Bachelor of Science in Electrical Engineering

Required 125 credits (36 of which must be number 300 or above) including:

I. Essential Studies Requirements (see University ES listing).

II. Electrical Engineering required courses

Code	Title	Credits
EE 101	Introduction to Electrical Engineering	1
EE 201 & 201L	Introduction to Digital Electronics and Digital Electronics Laboratory	4
EE 206 & 206L	Circuit Analysis and Circuits Laboratory I	4
EE 304	Computer Aided Measurement and Controls	3
EE 313 & 313L	Linear Electric Circuits and Circuits Laboratory II	4
EE 314 & 314L	Signals and Systems and Signal and Systems Laboratory	4
EE 316	Electric and Magnetic Fields	3
EE 318	Engineering Data Analysis	3
EE 321 & 321L	Electronics I and Electronics Laboratory I	4
EE 401 & 401L	Electric Drives and Electric Drives Laboratory	4
EE 405 & 405L	Control Systems I and Control Systems Laboratory	4
EE 409	Distributed Networks	3
EE 421 & 421L	Electronics II and Electronics Lab II	4
EE 452 & 452L	Embedded Systems and Embedded Systems Design Laboratory	4
EE 480	Senior Design I	3
EE 481	Senior Design II	3
Total Credits		**55**

III. Program Required Electives

Code	Title	Credits
Electrical Engineering Electives [3]		**12**
Non Electrical Engineering Electives [2,3]		**6**
CSCI 242	Algorithms and Data Structures	
CSCI 260	Advanced Programming Languages	
ENGR 201	Statics	
ENGR 202	Dynamics	
ENGR 203	Mechanics of Materials	
MATH 208	Discrete Mathematics	
ME 301	Materials Science	
ME 306	Fluid Mechanics	
or CE 306	Fluid Mechanics	
ME 341	Thermodynamics	
Total Credits		**18**

IV. College of Engineering and Mines requirements

Code	Title	Credits
ENGR 340	Professional Integrity in Engineering	3
ENGR 460	Engineering Economy	3
Total Credits		**6**

IV. Requirements outside of the College of Engineering and Mines

Code	Title	Credits
CHEM 121 & 121L	General Chemistry I and General Chemistry I Laboratory	4
MATH 165	Calculus I	4
MATH 166	Calculus II	4
MATH 207	Introduction to Linear Algebra	2
MATH 265	Calculus III	4
MATH 266	Elementary Differential Equations	3
PHYS 251	University Physics I	4
or PHYS 251C & 251CL	University Physics I and University Physics I Lab	
PHYS 252	University Physics II	4
or PHYS 252C & 252CL	University Physics II and University Physics II Lab	
Total Credits		**29**

1 Grade of "C" or better in all EE courses is required for graduation.

2 Non EE Elective choices: Computer Science, Engineering (including EE), Math and Physics courses approved by advisor, normally 300 level or higher (Math 308 History of Math and Math 321 Applied statistical Methods do not meet the requirements of non EE electives).

3 Maximum of three credits of EE 490 Electrical Engineering Problems is allowed as an independent study, it can count towards one of the Electrical Engineering or non-Electrical Engineering elective requirements, it cannot be double counted. 2 credits of EE 397 Cooperative Education (40 hours/ week) is equivalent to 3 credits of the EE Electives with S/U grading, maximum 4 credits of EE 397 is equivalent to maximum of 6 credits of EE Elective.

4 Students must ensure all appropriate pre-requisites are met prior to registering for all courses in the curriculum.

Some of the following courses may be waived by completing: ENGR 102

Code	Title	Credits
EE 101	Introduction to Electrical Engineering	1
EE 201	Introduction to Digital Electronics	3
EE 201L	Digital Electronics Laboratory	1
EE 304	Computer Aided Measurement and Controls	3
EE 397	Cooperative Education	1-2