

GOVERNMENT POLYTECHNIC PUNE
DEPARTMENT OF MECHANICAL ENGINEERING

Curriculum Structure -180(OB)

LEVEL-1 Foundation Level Courses (All Compulsory)

SR. NO.	COURSE CODE	COURSE TITLE	PRE-REQUISITE	Credits				TH Marks		PR Marks		Total	CD
				TH	PR	TUT	TOTAL	ESE	PA	ESE	PA		
1	HU1101	Communication Skills I		2	0	1	3	40	10	25	25	100	
2	HU1102	Communication Skills II	HU1101	2	0	1	3	40	10	0	50	100	
3	SC1101	Applied Mathematics -I		3	0	2	5	80	20	0	25	125	
4	SC1102	Applied Mathematics II	SC1101	3	0	2	5	80	20	0	25	125	
5	SC1103	Applied Physics		3	2	0	5	80	20	25	25	150	
6	SC1106	Applied Chemistry		3	2	0	5	80	20	25	25	150	
	6	TOTAL		16	4	6	26	400	100	75	175	750	

LEVEL-2 Core Technology Courses

Group A (All Compulsory)

SR. NO.	COURSE CODE	COURSE TITLE	PRE-REQUISITE	Credits				TH Marks		PR Marks		Total	CD
				TH	PR	TUT	TOTAL	ESE	PA	ESE	PA		
7	AM2101	Engineering Mechanics		4	2	0	6	80	20	0	25	125	
8	CM2102	Fundamentals of ICT		1	2	0	3	0	0	25	25	50	
9	EE2102	Electrical Technology		3	2	0	5	80	20	0	25	125	
10	ET2105	Elements of Electronics Engineering		3	2	0	5	80	20	0	25	125	
11	ME2101	Fundamentals of Engineering Graphics		2	2	0	4	80	20	0	25	125	
12	ME2102	Mechanical Engineering Drawing	ME2101	2	2	0	4	80	20	0	25	125	
13	WS2101	Work Shop Practice		0	4	0	4	0	0	0	50	50	
	7	TOTAL		15	16	0	31	400	100	25	200	725	

Group B (Any One)

14	SC2101	Applied Maths-III	SC1102	3	0	1	4	80	20	0	25	125	
15	ME2105	Programming in C *		0	4	0	4	0	0	100	25	125	
	1	TOTAL		3	0	1	4	80	20	0	25	125	

LEVEL-3 Basic Technology Courses (All Compulsory)

SR. NO.	COURSE CODE	COURSE TITLE	PRE-REQUISITE	Credits				TH Marks		PR Marks		Total	
				TH	PR	TUT	TOTAL	ESE	PA	ESE	PA		
16	AM 3104	Strength of Materials	AM2101	4	2	0	6	80	20	0	25	125	
17	ME 3101	Machine Drawing	ME2102	2	4	0	6	80	20	0	50	150	
18	ME 3102	Thermal Engineering		3	2	0	5	80	20	25	25	150	
19	ME 3103	Fluid Mechanics & Fluid Machinery *		4	2	0	6	80	20	25	25	150	
20	ME 3104	Metrology and Measurements *		4	2	0	6	80	20	25	25	150	C.D
21	ME 3105	Theory of Machines & Mechanisms		4	2	0	6	80	20	25	25	150	
22	ME 3106	Fundamentals of Mechatronics		1	2	0	3	0	0	25	25	50	
23	ME 3107	Computer Aided Drafting *		0	4	0	4	0	0	50	50	100	
24	MT 3108	Mechanical Engineering Materials	SC1106	2	2	0	4	80	20	--	25	125	
25	WS 3101	Manufacturing Processes *		2	4	0	6	80	20	25	25	150	
	10	TOTAL		26	26	0	52	640	160	200	300	1300	

LEVEL-4 Applied Technology Courses

Group-A Auxiliary Courses (Total Two)

SR. NO.	COURSE CODE	COURSE TITLE	PRE-REQUISITE	Credits				TH Marks		PR Marks		Total	
				TH	PR	TUT	TOTAL	ESE	PA	ESE	PA		
26	AU 4101	Environmental Science	--	0	2	0	2	0	0	0	50	50	Compulsory
27	AU 4102	Renewable Energy Technologies		2	0	0	2	40	10	0	0	50	Any One
28	AU 4103	Engineering Economics		2	0	0	2	40	10	0	0	50	
29	AU 4104	Ethical Sources and Sustainability		2	0	0	2	40	10	0	0	50	
30	AU 4105	Digital Marketing		0	2	0	2	0	0	0	50	50	
	2	Total		2	2	0	4	40	10	0	50	100	

Group-B Management Level Courses (Total Two)

SR. NO.	COURSE CODE	COURSE TITLE	PRE-REQUISITE	Credits				TH Marks		PR Marks		Total	
				TH	PR	TUT	TOTAL	ESE	PA	ESE	PA		
31	MA 4101	Entrepreneurship and Startups #		2	0	0	2	40	10	--	--	50	Compulsory
32	MA 4102	Industrial Organization & Management #		2	0	0	2	40	10	--	--	50	Any One
33	MA 4103	Materials Management #		2	0	0	2	40	10	--	--	50	
34	MA 4104	Disaster Management #		2	0	0	2	40	10	--	--	50	
35	MA 4105	Introduction to E-commerce #		2	0	0	2	40	10	--	--	50	
36	MA 4106	Information Management #		2	0	0	2	40	10	--	--	50	
	2	Total		4	0	0	4	80	20			100	

LEVEL-5 Diversified Courses (Total 4)

SR. NO.	COURSE CODE	COURSE TITLE	PRE-REQUISITE	Credits				TH Marks		PR Marks		Total	
				TH	PR	TUT	TOTAL	ESE	PA	ESE	PA		
45	WS 5101	Adv. Mfg. & CNC *	WS3101	3	2	0	5	80	20	25	25	150	C.D
46	ME 5101	Computer aided 3D Modelling *		1	4	0	5	0	50	50	50	150	C.D
47	ME 5102	Refrigeration & Air condationing *	ME 3102	3	2	0	5	80	20	25	25	150	C.D C.D Any Two
48	ME 5103	Automobile Engineering		3	2	0	5	80	20	25	25	150	
49	ME 5104	CIM and Robotics		3	2	0	5	80	20	25	25	150	
50	ME 5105	Tool Engineering.		3	2	0	5	80	20	25	25	150	
51	ME 5106	Advanced welding Technology		3	2	0	5	80	20	25	25	150	
	4	TOTAL		10	10	0	20	240	110	125	125	600	--

	CREDITS				Th Marks		PR Marks		Total	
	TH	PR	TT	TOTAL	ESE	PA	ESE	PA	Marks	
	93	80	7	180	2280	570	650	1150	4650	
TH:PR Proportion	52	48			61		39		1500	CD Marks

TOTAL NO OF COURSES	40
TOTAL NO OF DIPLOMA AWARDDING COURSES	11
TOTAL NO OF COURSES WITH THEORY EXAM	31

Head of Department

TH- Theory, PR- Practical, TU- Tutorials, ESE - End Semester Exam, PA- Progressive Assessment, CD - Class Delararation,