

BSCSE - Eight Semester Study Plan

First Year							
Fall Semester				Winter Semester			
Course Code	Course Title	Credits	Pre-requisite	Course Code	Course Title	Credits	Pre-requisite
ENL 101	English Composition	3-3-0	None	ENL 102	Communication Skills	3-3-0	None
MAT 111	Calculus I	3-3-0	None	MAT 112	Calculus II	3-3-0	MAT 111
PHY 111	Engineering Physics I	3-2-2	None	PHY 112	Engineering Physics II	3-2-2	PHY 111
GEN 101	Communication Skills in Arabic	3-3-0	None	MAT 113	Linear Algebra and Complex Variables	3-3-0	MAT 111
CHM 111	General Chemistry	3-3-0	None	ENG 131	Introduction to Programming	3-2-2	None
SAT 102	Fundamentals of Statistics	3-3-0	None	GEN 102	Fundamentals of Innovation and Entrepreneurship	3-3-0	None
Total Credits		18				18	
Second Year							
MAT 214	Differential Equations	3-3-0	MAT 112	ELE 220	Electric Circuits and Devices	3-2-2	PHY 112
CSC 215	Discrete Structures	3-3-0	None	CSC 252	Computer Organization	3-2-2	None
ENG 251	Digital Logic Design	3-2-2	None	CSE 361	Fundamentals of Data Analytics	3-2-2	SAT 102
CSE 233	Object Oriented Programming	3-2-2	ENG 131	SAH 102	Islamic Studies	3-3-0	None
ENL 103	Technical Writing	3-3-0	None	CSC 210	Data Structures and Algorithm Analysis	3-2-2	CSE 233 & CSC 215
ENG 323	Engineering Economics	2-2-0	None	MAT 216	Introduction to MATLAB	1-0-2	MAT 113
Total Credits		17				16	
Third Year							
ENG 343	Signals and Systems	3-3-0	MAT 214 & MAT 216	CSE 441	Software Engineering	3-3-0	CSE 233
ENG 354	Microprocessor Programming and Interfacing	3-2-2	ENG 251	CSE 396	Internship	3-0-6	≥ 80 Credits, CGPA ≥ 2.0
CSE 351	Computer Networks	3-2-2	CSC 210	SAH 101	UAE Society	3-3-0	None
CSE 334	Automata and Formal Languages	3-3-0	CSC 215	CSC 305	Computer Graphics	3-2-2	CSE 233
CSC 322	Database Systems	3-2-2	ENG 131	MAT 317	Probability Theory	3-3-0	SAT 102
				CSE 451	Computer Architecture	3-2-2	CSC 252
Total Credits		15				18	
Fourth Year							
CSE 497	Senior Year Project Design	3-3-0	≥ 100 Credits & ENL 103	CSE 471	Project Management	3-2-2	CSE 441
CSC 335	Principles of Operating Systems	3-2-2	CSC 252 & CSC 210	CSE 498	Graduation Project	3-0-6	CSE 497
ENG 425	Social and Ethical Issues in Engineering	2-2-0	ENG 323	CSE 463	Artificial Intelligence	3-2-2	ENG 131 & CSE 361
CSE xxx	Elective I	3	*	CSE xxx	Elective III	3	*
CSE xxx	Elective II	3	*	CSE xxx	Elective IV	3	*
Total Credits		14				15	

List of Elective Courses

Course Code	Course Title	Credit Hours	Pre-requisite
CEC 413	Data Warehousing and Mining	3-2-2	SAT 102 & CSC 322
CSC 410	Advance Databases Systems	3-2-2	CSC 322
CSE 336	Principles of Programming Languages	3-3-0	CSE 334 & CSE 233
CSE 443	Software Testing	3-2-2	CSE 441
CSE 445	Web Application Development	3-2-2	CSE 233
CSE 461	Computer Security	3-2-2	CSC 335
CSE 475	Internet of Things	3-2-2	CSE 351 & CSE 233
CSE 472	Special Topics in Computing	3-2-2	*
CSE 473	Digital Image Processing	3-2-2	ENG 343 & MAT 216
CSE 474	Fuzzy Logic and Neural Networks	3-2-2	ENG 343 & MAT 216

*Will be decided at the time of course offering