

PROGRAMME STRUCTURE
FOR
DIPLOMA PROGRAMME IN
MECHANICAL ENGINEERING
UNDER RATIONALISED SEMESTER SYSTEM
(IMPLEMENTED FROM ACADEMIC YEAR 2020-2021)



BOARD OF TECHNICAL EDUCATION, GOA STATE

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Directorate of Technical Education, Goa State

DIPLOMA IN MECHANICAL ENGINEERING- CURRICULUM STRUCTURE											
Semester	Code	Subjects	L	T	P	H	TH	TM	PR	TW	TOT
FIRST	GC103	Applied Physics-I	3	0	2	5	75	25	–	25	125
	GC102	Engineering Maths-I	4	2	0	6	75	25	–	25	125
	GC203	Environmental Studies	4	0	0	4	75	25	–	–	100
	GC101	Comm. Skills	0	0	2	2	–	–	25	25	50
	GC105	Basic Engineering Practice (Electronic. & Comp.)	0	0	4	4	–	–	50	50	100
			11	2	08	21					500
SECOND	GC202	Applied Physics-II	3	0	2	5	75	25	–	25	125
	GC104	Applied Chemistry	3	0	2	5	75	25	–	25	125
	GC201	Engineering Maths-II	4	2	0	6	75	25	–	25	125
	GC205	Engineering Materials	3	0	0	3	75	25	–	–	100
	GC106	Basic Engineering Practice (Mech.& Elect)	0	0	5	5	–	–	50	75	125
	GC204	Engineering Drawing	0	0	5	5	–	–	50	50	100
			13	2	14	29					700
THIRD	CC301	Engg. Mechanics	3	1	1	5	75	25		25	125
	MC302	Manufacturing Processes	3	0	2	5	75	25		25	125
	MC301	Machine Drawing	2	0	4	6	75	25		50	150
	MC303	Thermal Engineering	3	1	1	5	75	25	-	25	125
	CC302	Elem. Of Electrical & Electronics Engineering	3	0	2	5	75	25		25	125
	MC304	Computer Aided Drafting	0	0	4	4	0	0	50	50	100
			14	2	14	30					750
FOURTH	MC401	Strength of Materials	3	1	1	5	75	25	-	25	125
	MC402	Mech. W/s Practice	0	0	4	4	0	0	50	50	100
	MC403	Mechatronics	3	0	2	5	75	25	25	25	150
	MC405	Energy Conversion	3	1	1	5	75	25	-	25	125
	MC404	Fluid Machinery	3	0	2	5	75	25	-	25	125
	MC406	Metrology & QC	2	0	2	4	75	25	-	25	125
			14	2	12	28					750

FIFTH	TR501	Industrial Training				15			30	70	GRADE
	CC601	Industrial Organization and Management	3	0	0	3	75	25			100
	CC502	Essentials of entrepreneurship development	0	0	2	2				25	25
	MC501	Theory of Machines	3	0	2	5	75	25		25	125
		Elective -I	3	0	2	5	75	25	25	25	150
	AC101	Essence of Indian Traditional Knowledge	2	-	-	2	-	-	-	-	-
			11	0	6	32					400
SIXTH	MC601	Machine Design	4	0	2	6	75	25	25	25	150
	CC602	Business Comm	0	0	2	2			25	25	50
		Elective - II	3	0	2	5	75	25	25	25	150
		Elective -III	3	0	2	5	75	25	25	25	150
	MC602	Mechanical Engineering Project	0	0	6	6			50	50	100
	MC603	Prod. Management	3	0	2	5	75	25	0	25	125
	AC102	Indian Constitution	2	-	-	2	-	-	-	-	-
			15	0	16	31					725
L- Lecturers T – Tutorial P – Practical C-Credits TH – Theory Marks TM – Test Marks PR – Practical Marks TW- Term Work Marks											

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LIST OF ELECTIVES

Groups	Course Code	Elective-I/Elective-II/Elective-III
Elective-I	MC604	Computer Aided Design and Manufacturing
	MC612	PLC in Automation
	MC615	Fibre Reinforced Polymers
	MC621	Refrigeration and Air Conditioning.
Elective-II	MC617	Computer Numerical Control Machines
	MC623	Power Plant Engineering
	MC629	Jigs & Fixtures Design
	MC630	Maintenance Engineering
Elective-III	MC614	Advanced Manufacturing
	MC622	Automobile Engineering
	MC626	Safety Engineering
	MC631	Lean Manufacturing