

**Bachelor of Science in Computer Engineering  
Study Plan (Fall Start)**

**Total Credit Hours: 134**

**First Year (Freshman)**

Semester 1

Code	Title	Cr.	Prerequisite
ARL 100	Communication Skills in Arabic I	3	nil
ENG 100	English I	3	TOEFL 500
MTT 102	Calculus I	3	Calc. Pl. Test or MTT 101
STT 100	General Statistics	3	nil
PSY 201	General Psychology	3	nil
UNS 100	University Study Skills	3	nil

**Total Credit Hours 18**

Semester 2

Code	Title	Cr.	Prerequisite
CEN 200	Introduction to Electrical & Computer Eng.	3	MTT 101
ENG 105	English II	3	ENG 100 ('C' grade) + UNS 100
ISL 100	Islamic Culture	3	nil
PHY 102	Physics and Engineering Applications I	3	MTT 102
PHY 102 L	Physics and Engineering Applications I Lab	1	MTT 102+PHY 102 (Co)
MTT 200	Calculus II	3	MTT 102

**Total Credit Hours 16**

**Second Year (Sophomore)**

Semester 3

Code	Title	Cr.	Prerequisite
CSC 201	Structured Programming	3	MTT 101 or Higher
PHY 201	Physics and Engineering Applications II	3	PHY 102
PHY 201 L	Physics and Engineering Applications II Lab	1	PHY 102+PHY 201 (Co)
CSC 303	Digital Logic Design	3	CEN 200
STT 201	Intermediate Statistics and Research Methods	3	STT 100
MTT 201	Calculus III	3	MTT 200

**Total Credit Hours 16**

Semester 4

Code	Title	Cr.	Prerequisite
CSC 202	Object Oriented Programming	3	CSC 201
SOC 201	UAE and GCC Society	3	nil
CEN 201	Electric Circuits	3	CEN 200 or PHY201
MTT 202	Discrete Mathematics	3	STT 100
MTT 205	Differential Equations	3	MTT 200 + MTT 204(Co)
MTT 204	Introduction to Linear Algebra	3	MTT 200 + MTT 205(Co)

**Total Credit Hours 18**

**Third Year (Junior)**

Semester 5

Code	Title	Cr.	Prerequisite
CEN 320	Signals and Systems	3	MTT 205
CSC 301	Data Structures and Algorithms	3	CSC 202
CSC 305	Data Communications and Networks	3	Junior Level
CEN 305	Microprocessors & Firmware Programming	3	CSC 201
ENG 201	Business and Technical Communications	3	ENG 105
OE 1	Open Elective I	3	

**Total Credit Hours 18**

Semester 6

Code	Title	Cr.	Prerequisite
CSC 304	Microprocessor Architecture and Assembly Language	3	CSC 303
CSC 308	Operating Systems	3	CSC 301
CSC 311	Java Programming for the Internet	3	CSC 201
OE 2	Open Elective II	3	
ME 1	Major Elective I	3	

**Total Credit Hours 15**

Summer Semester

Code	Title	Cr.	Prerequisite
CEN 399	Internship	3	90 Credit Hours

**Forth Year (Senior)**

Semester 7

Code	Title	Cr.	Prerequisite
CEN 405	Embedded Networks	3	CEN 305+ CSC 305 (Co)
CEN 466	Advanced Digital System Design	3	CSC 303
CEN 304	Electronic Devices and Circuits	3	CEN 201
ME 2	Major Elective II	3	-
ME 3	Major Elective III	3	-

**Total Credit Hours 15**

Semester 8

Code	Title	Cr.	Prerequisite
CEN 415	Embedded Linux System Design	3	CEN 405+CSC 308 (Co)
CSC 408	Computer Networks and Distributed Systems	3	CSC 305
CEN 464	Digital Signal Processing	3	CEN 320
CEN 450	Design Project	3	Senior level
CIV 402	Engineering Ethics	3	Senior level

**Total Credit Hours 15**