Sohar University — جامعة صحار

Programme Matrix

Faculty	Faculty of Computing and Information Technology
Program	Networking and Database (NEDB)
Award	BACHELOR OF INFORMATION TECHNOLOGY Networking & Database
Credit Hours/ Units	128 Credit Hours / 68 Units
Academic Year	2025/2026

Level	Semester 1					Semester 2				
	Course Code	Course Name	Pre-requisite	Core/ Elective	Units / Credits	Course Code	Course Name	Pre-requisite	Core/ Elective	Units/ Credits
1	COMP1117	Computer Architecture & Organization	IC3	Core	2/4	COMP1217	Fundamentals of Database Systems	IC3	Core	2/4
	COMP1116	Computer Programming	IC3	Core	2/4	COMP1216	Algorithms and Data Structure	None	Core	2/4
	COMP1118	Discrete Mathematics	IC3	Core	2/3	COMP1213	Computer Networks I	IC3	Core	2/4
	UNIR1100	Communication Skills I	None	Core	2/3	COMP1220	Computer Security Fundamental	Set3	Core	2/4
	UNIR1001	Oman and Islamic Culture	None	Core	1/2	UNIR1002	Arabic Language Skills	None	Core	1/2
2	COMP2000	Computer Networks II	COMP1213	Core	2/4	UNIR2100	Communication Skills II	UNIR1100	Core	2/3
	NEDB2101	Database Administration	COMP1217	Core	2/4	NEDB2201	Advanced Database Systems	COMP1217	Core	2/4
	COMP2108	Object Oriented Programming	COMP1116	Core	2/4	COMP2215	Operating System & Security	None	Core	2/4
	COMP2111	System Analysis and Design	COMP1116	Core	2/4	INTR2002	Industrial Training	UNIR2001	Core	0
	UNIR2001	Entrepreneurship	UNIR2100	Core	2/2	COMP2220	Web Information Systems	None	Elective	2/4
						ARIN2201	Intro to BI	None	Elective	
						CYSE2201	Digital forensics and Malware analysis	None	Elective	

Level	Semester 1					Semester 2				
	Course Code	Course Name	Pre-requisite	Core/ Elective	Units / Credits	Course Code	Course Name	Pre-requisite	Core/ Elective	Units/ Credits
3	NEDB3101	Switching and Routing Techniques	COMP2000	Core	2/4	Comp3212	Wireless Sensor and Actuator Networks	COMP2000	Core	2/4
	COMP3111	GIS and Spatial Databases	None	Core	2/4	COMP3209	Data Mining	None	Core	2/4
	COMP3112	Software Project Management	None	Core	2/4	UNIR3100	Communication Skills III	UNIR2100	Core	2/4
	COMP3107	Distributed Database Design	COMP1217	Core	2/4	COMP3210	Artificial Intelligence	None	Elective	
						COMP3211	ERP Design and Implementation	None	Elective	2/4
						CYSE3221	Cyber Law and Ethics	None	Elective	
4	COMP4000A	Specialization Project (A)	INTR2002	Core	2/4	COMP4000B	Specialization Project(B)	COMP4000A	Core	2/4
	COMP4108	Big Data Analytics	COMP2108	Core	2/4	CYSE4202	Advanced Information Security	None	Core	2/4
	COMP4121	IoT Network Security	COMP1213	Core	2/4	COMP4210	Mobile & Wireless Networks	None	Core	2/4
	COMP3108	Cloud Computing and Web Services	COMP1217	Elective	2/4	COMP3109	Mobile Applications	None	Elective	2/4
	COMP4120	Ethical Hacking	CYSE3221	Elective		COMM4206	Data Visualization	None	Elective	
	COWE4100	Generative AI: Models and Applications	COMP2220	Elective		ARIN4201	Special Topic in AI	None	Elective	