

## GETTING STARTED

### Computer Aided Design and Drafting Program

For additional information about the program, visit [pcc.edu/drafting](http://pcc.edu/drafting), or contact program advisor: Marta Hoeing at 971-722-6419 or [marta.hoeing@pcc.edu](mailto:marta.hoeing@pcc.edu)

### PCC General Admission

To apply for admission to PCC, go to [pcc.edu/admissions](http://pcc.edu/admissions) or visit an admissions office at any one of our four campuses.

### College Expenses

For the latest information on tuition and fees, visit [pcc.edu/tuition](http://pcc.edu/tuition).

## COMPUTER AIDED DESIGN AND DRAFTING

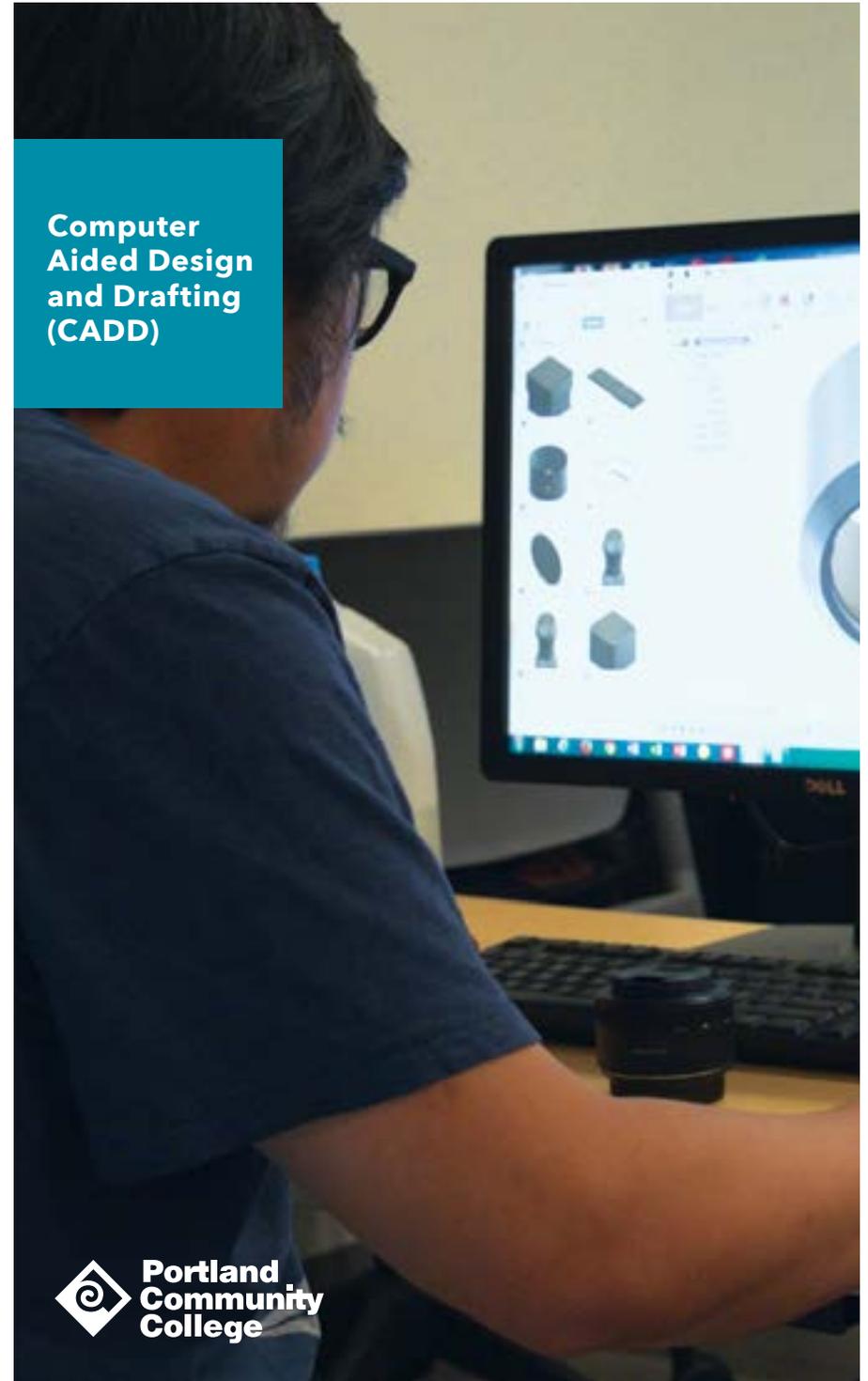
Portland Community College  
Southeast Campus  
2305 SE 82nd Avenue  
Portland OR 97216

971-722-6419 • [pcc.edu/drafting](http://pcc.edu/drafting)

All information is subject to change.

#23811 03/18

Portland Community College is an Affirmative Action, Equal Employment Opportunity Institution. Financial aid available. Approved for veterans training. If you have a disability that requires academic adjustments and services, please contact Disability Services as soon as possible for information regarding eligibility and deadlines to receive services. Some accommodations require several weeks to put into place. Call 971-722-4341 or 971-722-4877.



## Computer Aided Design and Drafting (CADD)



## DRAFTING YOUR FUTURE

When Da Vinci drafted a flying machine in Italy in the late 1400s people were appalled. "Who needs this?" people asked. Not until after 1903 in the U.S., when Orville and Wilbur Wright conducted the first flight, did people see the possibilities. It was a mechanical drafter, Octave Chanute, who offered biplane glider designs to the Wright brothers. Especially important to Chanute's design was the curved top of the biplane's wings, which allowed the plane to achieve lift; a design that proved revolutionary. In today's world of technology, drafters interpret the work of engineers every day to give form to several important tools, objects and components in manufacturing and construction.

But it doesn't have to take over 400 years for your dreams to take flight. You can begin working toward them now in our Computer Aided Design and Drafting program. In our program, you will learn the skills necessary to help launch a successful drafting career.

### MODELING SUCCESS

In our Computer Aided and Design Drafting program, you can earn a certificate within one year, providing the skills you need to obtain an entry-level position in the field.

With our certificate, you'll acquire several important industry-standard skills, including those in freehand drafting, modern computer-aided design (CAD) programs, 3-D modeling, mathematical concepts and problem solving.

We encourage new and returning students to take advantage of our flexibility, as we offer mainly afternoon and evening courses. A number of our returning students seek to upgrade their skills—students already employed in the engineering departments for such companies as Nike, in footwear design; or Leupold and Stevens, in binocular and scope design and engineering. In addition, our program has an active advisory committee of those who currently work in the design and engineering industry. That means you receive the most modern education available, with real-world assignments and cutting-edge concepts that help ensure your skills are current.

### ACADEMIC OVERVIEW

Our program is intended to help students acquire up-to-date knowledge and skills required of drafters and designers. To receive a one-year certificate, you must take 45 credit hours of drafting design and technology classes. Students typically begin the CADD certificate program during the fall term and follow classes in a sequential order. Fundamental classes are repeated on a periodic basis, providing you with a variety of options for completing the certificate in a timely manner.

#### Before entry into the program, students must:

- ◆ Interview with a program advisor (recommended).
- ◆ Attain COMPASS exam placement in MTH 60 and WR 115 before registering for first term drafting classes.

#### While in the program, students must:

- ◆ Maintain a minimum "C" average letter grade in all required classes.
- ◆ Achieve proficiency in modern CAD (computer aided drafting).

#### Career Overview

A mechanical drafter interprets engineering information in the form of sketches, plans and detailed drawings to be used in manufacturing and construction. A drafter may also work under engineers. As a graduate of this program, you will be expected to apply skills in the following:

- ◆ Computer aided design (CAD) software
- ◆ Abstract and spatial concepts
- ◆ Mechanical reasoning
- ◆ Industry standards for drafting

#### Can I transfer my credits to a university?

Other colleges and universities may accept a portion of this program's credits to apply to a four-year degree. To be certain, check with the other college or university, or contact the PCC Computer Aided Design and Drafting department advisor.

## CAREER OVERVIEW

### What will I do on the job?

The design drafter is a skilled technician who starts with a design and develops the working drawings required to guide the production of machines or products.

### What skills will I use on the job?

PCC's Computer Aided Design and Drafting program is designed to develop your skills in areas such as freehand sketching, drawing organization, computer-aided drafting (including AutoCAD, Inventor or Solidworks), proper linework, abstract and mechanical reasoning, spatial relations, and graphic design and layout.

### Who will hire me?

Demand is high for skilled design drafters, and growth is predicted in the field. Drafters are hired by firms of all sizes or are self-employed. Many opportunities exist for drafters, including product design, electronic schematics, sheet metal layout, structural steel detailing, special tools and fixtures, and machine design. Graduates find work in manufacturing firms, construction companies, engineering firms, along with city, state and federal agencies. Graduates of PCC's CADD program have been hired by organizations such as A-DEC, CH2M Hill, the City of Portland, U.S. Army Corps of Engineers, ESI, FPS Computing, Freightliner Corporation, KPFF Consulting Engineers, Mentor Graphics Corporation, NACCO, Tektronix, Williams Air Controls, CD Medikol Mechanical Kidney Machines, Allied Systems Heavy Equipment and HuntAir.

For U.S. Department of Education gainful employment information on this program, visit [pcc.edu/gainful](http://pcc.edu/gainful).

### How much can I earn?

The approximate yearly salaries in the Portland metropolitan area begin between \$35,000 and \$40,000. Experienced design drafters earn \$45,000 to \$57,000 a year.

