minor Project	0	0	2	1								
			TOTAL	21	0	8	25				TOTAL	18	0	6	21
Total Credits							25	Total Credits							21

7 th Semester							
Sl. No.	AICTE Code	Course Code	Course Title	L	T	S/P	C
1	OEC		Open Elective-II	3	0	0	3
2	PEC		School Elective-IV	3	0	0	3
3	PCC	M EL 4223	Refrigeration and Air-conditioning	3	0	2	4
4	PCC	MEL 4031	Automobile Engineering	3	0	2	4
5	MC		Disaster management - AICTE-MC	2	0	0	NC
6	PW	MEC 4913	Colloquium	0	0	2	1
7	PW	MED 4921	Project- Phase-I	0	0	4	2
			TOTAL	14	0	10	17
Total Credits							17

8 th Semester							
Sl. No.	AICTE Code	Course Code	Course Title	L	T	S/P	C
1	PW	MED 4912	(Major Project + Open Elective-III) (9+3) / Internship (12)	0	0	24	12
			TOTAL	0	0	24	12
Total Credits							12

LIST OF SCHOOL ELECTIVES

School Elective –I

Course Code	Course Title	L-T-P	Credits
MEE 3224	Power Plant Engineering	3-0-0	3
MEE 3134	Work Study Ergonomics	3-0-0	3
MEE 3122	Computer Integrated Manufacturing Systems	3-0-0	3
MEE 3024	Concurrent Engineering	3-0-0	3
MEE 3032	Industrial Automation	3-0-0	3
MEE 3233	Gas Dynamics and Jet Propulsion	3-0-0	3
MEE 3033	Control Systems	3-0-0	3
MEE 3079	Tribology	3-0-0	3

School Electives-II

Course Code	Course Title	L-T-P	Credits
MEE 3236	Alternate Fuel	3-0-0	3
MEE 3237	Solar Thermal Power Engineering	3-0-0	3
MEE 3160	Rapid Manufacturing Technology	3-0-0	3
MEE 3161	Micro and Nano Machining	3-0-0	3
MEE 3080	Design of Composite Materials	3-0-0	3
MEE 3081	Modeling and Simulation of Manufacturing System	3-0-0	3
MEE 3238	Sustainable Energy Engineering	3-0-0	3

School Electives-III

Course Code	Course Title	L-T-P	Credits
MEE 3162	Quality Management	3-0-0	3
MEE 3163	Robotic	3-0-0	3
MEE 3164	Non Destructive Testing	3-0-0	3
MEE 3022	Mechanical Vibration	3-0-0	3
MEE 3239	Fuel and Combustion	3-0-0	3
MEE 3240	Hydrogen and Fuel Cell	3-0-0	3
MEE 3165	Project Management	3-0-0	3

School Elective-IV

Course Code	Course Title	L-T-P	Credits
MEE 4234	Computational Fluid Flow and Heat Transfer	3-0-0	3
MEE 4025	Design for Manufacturing and Assembly	3-0-0	3
MEE 4235	Energy Management	3-0-0	3
MEE 4141	Maintenance Engineering	3-0-0	3
MEE 4026	Mechanical System Design	3-0-0	3
MEE 4027	Product Design & Developments	3-0-0	3
MEE 4035	Tool Design	3-0-0	3