

# ENGINEERING ASSOCIATE IN SCIENCE DEGREE

---

PROGRAM CODE: 2S03834

The **Engineering Associate in Science Degree** is designed to prepare students for transfer to a university for a Bachelor of Science in Engineering degree. Students with a bachelor's degree in engineering may pursue careers in a variety of industries depending on their specialization in the engineering field. In order to be well prepared for the upper division engineering curriculum at a university after transfer, students should complete as many courses as possible from both the core engineering course list and the restricted electives list. This degree requires a total of 24-28 units.

Code	Title	Units
<b>Required Courses (24-28 units):</b>		<b>24-28</b>

**Choose at least 6 units from Category A (Engineering courses) and then complete additional units in Category A and/or B (Supporting Courses):**

**Category A - Engineering Courses (6 units):**

ENGR 101AF	Surveying I	4
ENGR 105 F	Engineering CAD	4
ENGR 110 F	Introduction to Engineering	3
ENGR 201 F	Statics	3
ENGR 203 F	Electric Circuits	4
ENGR 203LF	Electric Circuits Lab	1
ENGR 220 F	Programming and Problem-Solving in MATLAB	3

**Category B - Supporting Courses (18 units):**

CHEM 111AF	General Chemistry I	5
MATH 151 F	Calculus I (formerly MATH 150AF) or MATH 151HF Honors Calculus I (formerly MATH 150HF)	4
MATH 152 F	Calculus II (formerly MATH 150BF) or MATH 152HF Honors Calculus II	4
MATH 251 F	Multivariable Calculus (formerly MATH 250AF)	4
MATH 252 F	Linear Algebra and Differential Equations (formerly MATH 250BF)	4
MATH 255 F	Linear Algebra	3
MATH 260 F	Ordinary Differential Equations	3
PHYS 221 F	General Physics I	4
PHYS 222 F	General Physics II	4
PHYS 223 F	General Physics III	4

<b>Total Units</b>	<b>24-28</b>
--------------------	--------------

**Outcome 1:** Identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

**Outcome 2:** Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.