# Engineering Graphics

**FTC** FRANKLIN TECHNOLOGY CENTER
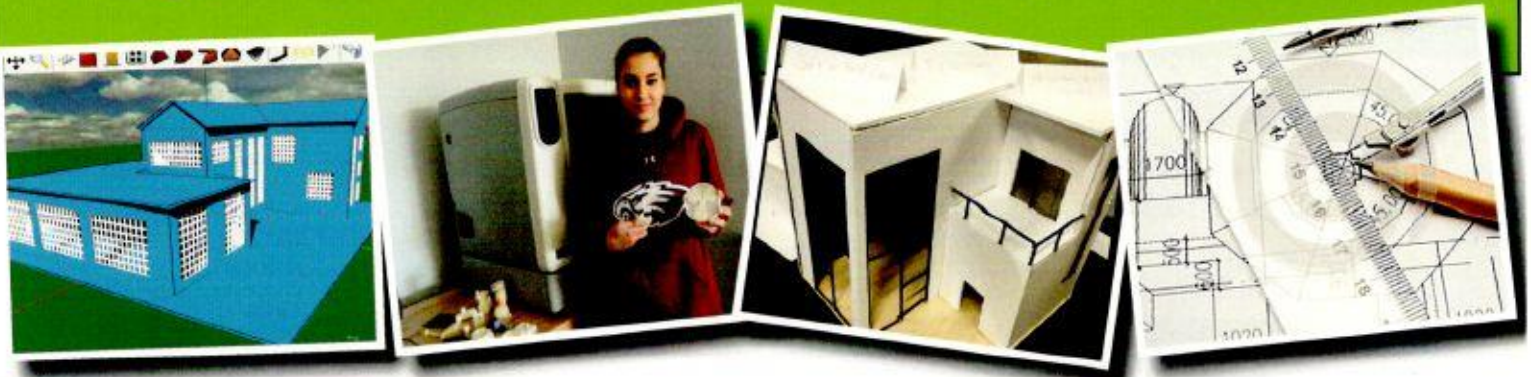
In the **ENGINEERING GRAPHICS** program at **Franklin Tech**, students are introduced to the manufacturing design language of our industrial world. **ENGINEERING GRAPHICS** provides students with an opportunity to develop skills in making and using technical drawings. Students begin with the basics of equipment and material usage, then proceed through fundamental drawing techniques and procedures. Drawings will focus on CAD (computer aided drafting) using AutoCad software.

## What will I learn?

Students will learn the latest in the engineering design process. Students will often work in teams, and the program is primarily project based. The Engineering Graphics program covers the latest topics including:

- Mechanical design
- Orthographic, pictorial projections
- Auxiliary and sectional views
- Working and assembly drawings
- Dimensioning and tolerancing
- Design/engineering process
- CAD-AUTOCAD
- Architectural design
- Civil drawings
- Structural drawings
- Employability skills and leadership

## Employment Opportunities:

There are many employment opportunities for people specializing in engineering graphics. Some of these may include: engineering firms, architectural firms, manufacturing facilities, public and government contractors, real estate design, and utility companies. Students in this program are strongly encouraged to seek a college degree.

## Certfications:

Students completing the **Engineering Graphics** program may earn an industry certification from the American Design and Drafting Association.

*"My program is different that anything else I have been in. My instructor finds ways to make the class entertaining and different each day, while also teaching me what I need to know to become the best I can be."*

Cheyenne Kellhofer

**ADDA** INTERNATIONAL

American Design & Drafting Association

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## Student Benefits

### FREE Training

High School students completing a program at FTC receive FREE tuition and training materials. Students also take their program certification test at no cost to them.

### Embedded Credit

Students completing a program at FTC have the opportunity to earn academic credits along with their program training. Students in Joplin High School, Sarcoxie High School, and Webb City High school participate in the embedded credit option. In **Engineering Graphics** you can earn a full credit for Technical Math and Applied Communications upon completion of the two year program and successful completion of assignments for the embedded credit courses. Students earn a grade in the courses and they are transcripted.

### Membership in a Student Organization

Going a step further in rounding out their education, FTC students are encouraged to join a national student organization, SkillsUSA. The members of this organization practice teamwork, leadership and problem-solving. Members also have an opportunity to hold office and participate in local, district, state, and national contests.

### Internships

In their last semester of the program, successful students have the option to participate in an on-the-job training experience. Students may seek a construction internship with a local employer. An agreement is signed by FTC, the employer, the student, and the parents. Students work up to four days a week and attend tech the assigned time. This is a great way for students to gain actual experience, and in many cases the internship is a paid internship. The internship can possibly lead to a full-time job or job references for future positions.

### How to Enroll?

FTC is open to Juniors and Seniors from Joplin High School, Carl Junction Highs School, Webb City High School, Sarcoxie High School, College Heights Christian School, McAuley High School, and home school students. Enrollment for full-time classes begins in January for the following fall term. To enroll, high school students simply complete an application and return it to their school counselor. Students can also apply online or in person at Franklin Tech.

### Contact Us

Franklin Technology Center
2220 Indiana Ave
Joplin, MO 64804
417-625-5260

Visit us on the web at:
**franklintechjoplin.com**

Or Check us out on Facebook
**facebook.com/franklintechhighschool**