

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



BOARD OF TECHNICAL EDUCATION, GOA STATE

DTE Building, Alto Porvorim, Bardez, Goa 403521

Ph. +91-832-2413571, +91-832-2412146

Fax +91-832-2413572

Email: dir-dte.goa@nic.in

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Directorate of Technical Education, Goa State

DIPLOMA IN COMPUTER ENGINEERING CURRICULUM STRUCTURE											
Semester	Code	Subjects	L	T	P	H	TH	TM	PR	TW	TOT
FIRST	GC102	Engineering Mathematics-I	4	2	-	6	75	25	-	25	125
	GC103	Applied Physics-I	3	-	2	5	75	25	-	25	125
	GC104	Applied Chemistry	3	-	2	5	75	25	-	25	125
	GC106	Basic Engineering Practice (Mech & Elect)	-	-	5	5	-	-	50	75	125
	GC204	Engineering Drawing	-	-	5	5	-	-	50	50	100
			10	2	14	26	225	75	100	200	600
SECOND	GC101	Communication Skills	-	-	2	2	-	-	25	25	50
	GC105	Basic Engineering Practice (Electronics & Computer)	-	-	4	4	-	-	50	50	100
	GC201	Engineering Mathematics-II	4	2	-	6	75	25	-	25	125
	GC202	Applied Physics-II	3	-	2	5	75	25	-	25	125
	GC203	Environmental Studies	4	-	-	4	75	25	-	-	100
	GC205	Engineering Materials	3	-	-	3	75	25	-	-	100
			14	2	8	24	300	100	75	125	600
THIRD	CM301	Computer Organization	4	-	-	4	75	25	-	-	100
	CM302	Operating System	3	-	2	5	75	25	-	25	125
	CM303	Computer Programming	3	1	2	6	75	25	25	25	150
	CM304	Web Designing	3	1	2	6	75	25	25	25	150
	CM305	Computer Laboratory-I	-	1	2	3	-	-	50	25	75
	CC309	Digital Electronics	3	-	2	5	75	25	25	25	150
			16	3	10	29	375	125	125	125	750
FOURTH	CM401	Microprocessors	3	-	2	5	75	25	-	25	125
	CM402	Introduction to Database Management Systems	3	1	2	6	75	25	25	25	150
	CM403	Object Oriented Programming	3	1	2	6	75	25	25	25	150
	CM404	Internet Technologies	3	-	2	5	75	25	25	-	125
	CM405	Data Communication & Computer Networks	3	-	2	5	75	25	-	25	125
	CM406	Computer Laboratory-II	-	-	2	2	-	-	50	25	75
			15	2	12	29	375	125	125	125	750
FIFTH	TR501	Industrial Training	-	-	4	4	-	-	30	70	GRADE
	CM501	Computer Security	3	-	2	5	75	25	25	-	125
	CC501	Entrepreneurship Development	-	-	2	2	-	-	-	25	25
	CC601	Industrial Organization & Management	3	-	-	3	75	25	-	-	100
		Elective -I	3	-	2	5	75	25	25	25	150
			9	-	10	19	225	75	80	120	400

Directorate of Technical Education, Goa State

SIXTH	CM601	Network Management	3	-	2	5	75	25	25	-	125
	CM602	Software Engineering & Testing	3	-	2	5	75	25	-	-	100
	CM603	Computer Engineering Project	-	-	8	8	-	-	50	100	150
	CC602	Business Communication	-	-	2	2	-	-	25	25	50
		Elective - II	3	-	2	5	75	25	25	25	150
		Elective -III	3	-	2	5	75	25	25	25	150
			12	-	18	30	300	100	150	175	725
L- Lectures T – Tutorials P – Practicals H-Hours TH – Theory Marks TM – Test Marks PR – Practical Marks TW- Term Work Marks											

LIST OF ELECTIVES (AS PER CAREER OPTIONAL/VERTICALS)

Core Programming		Web Technologies & Multimedia	
Sub Code	Elective-I / Elective-II / Elective-III	Sub Code	Elective-I / Elective-II / Elective-III
CM611	Data Structures	CM615	E-Commerce
CM612	Design and Analysis of Algorithms	CM616	Principles of Multimedia
CM613	Advanced Object-Oriented Programming	CM617	Server Programming
CM614	Mobile Application Development	CM618	Computer Graphics
Systems		Data & IT Infrastructure Management	
Sub Code	Elective-I / Elective-II / Elective-III	Sub Code	Elective-I / Elective-II / Elective-III
EX403	8051 Microcontrollers	CM621	Information Storage and Management
CM619	Embedded System Design	CM622	Cyber Law and Computer Forensics
EX612	Autonomous Robots	CM623	Internet of Things
CM620	Distributed Operating Systems	CM624	ERP and Supply Chain Management