

Generic Study Plan for BSc. in Computer Science & Software Eng.

Cohort fall 2018 and before - Total = 130 credit hours

Year 1 - First Semester				Year 1 - Second Semester			
Course #.	Course Title	Pre-req.	Cr.	Course #.	Course Title	Pre-req.	Cr.
ESPU1081	ESP1		3	MATH110	Calculus II	MATH105	3
MATH105	Calculus I	-	3	CENG202	Discrete Mathematics	MATH105	3
CSBP119	Algorithms and Prob. Solving	-	3	CENG205	Digital Design & Com Org.		3
PHYS105	General Physics I	-	3	CSBP219	Object-Oriented Prog.	CSBP119	3
ITBP103	Principles of IT		3	CSBP121	Programming Lab I	CSBP119(co)	1
				GEIL101	Information Literacy ¹ or		3
				GEIT112	Fourth Industrial Revolution		
Semester Credit Hours			15	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	CSBP315	OS Fundamentals	CENG205	3
BIOC100/ CHEM111	Basic Bio. I or Gen. Chemistry		3	CSBP319	Data Structures	CSBP219	3
CENG210	Comm. & Net. Fund	CEN205(co/pre) & PHYS105	3	SWEB300	Software Eng. Fundamentals	CSBP219	3
STAT210	Prob. & Stats	Math110	3	ITBP301	Sec. Principles and Practice	CENG210	3
HSS105	Emirates Society		3	CSBP221	Programming Lab II	CSBP121 ,CSBP219 (co)	1
Semester Credit Hours			15	Semester Credit Hours			13
Year 3 - First Semester				Year 3 - Second Semester			
Course #.	Course Title	Pre-Req.	Cr.	Course #.	Course Title	Pre-Req.	Cr.
CSBP316	Human Computer Interaction	CSBP219	3	CSBP461	Internet Computing	CSBP340	3
SWEB450	Analysis of Algorithms	CSBP319	3	CSBP400	Modeling and Simulation	STAT210	3
CSBP340	Database Systems	CSBP319	3	CSBP301	Artificial Intelligence	CSBP319	3
ITBP370	Prof. Res. In IT	ESPU1081	3	ITBP321	Web App. Development Lab	Co/Pre CSBP340	1
ISLM100	Islamic Culture		3	Elective	Cultural Elective 2		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
CSBP412	Intro. to Engineering & Design	GEIL101& ITBP103	3	CSBPxxx	Major Elective 4	-	3
ITBP480	Senior Graduation Project I ²	STAT210	3	CSBP492	CS project Lab	CSBP301	1
CSBPxxx	Major elective 1		3	ITBP481	Senior Graduation Project II	ITBP480	3
				Elective	Cultural Elective 3		3
Semester Credit Hours			15	Semester Credit Hours			16
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)							

¹Students before 2016 should register ESPU1082.

²Students must have finished 80 CrHr to register in ITBP480

Major electives Courses ³	Pre-req.	Major electives Courses ³	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	CSBP301 & TAT210	CSBP476 Robotics and Intelligent Systems	CSBP301
CSBP431 Bioinformatics	CSBP450	CSBP491 Computational Intel. Data Management	CSBP319

Cultural Elective Courses		
The Global Experience (3 Cr. Hrs.)		
	HIS 120	Arab Islamic Civilization
	HIS 125	Contemporary Civilizations
	AGRB 360	Global Agri-Food Trade
	BIOE 240	Principles of Environmental science
	PSG 250	Principles of International Relations
	GEO 200	World Regional Geography
	ARCH 346	Contemporary World Architecture
	HIS 121	World History: Origins to 1500
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	Introduction to Psychology
	SOC 260	Folklore
	SWK 200	Introduction to Social Welfare
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
	HIS 133	Introduction to Art History
	LIT 150	Introduction to Literature
	TRS 200	Introduction to Translation
	MSC 200	Introduction to Mass Media
	MSC 240	World & Arab Media
	LNG 100	Introduction to Linguistics
	LNG 110	Language, Society & Culture
	PHI101	Introduction to Philosophy
	PHI270	Philosophy of Education

Minor in AI		
Required Courses		
Course	Title	Prerequisite
CSBP301	Artificial Intelligence	CSBP319
Elective Courses (9 Hrs.)		
CSBP411	Machine Learning	CSBP301
CSBP476	Robotics and Intelligent Systems	CSBP301
CSBP441	Applied Computer Vision	CSBP301
CSBP491	Computational Intelligence for Data Management	CSBP319
CSBP499	Special Topics in Computer Science	CSBP319

