

COMPUTER AIDED DESIGN AND DRAFTING

Drafters use software to convert the designs of engineers and architects into technical drawings and plans. Workers in production and construction use these plans to build everything from microchips to skyscrapers.

DUTIES

Drafters typically do the following:

- Design and prepare plans for using computer-aided design and drafting (CADD) software
- Produce effective product designs by using their understanding of engineering and manufacturing techniques
- Add structural details to architectural plans from their knowledge of building techniques
- Prepare multiple versions of designs for review by engineers and architects
- Specify dimensions, materials, and procedures for new building projects or products
- Work under the supervision of engineers or architects

Many drafters are referred to as *CADD operators*. With CADD systems, drafters create and store drawings electronically so that they can be viewed, printed, or programmed directly into automated manufacturing systems. New software systems, such as building information modeling (BIM) and product data management (PDM), are coming into use. Through three-dimensional rendering, BIM software allows designers and engineers to see how elements in their projects work together. PDM software helps users track and control data, such as technical specifications, related to projects. Just as BIM is changing the work of architectural drafters as well as engineers and designers, PDM is changing the work of mechanical drafters. These software systems allow drafting and design work to be done at the same time as the work done by other professionals involved in the project.



SALARY INFORMATION

Location	2018				
	10%	25%	Median	75%	90%
California	\$41,750	\$51,930	\$61,960	\$75,700	\$89,990

*Pay period based on yearly amount.

EMPLOYMENT OUTLOOK



Stable growth rate is estimated to be **10%**



1,480 estimated annual job openings

RELATED OCCUPATIONS

- Mechanical Engineers
- Civil Drafters
- Mechanical Drafters
- Civil Engineering Technicians
- Electrical Engineering Technicians
- Commercial and Industrial Designers
- Set and Exhibit Designers
- Fabric and Apparel Patternmakers

