

Generic Study Plan for BSc. in Computer Science.

Cohort fall 2024 and prior - Total = 130 credit hours

Year 1 - First Semester				Year 1 - Second Semester			
Course #.	Course Title	Pre-req.	Cr.	Course #.	Course Title	Pre-req.	Cr.
GEAE101	Acad. English for Hum. & STEM		3	CENG202	Discrete Mathematics	MATH105	3
MATH105	Calculus I	-	3	MATH110	Calculus II	MATH105	3
CSBP119	Algorithms and Prob. Solving	-	3	CSBP219	Object-Oriented Prog.	CSBP119	3
PHYS105	General Physics I	-	3	CENG205	Digital Design & Com Org.		3
GEIT112 OR GEIT11	Fourth Industrial Revolution _OR Introduction to Artificial Intelligence		3	CSBP221	Programming Lab II	CSBP219(co)	1
CSBP121	Programming Lab I	CSEB119 (Co)	1	Math140	Linear Algebra		3
	Semester Credit Hours		16		Semester Credit Hours		16
Year 2 - First Semester				Year 2 - Second Semester			
Course #.	Course Title	Pre-Req.	Cr.	Course #.	Course Title	Pre-Req.	Cr.
Elective	Cultural Elective 1		3	CSBP340	Database Systems	CSBP319	3
BIOC100 or CHEM111	Basic Bio. I or Gen. Chemistry		3	ITBP370 Or ITBP270	Prof. Res. In IT	GEAE101	3
CENG210	Comm. & Net. Fund	CEN205(co/pre) & PHYS105	3	STAT210	Probability and Statistics	MATH110	3
CSBP315	Operating Systems Fundamentals	CENG205	3	SWEB300	Software Eng. Fundamentals	CSBP219	3
CSBP319	Data Structures	CSBP219	3	ITBP301	Sec. Principles and Practice	CENG210	3
	Semester Credit Hours		15		Semester Credit Hours		15
Year 3 - First Semester				Year 3 - Second Semester			
Course #.	Course Title	Pre-Req.	Cr.	Course #.	Course Title	Pre-Req.	Cr.
Elective	Cultural Elective 2		3	CSBP461	Internet Computing	CSBP340	3
CSBP316	Human Computer Interaction	CSBP219	3	CSBP400	Modeling and Simulation	STAT210	3
GEEM110	Contemporary Emirati Studies		3	CSBP301	Artificial Intelligence	CSBP319	3
SWEB450	Analysis of Algorithms	CSBP319	3	ITBP321	Web App. Development Lab	Co/Pre CSBP340	1
ITBP418 Or ITBP280	Entrepreneurship in IT	ITBP301	3	GESU121	Sustainability		3
	Semester Credit Hours		15		Semester Credit Hours		13
Year 4 - First Semester				Year 4 - Second Semester			
Course #.	Course Title	Pre-Req.	Cr.	Course #.	Course Title	Pre-Req.	Cr.
CSBP411	Machine Learning	CSBP301	3	CSBPxxx	Major Elective 2**		3
CSBP421	Smart Computer Graphics	CSBP319	3	CSBPxxx	Major elective 3**		3
GEIS101	Islamic Culture		3	CSBPxxx	Major Elective 4**	-	3
ITBP480	Senior Graduation Project I	STAT210	3	PHYS135	Gen. Physics Lab I	PHYS105	1
CSBPxxx	Major elective 1**		3	ITBP481	Senior Graduation Project II	ITBP480	3
	Semester Credit Hours		15		Semester Credit Hours		13
Year 5 - First Semester							
ITBP495: Internship (12 credit hours)							
(Students are not Allowed to register any additional courses during their Internship without the approval of the College)							

*Students must have finished 80 CrHr to register in ITBP480

Major electives Courses**	Pre-req.	Major electives Courses*	Pre-req.
CSBP320 Data Mining	STAT210	CSBP487 Computer Animation and Visualization	CSBP319
CSBP483 Mobile Web.	CSBP340	SWEB451 Game Development	CSBP319
CSBP499 Special Topics in CS	STAT210	CSBP476 Robotics and Intelligent Systems	CSBP301
CSBP431 Bioinformatics	SWEB450	CSBP491 Computational Intel. Data Management	CSBP319

Cultural Elective Courses (6 Cr. Hrs.)		
Social and Behavioral Sciences (3 Cr. Hrs.)		
	AGRB 210	Introduction to Agribusiness
	ECON 110	Principles of Economics
	HSR 140	Introduction to Society and Behavior
	HSR 150	Introduction to Government, Policy, and Urban Studies
	PSY 100 / PYSC 100	Introduction to Psychology
	GEO 200	World Regional Geography
	GHEP111	Happiness and Wellbeing
	CURR103	Early childhd Dev & Learning
	CHIN 102	Chinese 2 for beginners
	FCH 102	French 2 for beginners
	KOR 102	Korean 2 for beginners
	GER 102	German 2 for beginners
	SPN 102	Spanish 2 for beginners
Humanities/Fine Art (3 Cr. Hrs.)		
	ARCH 366	History and Theory of Architecture
	HSR 120	Introduction to Heritage and Culture
	HSR 130	Introduction to Language and Communication
	PHI101	Introduction to Philosophy
	HIS 130	Sheikh Zayed; History, Found.& Dev.
	CHIN 101	Chinese 1 for beginners
	FCH101	French 1 for beginners
	KOR 101	Korean 1 for beginners
	GER 101	German 1 for beginners
	SPN 101	Spanish 1 for beginners