

**Department
of
Mechanical Engineering**

**I B.Tech I SEM & II SEM
Course Structure**



ACE
Engineering College
Ankushapur(V), Ghatkesar(M), Medchal Dist - 501 301
(An Autonomous Institution, Affiliated to JNTUH ,Hyderabad)

Department of Mechanical Engineering
B.Tech. in Mechanical Engineering
COURSE STRUCTURE & SYLLABUS (ACE-R22 Regulations)
Applicable from AY 2022-23 Batch

I Year I Semester

S. No.	Course Code	Course Title	L	T	P	Credits
1.	MA101BS	Matrices and Calculus	3	1	0	4
2.	PH102BS	Applied Physics	3	1	0	4
3.	ME103ES	C Programming and Data Structures	3	0	0	3
4.	ME104ES	Engineering Workshop	0	1	3	2.5
5.	EN105HS	English for Skill Enhancement	2	0	0	2
6.	ME106ES	Elements of Mechanical Engineering	0	0	2	1
7.	PH107BS	Applied Physics Laboratory	0	0	3	1.5
8.	CS109ES	C Programming and Data Structures Laboratory	0	0	2	1
9.	EN109HS	English Language and Communication Skills Laboratory	0	0	2	1
10.	*MC110	Environmental Science	3	0	0	0
11.		Induction Programme				
		Total	14	3	12	20

I Year II Semester

S.No.	Course Code	Course Title	L	T	P	Credits
1.	MA201BS	Ordinary Differential Equations and Vector Calculus	3	1	0	4
2.	CH202BS	Engineering Chemistry	3	1	0	4
3.	ME203ES	Computer Aided Engineering Graphics	1	0	4	3
4.	ME204ES	Engineering Mechanics	3	0	0	3
5.	ME205PC	Engineering Materials	2	0	0	2
6.	ME206ES	Python Programming Laboratory	0	1	2	2
7.	CH207BS	Engineering Chemistry Laboratory	0	0	2	1
8.	ME208PC	Fuels & Lubricants Laboratory	0	0	2	1
		Total	12	3	10	20

II Year I Semester

S. No.	Course Code	Course Title	L	T	P	Credits
1.	MA305BS	Probability, Statistics & Complex Variables	3	1	0	4
2.	ME302PC	Mechanics of Solids	3	0	0	3
3.	ME303PC	Metallurgy & Material Science	3	0	0	3
4.	ME304PC	Production Technology	3	0	0	3
5.	ME305PC	Thermodynamics	3	1	0	4
6.	ME306PC	Production Technology Laboratory	0	0	2	1
7.	ME307PC	Material Science & Mechanics of Solids Laboratory	0	0	2	1
8.	ME308PC	Computer Aided Machine Drawing	0	0	2	1
9.	*MC309	Constitution of India	3	0	0	0
		Total	18	2	6	20

II Year II Semester

S. No.	Course Code	Course Title	L	T	P	Credits
1.	EE401ES	Elements of Electrical and Electronics Engineering	3	0	0	3
2.	ME402PC	Kinematics of Machinery	3	0	0	3
3.	ME403PC	Fluid Mechanics & Hydraulic Machines	3	0	0	3
4.	ME404PC	IC Engines & Gas Turbines	3	0	0	3
5.	ME405PC	Instrumentation and Control Systems	3	0	0	3
6.	EE407ES	Elements of Electrical and Electronics Engineering Laboratory	0	0	2	1
7.	ME406PC	Fluid Mechanics & Hydraulic Machines Laboratory	0	0	2	1
8.	ME408PC	Instrumentation and Control Systems Laboratory	0	0	2	1
9.	ME409PC	Real-time Research Project/ Field-Based Project	0	0	4	2
10.	*MC410	Gender Sensitization Lab	0	0	2	0
		Total	15	0	12	20