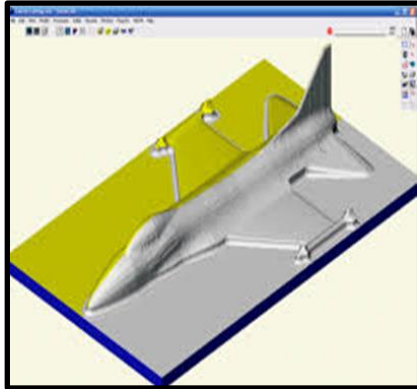


# Computer Integrated Manufacturing



Prerequisite: Intro to Engineering Design OR Principles of Applied Engineering

Course: 1838CT

Credits: 1

Length: 18 weeks

Placement: 10-12

## Course Description

In Computer Integrated Manufacturing the student will examine and utilize modern manufacturing practices and computer techniques used to design and build various projects from clients around the district. Students will learn about and incorporate their knowledge of robotics to laser cutting and engraving, and 3D printing to complete these projects. Visit Achieve Texas for more information on career opportunities at:

<http://www.achievetexas.org/Sciences.htm>

## Student Activities

Student projects include:

1. Laser cutting and engraving key chains, signs, puzzles, toys, awards, and other items.
2. 3D Printing of miniatures, gears, toys, chess pieces, tools, etc.
3. Wood, plastics, and metal crafting
4. Robotics and Automation, CNC Milling and Lathe, and 3D modeling.

## Additional Considerations

Students must have successfully completed Geometry without modification. Students need fine motor skills and mobility. Cannot modify curriculum.

## Organizations/After School/Competitions

Shine Runners Solar Car Racing Team  
 FTC Robotics  
 Technology Student Association