

B.Tech Mechanical Engineering 2017-18 Program Structure

S.No	Course Code	Course Name	L	T	P	S	Cr	Pre-requisite
HUMANITIES & SOCIAL SCIENCES								
1	17EN1201	Building Blocks for Communication Skills	0	0	4	0	2	NIL
2	17EN3102	Instant Communication Skills	0	0	4	0	2	NIL
3	17EN3203	Corporate Communication Skills	0	0	4	0	2	NIL
4	17MB4057	Economics for Engineers	2	0	0	0	2	NIL
5	17GN1001	Ecology And Environment (will be offered Online)	2	0	0	0	2	NIL
6	17UC0010	Universal Human Values & Professional Ethics	0	0	2	0	1	NIL
		Total	4	0	14	0	11	
AUDIT COURSES								
1	17AC1001	Indian Heritage and Culture	0	0	2	0	0	NIL
2	17AC1002	Indian Constitution	0	0	2	0	0	NIL
3	17AC1003	Environment and Sustainability	2	0	0	0	0	NIL
4	17AC1004	Gender Sensitization	2	0	0	0	0	NIL
		Total	4	0	4	0	0	
BASIC SCIENCES								
1	17MT1101	Single Variable Calculus and Matrix Algebra	3	0	2	0	4	NIL
2	17MT1102	Foundations of Computational Mathematics	3	0	0	0	3	NIL
3	17MT1203	Multivariate Calculus	3	1	0	0	4	NIL
4	17MT1204	Logic and Reasoning	2	0	0	0	2	NIL
5	17MT2012	Theory of Differential Equations for Engineering and Mechanics	2	0	2	0	3	NIL
6	17PH1001	Engineering Materials	3	0	2	0	4	NIL
7	17CY1001	Engineering Chemistry	3	0	2	0	4	NIL
		Total	19	1	8	0	24	
ENGINEERING SCIENCES								
1	17CS1101	Problem Solving through Computer Programming	2	2	2	0	5	NIL
2	17GN1204	Coding Skills for Engineers	0	0	10	0	5	17CS1101
3	17ME1001	Engineering Mechanics	3	0	2	0	4	NIL
4	17ME1002	Engineering Graphics and Design	1	0	4	0	3	NIL
5	17ME1003	Workshop Practice	0	0	2	0	1	NIL
6	17ME1104	Introduction to Mechanical Engineering	2	0	2	0	3	NIL
7	17GN1003	Basic Engineering Measurements	2	0	2	0	3	NIL
8	17ME2005	Computational Thinking and Data Sciences	2	0	2	0	3	NIL
9	17ME2206	Numerical Computation for Mechanical Engineers	3	0	2	0	4	NIL
10	17EE2205	Circuits and Electronics	3	0	2	0	4	NIL
		Total	18	2	30	0	35	
PROFESSIONAL CORE COURSES								
1	17ME2107	Machine drawing	0	0	4	0	2	17ME1002
2	17ME2108	Thermal-Fluids Engineering-I	3	0	2	0	4	NIL
3	17ME2109	Mechanics and Materials-I	3	0	2	0	4	17ME1001
4	17ME2110	Dynamics and Control-I	3	0	2	0	4	17ME1001
5	17ME2211	Dynamics and Control-II	3	0	2	0	4	17ME2110
6	17ME2212	Thermal-Fluids Engineering-II	3	0	2	0	4	17ME2108
7	17ME2213	Mechanics and Materials-II	3	0	2	0	4	17ME2109
8	17ME3114	Design and Manufacturing-I	3	0	2	0	4	17ME2109
9	17ME3115	Engineering Management	3	0	0	0	3	NIL
10	17ME3116	Heat Transfer	3	0	2	0	4	17ME2108

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11	17ME3117	Finite Element Analysis of Solids and Fluids	3	0	2	0	4	17ME2108, 17ME2109
12	17ME3118	Introduction to Robotics	3	0	2	0	4	NIL
13	17ME3219	Design and Manufacturing-II	3	0	2	0	4	17ME3114
14	17ME3220	Elements of Mechanical Design	2	0	2	0	3	17ME2213
		Total	38	0	28	0	52	
TECHNICAL SKILL COURSES								
1	17TS701	Skilling for Engineers-1 (Manufacturing Technologies)	0	0	0	8	2	NIL
2	17TS702	Skilling for Engineers-2 (Control Systems for Machines)	0	0	0	8	2	NIL
3	17TS703	Skilling for Engineers-3 (Problem Solving techniques in Thermal)	0	0	0	8	2	17ME2108
4	17TS704	Skilling for Engineers-4 (Problem Solving techniques in Design)	0	0	0	8	2	17ME2213
5	17TS705	Technical Proficiency & Training-1(Automobile Design and Building)	0	0	0	4	1	NIL
6	17TS706	Technical Proficiency & Training -2(Robot Design)	0	0	0	8	2	NIL
		Total	0	0	0	44	11	
Counseling & Cocurricular Activities								
1	17GN2103	Counseling -1	0	0	1	0	0	NIL
2	17GN2204	Counseling -2	0	0	1	0	0	NIL
3	17GN3105	Counseling -3	0	0	1	0	0	NIL
4	17GN3206	Counseling -4	0	0	1	0	0	NIL
5	17GN2109	Cocurricular Activity -1	0	0	0	2	0	NIL
6	17GN2210	Cocurricular Activity -2	0	0	0	2	0	NIL
7	17GN3111	Cocurricular Activity -3	0	0	0	2	0.5	NIL
8	17GN3212	Cocurricular Activity -4	0	0	0	2	0.5	NIL
		Total	0	0	4	8	1	
PROFESSIONAL ELECTIVES								
1	PE	Professional Elective-1	2	0	2	0	3	NIL
2	PE	Professional Elective-2	2	0	2	0	3	NIL
3	PE	Professional Elective-3	2	0	2	0	3	NIL
4	PE	Professional Elective-4	2	0	2	0	3	NIL
5	PE	Professional Elective-5	2	0	2	0	3	NIL
		Total	10	0	10	0	15	
OPEN ELECTIVES								
1	OE	Open Elective -1	3	0	0	0	3	NIL
2	OE	Open Elective -2	3	0	0	0	3	NIL
3	OE	Open Elective -3(Foreign Lang.)	3	0	0	0	3	NIL
		Total	9	0	0	0	9	
PROJECT								
1	17IE2246	Industrial Training	0	0	0	0	2	NIL
2	17IE3247	Term Paper	0	0	4	0	2	NIL
3	17IE4048/ 17IE4050	Project (Part I) / Practice School	0	0	0	24	6	NIL
4	17IE4049/ 17IE4050/ 17IE4051	Project (Part II) / Practice School/ Internship	0	0	0	24	6	NIL
		Total	0	0	4	48	16	
		GRAND TOTAL	102	3	102	100	174	