

SMT. S.R.PATEL ENGINEERING COLLEGE, UNJHA
MECHANICAL ENGINEERING DEPARTMENT
TEACHING SCHEME MECHANICAL ENGINEERING

B.E. Mechanical I & II Semester						
Course Code	Course Title	Total Number of contact hours				Credits
		Lecture (L)	Tutorial (T)	Practical (P)	Total Hours	
2110001	Chemistry	3	0	2	5	5
2110002	Communication Skills	2	0	2	4	4
2110003	Computer Programming and	3	1	2	6	6
2110004	Elements of Civil Engineering	4	0	2	6	6
2110005	Elements of Electrical Engineering	4	0	2	6	6
2110006	Elements of Mechanical	4	0	2	6	6
2110007	Environmental Studies	3	0	0	3	3
2110011	Physics	3	0	2	5	5
2110012	Workshop	0	0	4	4	4
2110013	Engineering Graphics	2	0	4	6	6
2110014	Calculus	3	2	0	5	5
2110015	Vector Calculus and Linear	3	2	0	5	5
2110016	Basic Electronics	4	0	2	6	6
2110017	Electrical and Electronics	0	0	4	4	4
2990001	Contributor Personality	4	0	0	4	4

B.E. Mechanical III Semester						
Course Code	Course Title	Total Number of contact hours				Credits
		Lecture (L)	Tutorial (T)	Practical (P)	Total Hours	
2130002	Advanced Engineering	3	2	0	5	5
2130003	Mechanics of Solids	4	0	2	6	6
2131903	Manufacturing Process-1	3	0	2	5	5
2131904	Material Science and Metallurgy	3	0	2	5	5
2131905	Engineering Thermodynamics	4	1	0	5	5
2131906	Kinematics of Machines	3	1	0	4	4
2130005	Design Engineering - I A	0	0	3	3	3
	TOTAL	20	4	9	33	33
BEYOND ACADEMICS						
3ME01	Software	0	0	2	2	-
3ME02	Seminar	0	0	1	1	-
3ME03	CDC Activities	0	0	1	1	-
3ME04	GATE Classes	4	0	0	4	-

B.E. Mechanical IV Semester						
Course Code	Course Title	Total Number of contact hours				Credits
		Lecture (L)	Tutorial (T)	Practical (P)	Total Hours	
2140003	Engineering Economics and Management	3	0	0	3	3
2141901	Mechanical Measurement &	3	0	2	5	5
2141905	Complex Variables and Numerical Methods	3	2	0	5	5
2141906	Fluid Mechanics	4	0	2	6	6
2141907	Machine Design & Industrial	4	0	2	6	6
2141908	Manufacturing Processes -II	3	0	2	5	5
2140002	Design Engineering - I B	0	0	3	3	3
	TOTAL	20	2	11	33	33
BEYOND ACADEMICS						
4ME01	Software	0	0	2	2	-
4ME02	Seminar	0	0	1	1	-
4ME03	CDC Activities	0	0	1	1	-
4ME04	GATE Classes	4	0	0	4	-
B.E. Mechanical V Semester						
Course Code	Course Title	Total Number of contact hours				Credits
		Lecture (L)	Tutorial (T)	Practical (P)	Total Hours	
2151902	Theory of Machines	3	0	2	5	5
2151903	Fluid Power Engineering	3	0	2	5	5
2151907	Design of Machine Elements	3	0	2	5	5
2151908	Control Engineering	3	0	2	5	5
2151909	Heat Transfer	3	0	2	5	5
2150001	Design Engineering - II A	0	0	3	3	3
2150002	Institute Elective - Cyber Security	0	1	2	3	3
2150003	Institute Elective - Diaster	3	0	0	3	3
	TOTAL	18	1	15	31	31
BEYOND ACADEMICS						
5ME01	Software	0	0	2	2	-
5ME02	Seminar	0	0	2	2	-
5ME03	GATE Classes	6	0	0	6	-
5ME04	Training and placement activities	2	0	0	2	-
B.E. Mechanical VI Semester						
Course Code	Course Title	Total Number of contact hours				Credits
		Lecture (L)	Tutorial (T)	Practical (P)	Total Hours	
2161901	Dynamics of Machinery	3	0	2	5	5
2161902	Internal Combustion Engines	3	0	2	5	5
2161903	Computer Aided Design	3	0	2	5	5
2161907	Industrial Engineering	3	0	2	5	5
2161908	Refrigeration and Airconditioning	3	0	2	5	5
2161909	Production Technology	3	0	2	5	5
2160001	Design Engineering - II B	0	0	3	3	3
	TOTAL	18	0	15	33	33
BEYOND ACADEMICS						
6ME01	Software	0	0	2	2	-
6ME02	Seminar	0	0	2	2	-
6ME03	GATE Classes	4	0	0	4	-
6ME04	Training and placement activities	2	0	0	2	-

B.E. Mechanical VII Semester						
Course Code	Course Title	Total Number of contact hours				Credits
		Lecture (L)	Tutorial (T)	Practical (P)	Total Hours	
2170001	Project -I	0	0	4	4	4
2171901	Operation Research	3	2	0	5	5
2171903	Computer Aided Manufacturing	3	0	2	5	5
2171909	Machine Design	3	2	0	5	5
2171910	Power Plant Engineering	4	0	2	6	6
	Department Elective - I	3	0	2	5	5
2170203	Vehicle Dynamics	3	0	2	5	5
2171911	Advance Heat Transfer	3	0	2	5	5
2171912	Oil Hydraulics and Pneumatic	3	0	2	5	5
2171913	Metal Forming Analysis	3	0	2	5	5
	TOTAL	16	4	10	30	30
BEYOND ACADEMICS						
7ME01	Software	0	0	2	2	-
7ME02	Training and placement activities	2	0	0	2	-

B.E. Mechanical VIII Semester						
Course Code	Course Title	Total Number of contact hours				Credits
		Lecture (L)	Tutorial (T)	Practical (P)	Total Hours	
2181909	Project II	0	0	16	16	16
2181910	Renewable Energy Engineering	4	0	0	4	4
	Department Elective II*	3	0	2	5	5
2181911	Finite Elements Method	3	0	2	5	5
2181912	Optimization	3	2	0	5	5
2181913	Product Design and Value	3	2	0	5	5
2181914	Rapid Prototyping	3	0	2	5	5
2181915	Automobile Engineering	3	0	2	5	5
2181916	Energy Conservation and	3	2	0	5	5
2181917	Cryogenic Engineering	3	0	2	5	5
2181918	Principles of Combustion	3	0	2	5	5
	Department Elective III*	3	0	2	5	5
2181919	Robotics	3	0	2	5	5
2181920	Quality Engineering	3	2	0	5	5
2181921	Design for Manufacturing and Assembly	3	2	0	5	5
2181922	Automation	3	0	2	5	5
2181923	Entrepreneurship	3	2	0	5	5
2181924	Design of Heat Exchanger	3	0	2	5	5
2181925	Computational Fluid Dynamics	3	0	2	5	5
2181926	Tribology	3	0	2	5	5
2181927	Advance Welding Technology	3	0	2	5	5
	TOTAL	10	0	20	30	30
BEYOND ACADEMICS						
8ME01	Software	0	0	2	2	-
8ME02	Revision	0	0	2	2	-
8ME03	Training and placement activities	2	0	0	2	-