



DESIGN YOUR FUTURE  
BASED ON A GREAT CAREER

# Engineering Drafting & Design

[DESIGN + TECHNOLOGY]



In a technical drafting career, you create plans to bring projects to life. Technical drafters utilize computer-aided design or CAD to become an indispensable part of any design team. Preparing drawings and reproductions are all part of a day's work. At Washburn Tech, you will use the latest tools and equipment to turn your career plan into reality.

### LEARNING AT WASHBURN TECH

Our program provides hands-on experience in the proper use of drafting tools, software and equipment. You will learn to prepare drawings and reproductions, and develop skills, knowledge and techniques for use in a variety of areas in the drafting field. Our program focuses on the fundamentals of CAD, emphasizing the use of computer hardware and software in processing and retrieving drawings and data files. Emphasis is placed on 3D modeling. Other areas of study include applied algebra, geometry and trigonometry, as well as scientific and physical principles of construction and manufacturing materials and techniques. Attending full-day, you can complete the program in two semesters, while half-day and high school students can finish in four semesters. Upon completion, you will earn a 48-credit-hour technical certificate and be eligible to complete an associate degree or more advanced degrees at Washburn.

### JOB AND SALARY OUTLOOK

Opportunities are best for those who have completed post-secondary training. Kansas Department of Labor reports the average entry-level salary for a civil drafter in 2022 was \$18.70 an hour or \$38,900 annually. The average wage was \$25.32 an hour or \$52,660 annually.

### ENTRY REQUIREMENTS

Students are required to take the Accuplacer exam and score a minimum of 4 in reading and 5 in math. Other assessments or college coursework can be accepted in place of Accuplacer. See an admissions counselor for details. You also must complete an application and submit a copy of official transcripts.



## Build your best self.

TALK TO AN ADMISSIONS COUNSELOR TODAY!

785.670.2200

### CAREERS IN DRAFTING »

- + CAD drafters
- + CAD designers
- + auto design
- + architectural
- + building drafters
- + blueprint tracers
- + aeronautical drafters
- + circuit board drafters

# Engineering Drafting & Design

## COURSE DESCRIPTIONS

### INTRODUCTION TO DRAFTING

Introduces the application of fundamental drawing types including geometric construction, orthographic views, sections, auxiliary views and development

### TECHNICAL MATH

Math review of practical skill as related to the workplace

### COMPUTER AIDED DRAFTING I

Introduces AutoCAD software as a drafting tool

### COMPUTER AIDED DRAFTING II

Covers intermediate AutoCAD commands including attribute blocks, external references, object linking/embedding, advanced drawing set-up and user coordinate systems

### MACHINE DESIGN

Introduces fundamentals, theory, terminology and practical construction methods in machine disciplines

### COMPUTER AIDED DRAFTING III

Introduces students to 3D mechanical and industrial design software - solid edge

### INDUSTRIAL DESIGN

Uses the acquired knowledge from the Machine Design and CAD III courses to produce industrial design projects

### ARCHITECTURAL DESIGN I & II

Learn tools and techniques used to create a 3-story commercial building with Revit

### CIVIL DESIGN I & II

Introduces civil drafting applications using civil, mapping and survey products: second course introduces software used in the industry

### STRUCTURAL DESIGN

Covers fundamental aspects of structural design

### WORKPLACE SKILLS

Utilize Key Train software to advance knowledge in Applied Math, Reading for Information and Locating Information WorkKeys assessments

### MANUFACTURING DESIGN & 3D PRINTING

Focusing on manufacturing materials and CAD/CAM software, students will create projects using industry methods and standards

### PRESENTATIONS & SPECIAL PROJECTS

Create advanced presentations, videos and simulations



## APPLICATION CHECKLIST



**MEET WITH  
ADMISSIONS**



**TAKE  
ACCUPLACER\***



**SUBMIT  
TRANSCRIPT(S)**



**PAY  
ENROLLMENT  
FEE  
(ADULT ONLY)**

### 2023-2024 PROGRAM COSTS (Estimated)

	HIGH SCHOOL	ADULT
Enrollment fee	\$0	\$50
Tuition	*\$1,368	\$7,296
All other fees	\$243	\$1,361
<b>TOTAL</b>	<b>\$1,611</b>	<b>\$8,707</b>

\*Tiered courses are paid by Excel in CTE. Non-tiered courses are paid by the student.

### ADDITIONAL CHARGES\*\* (Estimated)

	HIGH SCHOOL	ADULT
Tools/Books	\$356	\$356

### COST NOTE

\*\*A list of required tools/books is on a separate sheet of paper and on our website, WashburnTech.edu. Students also will need to purchase supplies such as (but not limited to) pens/pencils, notebooks/paper, three-ring binder, etc. Students may purchase them at the vendor of their choice.

### MORE INFO »

**For more programs, enrollment and course schedule information, please contact Admissions. Financial Aid is available to those who qualify.**

**CALL 785.670.2200**

**TO TALK W/ ADMISSIONS COUNSELOR**