



Academic Form-38: PROGRAM MATRIX

Faculty	Faculty of Computing and Information Technology (FCIT)
Program	Software Engineering (SE)
Award	Bachelor in Software Engineering
Credit Units	68
Academic Year	2021/2022

Level	Semester 1					Semester 2				
	Course Code	Course Name	Pre-requisite	Core/Elective	Units	Course Code	Course Name	Pre-requisite	Core/Elective	Units
1	COMP1115	Fundamentals of Database Systems	None	Core	2	COMP1214	Discrete Mathematics	None	Core	2
	COMP1116	Computer Programming	None	Core	2	COMP1216	Algorithms and Data Structure	COMP1116	Core	2
	COMP1114	Introduction To Multimedia Technology	None	Core	2	COMP1231	Introduction to Software Engineering	None	Core	2
	UNIR1100	Communication Skills I	None	Core	2	COMP1213	Computer Networks I	None	Elective	2
	UNIR1001	Oman and Islamic Culture	None	Core	1	COMP1215	Computer Architecture and Organization	COMP1116	Elective	
					UNIR1002	Arabic Language Skills	None	Core	1	
2	MATH2100	Calculus and Statistics	None	Core	2	UNIR2100	Communication Skills II	UNIR1100	Core	2
	COMP2108	Object Oriented Programming	COMP1116	Core	2	COMP2232	Industrial Training Practice	COMP1116	Core	2



	COMP2131	Software Requirement Engineering	COMP1231	Core	2	COMP2105	Operating System	None	Core	2
	UNIR2001	Entrepreneurship	None	Core	2	COMP2220	Web Information Systems	COMP1114	Elective	
	COMP2111	Systems Analysis and Design	COMP1231	Elective		COMP2221	Fundamentals of E-Commerce	None	Elective	2
	NEDB2101	Database Administration	COMP1115	Elective	2	COMP2222	Computer Animation	COMP1114	Elective	
	COMP2100	Human Computer Interaction	COMP1116	Elective						
3	COMP3132	Software Design and Architecture	COMP2131	Core	2	COMP3231	Software Testing	COMP1231	Core	2
	COMP3110	Pattern Recognition	COMP1116	Core	2	COMP3210	Artificial Intelligence	COMP1216	Core	2
	COMP3131	Software Construction	COMP1231	Core	2	UNIR3100	Communication Skills III	UNIR1200	Core	2
	COMP3107	Distributed Database Design	COMP1115	Elective		COMP3209	Data Mining	COMP1216	Elective	
	COMP3108	Cloud Computing	None	Elective		COMP3212	Wireless Sensor and Actuator Networks	None	Elective	2
	NEDB3101	Switching and Routing Techniques	None	Elective	2	COMP3201	Computer Graphics	COMP1114	Elective	
	COMP3111	GIS and Spatial Databases	COMP1115	Elective		COMP3211	ERP Design and Implementation	COMP2131	Elective	
	COMP3109	Mobile Applications	COMP2108	Elective						
4	COMP4001A	Industrial Project I	COMP2108	Core	2	COMP4001 B	Industrial Project II	COMP4001 A	Core	2

COMP4102	Software Project Management	COMP3132	Core	2	INTE4202	Information Security	None	Core	2
COMP4110	Numerical Analysis	COMP1214	Core	2	COMP4231	Software Metrics	COMP1231	Core	2
COMP4107	Special Topics	None	Elective	2	COMP4206	Modelling and Visualization	COMP3210	Elective	2
COMP4108	Big Data Analytics	COMP2108	Elective		COMP4209	E-Environment	COMP3109	Elective	
COMP4109	Internet of Things	None	Elective		COMP4210	Mobile and Wireless Networks	None	Elective	