

BSCSE 8-SEMESTER PLAN

First Year (Freshman)							
Fall Semester				Winter Semester			
Course Code	Course Title	Credits	Pre requisite	Course Code	Course Title	Credits	Pre requisite
ENL 101	English Composition	3	None	ENL 102	Communication Skills	3	None
MAT 111	Calculus I	3	None	MAT 112	Calculus II	3	MAT 111
PHY 111	Engineering Physics I	3	None	MAT 113	Linear Algebra and Complex Variables	3	MAT 111
SAT 103	Computer Application and Technology	3	None	ENG 131	Introduction to Programming	3	NONE
CHM 111	General Chemistry	3	None	PHY 112	Engineering Physics II	3	PHY 111
SAT 105	General Science	3	None	SAT 102	Fundamentals of Statistics	3	None
Total Credits		18				18	
Second Year (Sophomore)							
MAT 214	Differential Equations	3	MAT 112	ENG 252	Electronics I	3	ENG 241
MAT 215	Discrete Mathematics	3	None	ENG 232	Engineering Graphics	2	SAT 103
ENG 241	Circuit Analysis I	3	PHY 112	MAT 216	Introduction to MATLAB	1	MAT 113
ENG 251	Digital Logic Design	3	SAT 103	ENL 104	Research and Learning Skills	3	None
CSE 233	Object Oriented Programming	3	ENG 131	SAH 102	Islamic Studies	3	None
ENL 103	Technical Writing	3	None	CSE 242	Data Structures and Algorithm Analysis	3	CSE 233
				MAT 317	Probability Theory	3	SAT 102
Total Credits		18				18	
Third Year (Junior)							
ENG 343	Signals and Systems	3	MAT 214	CSE 441	Software Engineering	3	CSE 233
ENG 354	Microprocessor Programming and Interfacing	3	ENG 251	CSE 396	Internship	3	>= 80 Credits, CGPA >= 2.0
CSE 351	Computer Networks	3	CSE 242	SAH 101	UAE Society	3	None
CSE 334	Automata and Formal Languages	3	MAT 215	CSE 352	Computer Organization	3	ENG 354
CSE 243	Database Systems	3	CSE 233	CSE 336	Principles of Programming Languages	3	CSE 334
ENG 323	Engineering Economics	2	None	SAH 103	Reasoning and Critical Thinking	3	None
Total Credits		17				18	
Fourth Year (Senior)							
CSE 497	Senior Year Project Design	3	>= 100 Credits	CSE 471	Software Project Management	3	CSE 441
CSE 335	Operating Systems	3	CSE 242 & ENG 354	CSE 498	Graduation Project	3	CSE 497
CSE 452	Digital System Design	3	ENG 354	CSE 451	Computer Architecture	3	CSE 352
ENG 425	Social and Ethical Issues in Engineering	2	ENG 323	CSE 4xx	Elective III	3	*
CSE 4xx	Elective I	3	*	CSE 4xx	Elective IV	3	*
CSE 4xx	Elective II	3	*				
Total Credits		17				15	

List of Electives for BSCSE Program

Course Code	Course Title	Credit Hours	Pre-requisite
CSE 443	Software Testing	3	CSE 441
CSE 444	Compiler Design and Implementation	3	CSE 334
CSE 445	Web Application Development	3	CSE 242
CSE 446	Data Mining and Warehousing	3	CSE 243
CSE 453	Embedded System Design	3	ENG 354
CSE 454	VLSI Design	3	CSE 452
CSE 455	Digital Signal Processing	3	ENG 343
CSE 456	Data Communication	3	ENG 343
CSE 461	Computer Security	3	CSE 335
CSE 462	Network Programming	3	CSE 242
CSE 463	Artificial Intelligence	3	CSE 233