

# Industrial Technology Course Pathways

## Key

|       |                         |
|-------|-------------------------|
| ★     | Honors 5.0 Scale        |
| DC    | Dual Credit             |
| CERTS | Industry Certifications |
| AP    | Advanced Placement      |
| *     | Pending                 |

## Computer Science

Intro to Computer Science  
AP

Computer Science I - Comp Sci II  
AP

Computer Science II - Comp Sci II  
AP

Computer Science III - Comp Sci III  
AP

## Robotics

Robotics Design and Innovation- RDI

Robotics I

Robotics II  
DC

EDDR  
★

## Construction

Intro to Construction

Building Trades I - BTI  
Grades 11/12

Building Trades II - BTII  
Grade 12

## Engineering

Intro to Engineering Design - IED  
★ DC

Principles of Engineering - POE  
★ DC

Civil Engineering - CEA  
★ DC

Aerospace Engineering - AE  
★

EDD Non-PLTW  
★

EDD PLTW  
★

## Manufacturing

Intro to Manufacturing - I+M

Advanced Manufacturing I - ADMFI  
DC CERTS ★

Advanced Manufacturing II - ADMFII  
DC CERTS ★

Computer-integrated Manufacturing- ADMF116  
DC CERTS\* ★

## Drafting

Intro to Comms

IED Non-PLTW - CDP

CAD I - DRAF140  
DC

CAD II - DRAF150  
DC

CAD II - DRAF150  
DC

## Computer Science - (College & Career)

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**Intro to Computer Science** - This is the first year computer science class, in this class you will learn the basics of programming.

**Computer Science I - Comp Sci II** - In this course students will learn how to code using Python.

**Computer Science II - Comp Sci II** - In this course students will learn about computer applications.

**Computer Science III - Comp Sci III** - In this course students will be learning cyber security.

## Construction - (Career)

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**Intro to Construction** - This class offers hands-on activities related to the skills essential in residential, commercial and civil building construction.

**Building Trades I - BTI** - In this class you will be able to use the skills developed in intro to construction to build a house.

**Building Trades II - BTII** - This is the senior building trades class, In this class you will be using the skills you have developed to build a house.

## Manufacturing - (College & Career)

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**Intro to Manufacturing** - In this course, students will be doing hands on activities to learn about manufacturing processes.

**Advanced Manufacturing I** - In this course students will advance their knowledge of manufacturing processes and manufacturing safety standards.

**Advanced Manufacturing II** - In this course students will learn about machine maintenance and production.

**Computer-integrated Manufacturing** - This class introduces students to the manufacturing approach of using computers to control production processes.

## Robotics - (College & Career)

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**Robotics Design and Innovation** - This course introduces students to the basics of robot and they will build a robot to compete in a robotics competition called The First Tech Challenge.

**Robotics I** - This course allows students to continue competing in the FTC competition while also getting introduced to the next level of robotics.

**Robotics II** - In this course students will compete in the highest level of FIRST Robotics, where they will learn about the design process, manufacturing process, code development, and team building skills.

**EDD R** - Students will continue to compete in the FRC competition while mentoring lower level robotics students.

## Engineering - (College)

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**Intro to Engineering Design** - This course introduces students to the design process, research and analysis, teamwork, communication methods, engineering standards, and technical documentation involved in engineering.

**Principles of Engineering** - This course is a survey course of engineering.

**Civil Engineering** - In this class students will learn the major concepts involved in the Civil Engineering field.

**Aerospace Engineering** - In this class students will learn the major concepts involved in the Aerospace Engineering field.

**EDD PLTW** - This class allows students to chose a year long project to work on that will leave a lasting impact on the society around them.

**EDD Non-PLTW** - In this class students will build a car to compete in the Supermileage Competition.

## Drafting - (Career)

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**Intro to Comms** - In this course you will learn the basics computer communications.

**Computers in Design Production** - This course specializes in using modern technological processes and computers systems in the production of products and structures through the use of automated production systems.

**CAD I** - This course introduces students to computer drafting.

**CAD II** - This course allows students to go more in depth with computer drafting.