

**Parvatibai Chowgule College of Arts and Science (Autonomous)
Margao, Goa**

Course Structure
B.Voc.(Software Development)

Semester	General Education Component			Skill Component		
I	COM-I.SD-G1 Language Paper-I	Theory Credits 4	Practical Credits 0	COM- I.SD-SK1 Office Automation Tools	Theory Credits 3	Practical Credits* 3
	COM-I.SD-G2 Elements of Basic Statistics-I	Theory Credits 2	Practical Credits 0	COM- I.SD-SK2 Web Designing	Theory Credits 3	Practical Credits 3
	COM- I.SD-G3 Cyber Security	Theory Credits 4	Practical Credits 0	COM- I.SD-SK3 Introduction to Programming	Theory Credits 3	Practical Credits 3
II	COM-II.SD-G4 Language Paper-II	Theory Credits 4	Practical Credits 0	COM-II.SD-SK4 Computer Organisation and Operating System	Theory Credits 3	Practical Credits 3
	COM-II.SD-G5 Mathematical foundation in Computer Science	Theory Credits 4	Practical Credits 0	COM-II.SD-SK5 Data Structure	Theory Credits 3	Practical Credits 3
	COM-II.SD-G6 Academic Writing	Theory Credits 4	Practical Credits 0	COM-II.SD-SK6 Multimedia	Theory Credits 3	Practical Credits 3
	COM-II.SD-G7 Elements of Basic Statistics-II	Theory Credits 2	Practical Credits 0			
Outcome	1: Office Assistant					

	2: Programming Assistant 3: Technical Assistant 4: Hardware Technician 5: Desktop Publishers					
Semester	General Education Component			Skill Component		
III	COM-III.SD-G8 Environmental Studies-I	Theory Credits 2	Practical Credits 0	COM- III.SD-SK7 Object Oriented Paradigm	Theory Credits 3	Practical Credits 3
	COM- III.SD-G9 Business Communication	Theory Credits 4	Practical Credits 0	COM- III.SD-SK8 Computer Network	Theory Credits 3	Practical Credits 3
	COM- III.SD-G10 Entrepreneurship	Theory Credits 4	Practical Credits 0	COM- III.SD-SK9 Database Management Systems	Theory Credits 3	Practical Credits 3
	Internship	Credits 2				
IV	COM-IV.SD-G11 Accounting for Non-accountants	Theory Credits 4	Practical Credits 0	COM- IV.SD-SK10 Web Development Framework	Theory Credits 3	Practical Credits 3
	COM- IV.SD-G12 Environmental Studies-II	Theory Credits 2	Practical Credits 0	COM- IV.SD-SK11 Agile Software Engineering	Theory Credits 3	Practical Credits 3
	COM- IV.SD-G13 Personality Enhancement	Theory Credits 4	Practical Credits 0	COM- IV.SD-SK12	Theory Credits 3	Practical Credits 3

				Mobile Application Development		
	Internship	Credits 2				
Outcome	1:Assistant Programmer 2:Android Application Developer 3:Web Designer 4: Network Administrator 5: Database Administrator					
Semester	General Education Component			Skill Component		
V	COM-V.SD-G14 Lean startups and Innovation	Theory Credits 4	Practical Credits 0	COM-V.SD-SK13 Internet of Things	Theory Credits 3	Practical Credits 3
	COM-V.SD-G15 Managerial Economics	Theory Credits 4	Practical Credits 0	COM-V.SD-SK14 Software Testing	Theory Credits 3	Practical Credits 3
	COM-V.SD-G16 Human Values and Professional Ethics	Theory Credits 4	Practical Credits 0	Project Work	Credits 6	
VI	COM-VI.SD-G17 E-Governance	Theory Credits 4	Practical Credits 0	COM- VI.SD-SK15 Network Security	Theory Credits 3	Practical Credits 3
	COM- VI.SD-G18 Nutrients and Health	Theory Credits 4	Practical Credits 0	COM- VI.SD-SK16 Digital Marketing and E-Commerce	Theory Credits 3	Practical Credits 3

	COM-VI.SD-G19 HCI and Design Thinking	Theory Credits 4	Practical Credits 0	Project Work	Credits 6
Outcome	1: Software Programmer 2: Software Developer 3: Server Administrator 4: Software Project Analyst 5: Software Tester 6: Lab Instructor				

- * 1 Practical Credit=3 Hrs