

# Bachelor of Science in Electrical Engineering with Aerospace Focus

Required 126 credits (36 of which must be numbered 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	3
EE 111	Digital Circuits	3
EE 111L	Digital Circuits Laboratory	1
EE 211	Embedded Systems	3
EE 221	Electric Circuits I	3
EE 221L	Electric Circuits I Laboratory	1
EE 222	Electric Circuits II	3
EE 222L	Electric Circuits II Laboratory	1
EE 292	Sophomore Design	3
EE 301	Electric Drives	3
EE 321	Electronics I	3
EE 321L	Electronics Laboratory I	1
EE 322	Electronics II	3
EE 330	Electric and Magnetic Fields	3
EE 331	Electromagnetic Waves	3
EE 350	Fundamentals of Controls	3
EE 360	Signals and Systems	3
EE 385	Engineering Data Analysis	3
EE 392	Junior Design	3
EE 492	Senior Design I	3
EE 493	Senior Design II	3
<b>Total Credits</b>		<b>55</b>

III. Program Required Electives

Code	Title	Credits
Technical Electives <sup>2,3</sup>		9
<b>Total Credits</b>		<b>9</b>

IV. College of Engineering and Mines Requirements

Code	Title	Credits
CSCI 160	Computer Science I	4
ENGR 340	Professional Integrity in Engineering	3
ENGR 460	Engineering Economy	3
<b>Total Credits</b>		<b>10</b>

V. Requirements outside of the College of Engineering and Mines

Code	Title	Credits
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	4
PHYS 252	University Physics II	4

or PHYS 252C & 252CL	University Physics II and University Physics II Lab	
<b>Total Credits</b>		<b>25</b>

VI. Aerospace Focus Requirements

Code	Title	Credits
AVIT 126	Introduction to UAS Operations	2
AVIT 238	UAS Operator Certification	3
<b>Total Credits</b>		<b>5</b>

- <sup>1</sup> Grade "C" or better in all EE courses required for graduation.
- <sup>2</sup> Maximum of three credits of EE 490 Electrical Engineering Problems/Electrical Engineering Problems is allowed as an independent study, it can count towards one of the technical elective requirements, it cannot be double counted. 2 credits of EECS 397 Cooperative Education/Cooperative Education/Cooperative Education (40 hours/week) is equivalent to 3 credits of the EE Electives with S/U grading, maximum 4 credits of EECS 397 is equivalent to maximum of 6 credits of EE Elective.
- <sup>3</sup> At least 6 credit hours of Technical Electives must be selected from among courses administered by SEECs at the 300 level or above. Remaining Technical Electives may be selected from courses in CEM, Mathematics, or Physics at the 300 level or above as approved by the student's advisor. Math 308 History of Math does not meet Technical Elective requirement.
- <sup>4</sup> Students must ensure all appropriate pre-requisites are met prior to registering for all courses in the curriculum.