

ADVANCED MANUFACTURING TECHNOLOGY - ASSOCIATE IN SCIENCE

Plan Code: 2921

This program prepares students for transfer to a California State University, and prepares students for careers in aerospace, medical device, automotive aftermarket, and many other advanced manufacturing sectors where machine tool technologies are utilized. Students will learn a variety of valuable skills including print reading, shop math, and CNC machine tool programming. Students will learn inspection techniques using calipers, micrometers, indicators, thread-gaging, and automated measurement equipment, such as digital height-gages, and indicators. Students will create machine programs using the latest software technologies on the latest CNC machine tool equipment and simulators. The program will provide students with the technical skills need to find employment or advancement in the field of advanced manufacturing/ machine tool technology. Students will find jobs or apprenticeships as machine operator, CNC operator, machinist, CNC programmer, or inspector.

Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate the ability to create and interpret mechanical engineering drawings and specifications.

Program Requirements

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

Code Number	Course Title	Units
REQUIRED COURSES		
ADMT 50	Advanced Manufacturing, Introduction	3
ADMT 200	Advanced Manufacturing Math	3
ADMT 251	Advanced Manufacturing, CNC Mills/Lathes	2
ADMT 252	Advanced Manufacturing, Sheet Metal CNC	2
ADMT 253	Advanced Manufacturing, Capstone	2
CAD 1	Intro Computer Aided Design SolidWorks	3
CAD 4	Geometric Dimensioning and Tolerancing	3
CAD 5	Intro to CAD/CAM MasterCAM	3
CAD 6	Computer Aided Design Advanced	3
ETEC 10	Introduction to Engineering Technology	2
ETEC 60	Material Science for Engineering Tech	3
OSHA 254	OSHA Standards for General Industry	2
WELD 50	Introduction to Welding	4
Required Subtotal		35
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.