

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

Total Credit Hours: 135

First Year (Freshman)

Semester 1

Code	Title	Cr.	Prerequisite
ARL 100	Communication Skills in Arabic I	3	Nil
ENG 200	English II	3	*EPSS / ENG100 (C grade) + (Co) UNS102
STT 100	General Statistics	3	Nil
UNS 102	University Study Skills	1	Nil
MTT 102	Calculus I	3	C grade in MTT 101 or MPT
ISL 100	Islamic Culture	3	Nil

Total Credit Hours 16

Semester 2

Code	Title	Cr.	Prerequisite
CRT 301	Critical Thinking	2	ENG 200 + UNS 102
PHY 102	Physics and Engineering Applications I	3	MTT 102
PHY 102L	Physics and Engineering Applications I Lab	1	MTT 102 + PHY 102 (co-req.)
MTT 200	Calculus II	3	MTT 102
SOC 201	UAE and GCC Society	3	ENG 100 + (Co) UNS 102
CEN 200	Introduction to Electrical and Comp. Eng.	3	MTT 101 or equivalent

Total Credit Hours 15

Second Year (Sophomore)

Semester 3

Code	Title	Cr.	Prerequisite
CSC 201	Structured Programming	3	MTT 101 or Higher
EEN 210	Digital Circuits	3	CEN200
MTT 201	Calculus III	3	MTT 200
CHE 205	General Chemistry I	3	ENG 200
CHE 201L	Chemistry Lab	1	ENG 200 + CHE 205 (co-req.)
PHY 201	Physics and Engineering Applications II	3	PHY 102
PHY 201L	Physics and Engineering Applications II Lab	1	PHY 102 + PHY 201 (co-req.)

Total Credit Hours 17

Semester 4

Code	Title	Cr.	Prerequisite
CEN 201	Electric Circuits	3	CEN 200 or PHY201
OE 1	Open Elective I	3	
GEN 200	Engineering Economy	3	ENG 200 + MTT 102
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
ENG 305	Technical Communications for Eng. & Science	3	ENG 200
EEN 220	Circuits II	3	CEN 201
CEN 304	Electronic Devices and Circuits	3	CEN 201
CEN 320	Signals and Systems	3	MTT 205
EEN 338	Electromagnetic Fields and Waves	3	MTT 201, MTT 205, PHY 201
CEN 305	Microprocessors and Firmware Programm.	3	CSC 201

Total Credit Hours 18

Semester 6

Code	Title	Cr.	Prerequisite
EEN 330	Random Signals and Noise	3	CEN 320
EEN 335	Introduction to Communication Systems	3	CEN 320
EEN 340	Energy Conversion	3	EEN 220, EEN 338
EEN 345	Power Systems	3	EEN 220
EEN 360	Electronics Circuits	3	CEN 304
INE 300	Fund. of Innovations & Entrepreneurship	3	ENG200 + Completion of 60 chrs

Total Credit Hours 18

Summer Semester

Code	Title	Cr.	Prerequisite
EEN 399i	Internship	3	90 Credit Hours

Fourth Year (Senior)

Semester 7

Code	Title	Cr.	Prerequisite
EEN 336	Communication systems	3	EEN 330, EEN 335
CSC 305	Data Communications and Networks	3	Junior Level
ME 1	Major Elective 1	3	
ME 2	Major Elective 2	3	
PSY 201	General Psychology	3	ENG 100 + (Co) UNS 102
EEN 450A	Electrical Engineering Design Project I	1	Senior Level

Total Credit Hours 16

Semester 8

Code	Title	Cr.	Prerequisite
EEN 450B	Electrical Engineering Design Project II	2	EEN 450A
CIV 402	Engineering Ethics	3	Senior Level
EEN 365	Control Systems	3	MTT 204, CEN 320
ME 3	Major Elective 3	3	
OE 2	Open Elective 2	3	
OE 3	Open Elective 3	3	

Total Credit Hours 17

***Note:** English Proficiency Specified Score: Score of 1250+ & B2 (CEFR) in Writing Component for EmSat or/ 5.5 overall average & 5.5 specific score in Writing Component for IELTS, equivalent in other English Proficiency Test