



Course Specifications for the Bachelor of Information Technology Program

2024



Click on the course code to access the Course Specification.

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hour	Type of requirements (Institution,
Level 1	ENG0011	English I	Required	--	8	Preparatory Year
	CSC105	Computer Skills	Required	--	2	Preparatory Year
	PHYS110	Physics 1	Required	--	2	Preparatory Year
	STAT100	Statistics	Required	--	2	Preparatory Year
	PSYCH101	Thinking Skills and learning styles	Required	--	4	Preparatory Year
Level 2	ENG0012	English II	Required	ENG 0011	5	Preparatory Year
	ESP102	English for Engineering and Computer Science	Required	ENG 0011	2	Preparatory Year
	MATH105	Differential Calculus	Required	--	3	Preparatory Year
	CSC111	Computer programming	Required	CSC 105	3	Preparatory Year
	PHYS115	Physics 2	Required	PHYS110	3	Preparatory Year
Level 3	ARAB 101	Linguistic skills	Required	--	2	Institution
	PHYS116	General Physics 3	Required	PHYS115	4	College
	MATH115	Integral Calculus	Required	MATH 105	3	College
	IT131	IT131- Database	Required	CSC 111	3	College
	CS181	Computer Programming 2	Required	CSC 111	3	College
Level 4	ARAB103	Arabic Writing	Required	--	2	Institution
	IC101	Introduction to Islamic culture	Required	--	2	Institution
	MATH116	Linear algebra and Multi-Variable Calculus	Required	MATH115	3	College
	STAT126	Probability & Statistics	Required	STAT100	3	College
	COE121	Logical design	Required	CSC111 COE122	3	College
	COE122	Logical design (Lab)	Required	COE121	1	College

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hou	Type of requirements (Institution, Department, College)
	CS182	Computer Programming 3	Required	CS181	3	College
Level 5	IT251	Information System Fundamentals	Required	-	3	Department
	IT214	Object Oriented Programming I	Required	CS182	3	Department
	IT271	Web Technologies	Required	CS182	4	Department
	MATH212	Discrete Mathematics	Required	MATH116	3	College
	CS211	Concepts of Algorithms	Required	CS181	3	Department
	IC102	Islam and community building	Required	IC101	2	Institution
Level 6	IC103	IC103- Economic System in Islam	Required	IC 101	2	Institution
	IT221	Information Assurance and Security	Required	IT251	3	Department
	IT352	Information Aystem Analysis & Designs	Required	IT251	3	Department
	CS222	CS222- Operating System	Required	CS182	3	College
	CS214	CS214- Data Structures	Required	CS182	3	College
	Free Hours I	Free Hours I	Elective		3	
Level 7	IT215	Humain Computer Interaction	Required	IT214	3	Department
	IT332	Advance Database	Required	IT131	3	Department
	CS383	Software Engineering	Required	CS222	3	College
		Free Hours II	Elective	-	3	
Level 8	IT315	Object Oriented Programming II	Required	IT214	3	Department
	IT361	System Administration and Maintenance	Required	IT251	3	Department
	IT372	Data mining and Warehousing	Required	IT332	3	Department
	COE351	Computer Networks	Required	CS222	3	College
	IT324	Mobile and Cloud Computing	Required	IT214	3	Department
	IT362	Communication Skills & Ethics	Required	-	2	Department

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hou	Type of requirements (Institution,
		CoC Elective I	Elective		3	Department
	COE352	Computer Networks Lab	Required	COE351	1	College
Level 9	IT497	Summer Training	Required	120 CH	3	Department
	IT473	Electronic Commerce System	Required	IT352	3	Department
	IT ***	IT Elective I	Elective		3	Department
	IT ***	IT Elective II	Elective		3	Department
	IT498	Graduation Project I	Required	120 CH	2	Department
		COC Elective II	Elective		3	College
Level 10	IT435	Decision Support Systems	Required	IT332	3	Department
	IC104	Political System in Islam	Required	IC 101	2	Institution
	IT499	Graduation Project II	Required	IT498	3	Department

IT Elective Courses

Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours
IT351	Data Science for the Internet of Things	Elective	IT131	3
IT424	Knowledge Based Application Systems	Elective	CS214	3
IT425	Geographic Information System	Elective	IT352	3
IT433	Distributed Object Database	Elective	IT332	3
IT434	Advanced web technology	Elective	IT271	3
IT442	Wireless and Mobile Data Networks	Elective	COE351	3
IT443	Multimedia and Data compression	Elective	IT214	3
IT462	Network and Database Management	Elective	COE351	3
IT463	Distributed and Parallel Systems	Elective	IT352	3
IT474	Big data analysis	Elective	IT332	3
IT475	Web Data Routing	Elective	IT271	3
IT491	Special topics in computer science (1)	Elective	-	3
IT492	Special topics in computer science (2)	Elective	-	3

COC Elective Courses

Course Code	Course Title	Required Elective	or Pre-Requisite Courses	Credit Hours
STAT327	Statistical inference (2)	Elective	STAT126	3
CHEM101	General chemistry (1)	Elective	-	4
CHEM111	General chemistry	Elective	-	4
COE361	Signal and systems analysis	Elective	COE362(co) MATH218(pre)	3
COE362(co)	Signal and systems analysis (lab)	Elective	COE361	1
IT351	Data science for the Internet of Things	Elective	-	3
MATH204	Vector calculation	Elective	-	3
MATH218	Differential equations	Elective	-	3
MATH244	Linear algebra (2)	Elective	MATH116	3
MATH319	Coding and coding theory	Elective	-	3
MATH326	Mathematical methods	Elective	-	4
MATH345	Algebra applications	Elective	-	3
MATH351	Numerical analysis	Elective	-	4
MATH382	Real analysis (1)	Elective	-	4
PHYS243	Thermodynamics	Elective	-	3
PHYS321	Electromagnetism (2)	Elective	-	3
PHYS422	electronics	Elective	-	4

جملتك

