



Career Education at Folsom Lake College



FOLSOM LAKE COLLEGE  
EL DORADO CENTER | RANCHO CORDOVA CENTER

# INTRO TO MANUFACTURING AND INDUSTRIAL TECHNOLOGY

## Class Starts Fall 2021!

### MITECH 300 Introduction to Manufacturing and Industrial Technology 3 Units

Prerequisite: None

Course Transferable to CSU

Hours: 36 LEC/ 54 LAB

This introductory course covers a survey of major industrial processes and how the processes are applied in modern advanced manufacturing through a variety of technologies such as CAD/CAM/CNC and Rapid Prototyping. This course is an introduction to the process that takes a product from design to product realization by applying the five categories of manufacturing processes; Additive, Subtractive, Forming, Joining, and Surface Finishing. The course also covers manufacturing support processes required to complete a finished manufactured product. Lab activities include safely applying the advanced manufacturing processes to fabricate and assemble a finished unit to design specifications. This course is intended for individuals interested in learning about career pathways related to manufacturing and product development.

Class #19427 | Instructor: Todd Frazee

Schedule: Full Term, August 21 to December 16

Instruction Mode: In Person at Oak Ridge High School, Room F3

Lecture: Mondays, 6:00 to 7:50 pm

Lab: Wednesdays, 6:00 to 9:05 pm

### Is this Introduction to Manufacturing and Industrial Technology Course for me?

It is if you're interested in:

- The range of manufacturing processes that apply modern Manufacturing and Industrial Technology techniques
- New product development and engineering
- Building your own personalized product at the end of the course
- Exploring options with industry guest speakers

### How does this course make me more marketable?

This course provides valuable skillsets:

- Comprehensive understanding of current
- Manufacturing and Industrial Technology industry processes
- Understanding of product development from ideation to fabrication
- Upgraded skills in designing, engineering, planning, making, and more

For more information on how to apply and register, go to [www.flc.losrios.edu](http://www.flc.losrios.edu)



## Class Starts Fall 2021!

### MITECH 320 Introduction to CAD/CAM Programming 3 Units

Prerequisite: None

Course Transferable to CSU

Hours: 36 LEC/ 54 LAB

This course is an introductory course to Computer Aided Design and Computer Aided Manufacturing (CAD/CAM) advanced manufacturing software. The course covers the fundamentals of developing CAD models of parts, fixture assemblies, and applying CAM strategies and techniques to program code for 2-3 Axis Computer Numerical Controlled (CNC) manufacturing equipment. This course introduces the process that takes a product from CAD concept to generate CAM toolpath and compile the toolpath into CNC code that can be applied to drive simple CNC controlled processes. Processes supported by this class include laser cutting, plasma cutting, water jet cutting, routing, milling, and turning. This course is intended for individuals pursuing career pathways related to advanced manufacturing and product development.

Class #19429 | Instructor: Todd Frazee

Schedule: Full Term, August 21 to December 16

Instruction Mode: In Person at FLC Main Campus, FL5-09

Lecture: Tuesdays & Thursdays, 5:00 to 5:50 pm

Lab: Tuesdays & Thursdays, 6:00 to 7:20 pm

### Is this Introduction to CAD/CAM Programming Course for me?

It is if you're interested in:

- Expressing your design ideas using cutting edge 3D CAD software
- Developing design ideas into physical form using CAM technology to drive modern CNC machines
- New product development and engineering

### How does this course make me more marketable?

This course provides valuable skillsets:

- Comprehensive understanding of the application of CAD/CAM/CNC technology from initial concept to finished product
- CAM skills required to program 2 & 3 axis CNC machines such as laser cutters, plasma cutters, waterjet cutters, routers, mills, and lathes
- CAD skills to design and model work holding fixture and tool assemblies for CNC machines.
- Upgrade skills in designing, engineering, planning and manufacturing

For more information on how to apply and register, go to [www.flc.losrios.edu](http://www.flc.losrios.edu)