

COMPUTER AIDED DESIGN - MECHANICAL - ASSOCIATE IN SCIENCE

Plan Code: 2913

In this program, students learn entry-level job skills in mechanical drafting and design. The program will prepare students for a mechanical design-related career, and appropriate course selection will facilitate transfer to a professional degree program at a four-year university.

Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Construct engineering detail and working drawings incorporating tolerances and fits for manufacturing.

Program Requirements

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

Code Number	Course Title	Units
REQUIRED COURSES		
ETEC 10	Introduction to Engineering Technology	2
CAD 1	Intro Computer Aided Design SolidWorks	3
CAD 2	Intro to Computer Aided Design AutoCAD	3
CAD 3	Intro to Computer Aided Design CATIA	3
CAD 4	Geometric Dimensioning and Tolerancing	3
CAD 5	Intro to CAD/CAM MasterCAM	3
CAD 6	Computer Aided Design Advanced	3
Required Subtotal		20
Complete one of the following: ¹		19-39
LBCC General Education (Plan A) (https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-a/)		
CSU GE Breadth (Plan B) (https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-b/)		
IGETC Pattern (Plan C) (https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-c/)		
Electives (as needed to reach 60 degree-applicable units) ²		
Minimum Degree Total		60

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

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

COMPUTER AIDED DESIGN - MECHANICAL - CERTIFICATE OF ACHIEVEMENT

Plan Code: 3907

This program will prepare students for an entry-level position as a Computer Aided Design (CAD) technician and or mechanical drafter/ technician trainee in a variety of professional design settings and will serve as a foundation for specialization.

Program Student Learning Outcomes

- Construct engineering detail and working drawings incorporating tolerances and fits for manufacturing.

Program Requirements

Code Number	Course Title	Units
REQUIRED COURSES		
ETEC 10	Introduction to Engineering Technology	2
CAD 1	Intro Computer Aided Design SolidWorks	3
CAD 2	Intro to Computer Aided Design AutoCAD	3
CAD 3	Intro to Computer Aided Design CATIA	3
CAD 4	Geometric Dimensioning and Tolerancing	3
CAD 5	Intro to CAD/CAM MasterCAM	3
CAD 6	Computer Aided Design Advanced	3
Total Units		20