

Year 01

Unit code	Unit name	Credits	Core/ Elective	Hours				
				Lectures	Practicals	Tutorials	Project work	Industry engagement
Year 1 – Semester 1								
CMP1101	Computer Systems	3	C	2	2	1		
PRF1101	Professional Practice	3	C	2			2	1
FND1101	Mathematics for Computing (with Programming)	4	C	3	2	1		
PRF1102	Communication in Tech World	3	C	2	2			1
CMP1102	Programming Concepts	3	C	2	2		1	
	Total credits	16						
Year 1 – Semester 2								
PRF1201	Entrepreneurship & Start-up Culture	3	C	2			2	1
REQ1201	Business Analysis and Software Design	3	C	2	2			1
CMP1201	Internet Technologies	3	C	2	2	1		
FND1101	Probability & Statistics (with Programming)	4	C	3	2	1		
CMP1202	Data Technologies	3	C	2	2		1	
	Total credits	16						

Year 02

Unit code	Unit name	Credits	Core/Elective	Hours				
				Lectures	Practicals	Tutorials	Project work	Industry engagement
Year 2 – Semester 1								
SEC2101	Information Security	3	C	2	2			1
CMP2101	Object Oriented Programming	3	C	2	2	1		
CMP2102	Communication Protocols and Models	3	C	2	2	1		
PRF2101	Arts for Technology	3	C	2			2	1
FND2101	Programming with Vectors and Matrices	4	C	3	2	1		
	Total credits	16						
Year 2 – Semester 2								
CMP2201	Data structures and algorithms	3	C	2	2	1		
PRO2201	Project Management	3	C	2			2	1
CMP2202	Operating Systems and Platforms	3	C	2	2	1		
CMP2203	Cloud Computing Fundamentals	3	C	2	2			1
DES2201	Technology Challenge Competition	4	C	1	2		5	
	Total credits	16						

Year 03

Unit code	Unit name	Credits	Core/ Elective	Hours				
				Lectures	Practicals	Tutorials	Project	Industry engagement
Year 3 – Semester 1 (3 Core units + at least 2 Electives)								
DES3101	Human Factors in Computer Systems	3	C	2	2			1
PRO3101	Software Engineering Methods	3	C	2			2	1
CMP3101	Artificial Intelligence	4	C	3	2	1		
DES3102	Mobile Application Development	3	E	2	2		1	
DES3103	Immersive Technology Development	3	E	2	2		1	
CMP3102	Data Warehousing	3	E	2	2	1		
FND3102	Techniques in Social Media	3	E	2			2	1
CMP3102	Virtualisation and Containers	3	E	2	2			1
	Total credits	16						

Year 3 – Semester 2 (3 Core units + at least 2 Electives)

DES3201	Software Architecture	3	C	2			2	1
VAV3201	Software Quality Assurance	3	C	2	2			1
CAP3201	Capstone Project-Part 1 (in Software Engineering)	5	C	1			10	1
CMP3202	Cloud Application Development	3	E	2	2	1		
DES3201	SOA and Microservices	3	E	2	2		1	
FND3201	Machine Learning	3	E	2	2		1	
FND3202	Tensors and Graphs (with programming)	3	E	2	2	1		
	Total credits	17						

Year 04

Unit code	Unit name	Credits	Core/ Elective	Hours				
				Lectures	Practicals	Tutorials	Project	Industry placement
Year 4 – Semester 1 (3 Core units + at least 2 Electives)								
CAP4101	Capstone Project-Part 2 (in Software Engineering)	5	C	1			10	1
DES4101	Advanced Software Design	3	C	2	2			1
FND4101	Research Methods and Academic Writing	3	C	2			3	
CMP4101	Functional Programming	3	E	2	2	1		
SEC4101	Application Security	3	E	2	2		1	
CMP4102	Internet of Things	3	E	2	2			1
CMP4103	Service Integration and Management	3	E	2	2			1
CMP4104	Supercomputing and Quantum Computing	3	E	2		1	2	
DAT4101	Big Data	3	E	2	2	1		

	Total credits	17						
Year 4 – Semester 2 (Mandatory Internship)								
PRF4201	Information Technology Internship (in Software Engineering)	12	C				5	35
	Total credits	12						

Total credits: 126, Duration: 4 years