

ENGINEERING - ASSOCIATE OF SCIENCE

Students must complete all College degree requirements, which include: General Education requirements and elective credits to total at least 61-65 credits. Developmental coursework will not count towards the degree requirements and/or elective credits, but may be needed in order to take the necessary English and Mathematics coursework.

All courses must be completed with a C or higher.

Prefix	Title	Credits
General Education		
<i>Area I: Communication</i>		
<i>English Composition - Level 1</i>		
ENGL 1110G	Composition I	4
<i>English Composition - Level 2</i>		
Choose one from the following:		
ENGL 2210G	Professional & Technical Communication	3
ENGL 2221G	Writing in the Humanities and Social Science	
<i>Oral Communication</i>		
COMM 1130G	Public Speaking	3
or COMM 1115G	Introduction to Communication	
<i>Area II: Mathematics</i>		
MATH 1511G	Calculus and Analytic Geometry I ¹	4
<i>Area III/IV: Laboratory Sciences and Social/Behavioral Sciences</i>		
11		
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	
PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab	
Area IV: Social/Behavioral Sciences Course (3 credits) ²		
<i>Area V: Humanities</i> ²		
3		
<i>Area VI: Creative and Fine Arts</i> ²		
3		
<i>General Education Elective</i> ²		
3-4		
Core Requirements		
ENGR 100G	Introduction to Engineering	3
ENGR 111	Mathematics for Engineering Applications	3
ENGR 120		4
ENGR 140		4
ENGR 230		4
Major Requirements		
<i>Engineering Degree Electives (9-12 credits)</i>		
9-12		
Select any three from the following:		
MATH 1521G	Calculus and Analytic Geometry II	
PHYS 1320G & PHYS 1320L	Calculus -Based Physics II and Calculus -Based Physics II Lab	
C E 151	Introduction to Civil Engineering	
C E 233	Mechanics-Statics	
I E 151	Computational Methods in Industrial Engineering	
I E 217	Manufacturing Processes	
M E 159	Graphical Communication and Design	
M E 210	Electronics and System Engineering	
E E 212	Introduction to Computer Organization	
Total Credits		61-65

1

MATH 1511G Calculus and Analytic Geometry I is required for the degree but students may need to take any prerequisites needed to enter MATH 1511G first.

2

See the General Education section of the catalog for a full list of courses.

3

If Either MATH 1521G or PHYS 1320G/PHYS 1320L are selected as an elective, the course will also count for the General Education Elective requirement.

A Suggested Plan of Study

Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.

First Year

Fall		Credits
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
ENGL 1110G	Composition I	4
ENGR 100G	Introduction to Engineering	3
ENGR 130		4
Credits		15

Spring

MATH 1511G	Calculus and Analytic Geometry I ¹	4
ENGR 111	Mathematics for Engineering Applications	3
ENGR 230		4
Area IV: Social/Behavioral Sciences Course ²		3
Credits		14

Second Year

Fall

ENGR 140		4
PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab	4
Choose one from the following:		
ENGL 2210G or ENGL 2221G	Professional & Technical Communication or Writing in the Humanities and Social Science	3
ENGR Elective ³		3-4
Area VI: Creative and Fine Arts ²		3
Credits		17-18

Spring

COMM 1115G or COMM 1130G	Introduction to Communication or Public Speaking	3
ENGR Elective ³		3-4
ENGR Elective ³		3-4
Area V: Humanities ^{2,4}		3
General Education Elective ^{2,4}		3-4
Credits		15-18
Total Credits		61-65

2 Engineering - Associate of Science

1

MATH 1511G Calculus and Analytic Geometry I is required for the degree but students may need to take any prerequisites needed to enter MATH 1511G first.

2

See the General Education section of the catalog for a full list of courses.

3

Engineering Electives:

- MATH 1521G Calculus and Analytic Geometry II
- PHYS 1320G Calculus -Based Physics II/PHYS 1320L Calculus -Based Physics II Lab
- C E 151 Introduction to Civil Engineering
- C E 233 Mechanics-Statics
- I E 151 Computational Methods in Industrial Engineering
- I E 217 Manufacturing Processes
- M E 159 Graphical Communication and Design
- M E 210 Electronics and System Engineering
- E E 212 Introduction to Computer Organization

4

If either MATH 1521G Calculus and Analytic Geometry II or PHYS 1320G Calculus -Based Physics II/PHYS 1320L Calculus -Based Physics II Lab are selected as an elective, the course will also count for the General Education Elective requirement.