

**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 200	English 2	3	EPT / ENG 102 + FWS 100 (co-req)
MTT 102	Calculus I	3	C grade in MTT 101 or MPT
STT 100	General Statistics	3	nil
FWS 100	Academic Skills for Success	3	nil

*Total Credit Hours*     **15**

Semester 2

Code	Title	Cr.	Prerequisite
CEN 200	Introduction to Electrical & Computer Eng.	3	MTT 101 or equivalent
ISL 100	Islamic Culture	3	nil
FWS 211	Fundamentals of Emotional Intelligence	3	ENG 102 + FWS 100 (co-req)
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-req)
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-req)
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
CEN 201	Electric Circuits	3	CEN 200 or PHY201
MTT 202	Discrete Mathematics	3	STT 100
MTT 204	Introduction to Linear Algebra	3	MTT 200
MTT 205	Differential Equations	3	MTT 200+MTT 204 (co-req)

*Total Credit Hours*     **15**

**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
FWS 305	Technical Communications for Work Place	3	ENG 200 + Comp. of 45 c. hr.
OE I	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
ME 1	Major Elective I	3	
FWS 310	Fund. of Innovation and Entrepreneurship	3	ENG 200 + Comp. of 60 c. hr.
FWS 205	UAE and GCC Society	3	ENG 102 + FWS 100 (co-req)

*Total Credit Hours*     **18**

Summer Semester

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

**Fourth Year (Senior)**

Semester 7

Code	Title	Cr.	Prerequisite
CEN 405	Embedded Networks	3	CEN 305, CSC 305 (co-req)
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	-
CEN 450A	Capstone Design Project I	1	Senior level

*Total Credit Hours*     **16**

Semester 8

Code	Title	Cr.	Prerequisite
CEN 415	Embedded Linux System Design	3	CEN 405, CSC 308 (co-req)
CSC 408	Computer Networks and Distributed Systems	3	CSC 305
CEN 464	Digital Signal Processing	3	CEN 320
CEN 450B	Capstone Design Project II	2	CEN 450A
CIV 402	Engineering Ethics	3	Senior level
OE2	Open Elective	3	

*Total Credit Hours*     **17**