

# ENGINEERING - ASSOCIATE IN SCIENCE

<sup>2</sup> Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

Plan Code: 2520

This program provides a student with an introductory education to a range of concepts in various fields of engineering. A student will gain knowledge pertaining to Electrical, Mechanical, Civil, and Computer Engineering studies. This program may also facilitate transfer for a four-year engineering degree.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- To serve students for the fulfillment of their own personal goals.
- To serve students to meet career/transfer requirements.

## Program Requirements

This degree requires the completion of General Education coursework plus the following:

Code Number	Course Title	Units
<b>REQUIRED COURSES</b>		
CHEM 1A	General Chemistry	5.5
ENGL 1	Reading and Composition	4-5
or ENGL 1H	Honors Reading and Composition	
or ENGL 1S	Reading and Composition with Support	
or ESL 1S	College Writing for Non-Native Speakers	
ENGR 3B	Advanced Engr Graphics & 3D CAD Drafting	3
ENGR 17	Electrical Engineering Circuits	3
ENGR 17L	Electrical Engineering Circuits Lab	1
ENGR 44	Materials Science and Engineering	3
ENGR 35	Statics	3
ENGR 50	Introduction to Engineering	1
ENGR 54	Computer Methods	3.5
MATH 80	Third Calculus Course	5
PHYS 3A	Physics for Sci. & Eng. - Mechanics	5.5
PHYS 3B	Physics for Sci. & Eng. - E & M	4.5
<b>Required Subtotal</b>		<b>42-43</b>
Complete one of the following: <sup>1</sup>		19-39
LBCC General Education (Plan A) ( <a href="https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-a/">https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-a/</a> )		
CSU GE Breadth (Plan B) ( <a href="https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-b/">https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-b/</a> )		
IGETC Pattern (Plan C) ( <a href="https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-c/">https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-c/</a> )		
Electives (as needed to reach 60 degree-applicable units) <sup>2</sup>		
<b>Minimum Degree Total</b>		<b>60</b>

<sup>1</sup> Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.