

Study Plan for the BEE Degree

(134 Credit Hours)

Year I

First Semester (16 Credit Hours)

Course	Title	Credits	Prerequisites
ENGL 101	Basic Academic English I	3	-
MATH 101	Calculus I	3	-
PHYS 101/101L	College Physics I + Lab	3+1	-
CSC 101	Introduction to Computing for Engineers	3	-
SOCS 101	Islamic Civilization I	3	-
Total Credits		16	

Second Semester (17 Credit Hours)

Course	Title	Credits	Prerequisites
ENGL 102	Basic Academic English II	3	ENGL 101
MATH 102	Calculus II	3	MATH 101
PHYS 102/102L	College Physics II + Lab	3+1	PHYS 101
CHEM 101/101L	College Chemistry + Lab	3+1	-
ARAB101	Basic Academic Arabic	3	-
Total Credits		17	

Summer Semester I (6 Credit Hours)

Course	Title	Credits	Prerequisites
ENGL 203	Advanced Academic English	3	ENGL 102
SOCS 201	Islamic Civilizations II	3	SOCS 101
Total Credits		6	

Year II

Third Semester (15 Credit Hours)

Course	Title	Credits	Prerequisites
MATH 201	Calculus and Analytic Geometry III	3	MATH 102
MECH 210	Thermodynamics	3	PHYS 102
ELEE 210	Electric Circuits I	3	PHYS 102
ELEE220/CEN220	Logic Design	3	CSC 101
ELEE230/CSC102	Programming for Engineers	3	CSC 101
Total Credits		15	

Fourth Semester (17 Credit Hours)

Course	Title	Credits	Prerequisites
MATH 202	Differential Equations	3	MATH 201
ELEE 240	Electronics	3	ELEE 210
ELEE 250	Electric Circuits II	3	ELEE 210
ELEE 250L	Electric Circuits Lab	1	ELEE 250 (CoReq.)
ELEE 290	Digital Systems	3	ELEE 220
ELEE 290 L	Digital Systems Lab	1	ELEE 290
STAT 230	Probability and Statistics	3	MATH 201
Total Credits		17	

Year III

Fifth Semester (16 Credit Hours)

Course	Title	Credits	Prerequisites
ELEE350/CEN240	Signals and Systems	3	MATH 202
ELEE 340L	Electronics Lab	1	ELEE 240
ELEE 360	Electric Machines	3	ELEE 250
COEN 300	Engineering Economy	3	STAT 230
MATH 215	Linear Algebra	3	MATH 201
ENGL 206	Technical Writing	3	ENGL 203
Total Credits		16	

Sixth Semester (16 Credit Hours)

Course	Title	Credits	Prerequisites
MATH 225	Differential Equations	3	MATH 215
ELEE 340	Electronic Circuits	3	ELEE 240
ELEE 380	Linear Control Systems	3	ELEE 350
ELEE 390	Electromagnetic Field Theory	3	PHYS 102 + MATH 215
ELEE 399L	MATLAB for Engineers	1	MATH 225 + ELEE 230
ARAB 201	Advanced Academic Arabic	3	ARAB 101
Total Credits		16	

Summer Semester II (1 Credit Hours)

Course	Title	Credits	Prerequisites
ELEE 400	Internship for BEE Students	1	ENGL 206
Total Credits		1	

Year IV

Seventh Semester (14 Credit Hours)

Course	Title	Credits	Prerequisites
ELEE 498	Final Year Project I	1	ENGL 206
ELEE 470	Communication Systems	3	ELEE 350 + STAT 230
ELEE 480L	Control Systems Lab	1	ELEE 380
COEN400/CSC 492	Engineering Ethics	3	ENGL 206
ELEE Elective	Machines and Power Systems	3	ELEE 360
ELEE Elective	General ELEE Elective	3	-
Total Credits		14	

Eighth Semester (16 Credit Hours)

Course	Title	Credits	Prerequisites
ELEE 499	Final Year Project II	3	ELEE 498
SOCS 202	World Civilizations	3	-
Free Elective		3	-
ELEE Elective	General ELEE Elective	3	-
ELEE Elective	Electromagnetism	3	ELEE 390
ELEE Elective Lab		1	-
Total Credits		16	

Total Program Credits

134*

*Completion of Bachelor degree in Electrical Engineering.