

CADD Resources

Every effort has been made to present CADD to you here in a brief but timely fashion. If you would like to learn more about this occupational area, please visit the following websites.

American Design Drafting Association

www.adda.org

American Institute of Architectural Students

www.aias.org

American Society for Engineering Education

www.asee.org

American Society for Mechanical Engineers

www.asme.org

Illinois Drafting Educator's Association

www.idea-online.org

International Technology Education Association

<http://www.treaconnect.org/>

Project Lead the Way

www.pltw.org

SkillsUSA

www.skillsusa.org



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Is
CADD
part of your
future plans?



Perhaps it should be!

Computer-Aided Drafting and Design (CADD)

Drafting and design are the occupational fields of the graphic "language of industry." Their origin goes back over 500 years but gained increased importance with processes of mass production and interchangeable manufacturing. The designs of architecture also have to be expressed by drafting.

Every manmade object or project usually begins as a recorded plan of a working drawing. The design process requires experimentation and refinement that include different approaches to a problem. For hundreds of years design drawings have been made on such media as sheep skin, linen, film, vellum and paper at the drawing board using manual tools and methods.

In 1969 the first CADD systems were sold. In CADD drawings are drawn on a computer screen and later "plotted" as "hard copy". This introduced the term "magnetic copy" as well. Early CADD software required a mainframe computer to operate. With the introduction of the desktop or "personal computer" in 1980, CADD software developers had a new and less expensive platform to operate on. By the end of the decade, CADD rapidly replaced many of the traditional drawing boards and tables around the world.

Today, while board skills are used to a small extent in some companies, the majority of designs and drawings are created on CADD systems. Recent developments of rapid prototyping and the paperless factory are founded in CADD.

Skill Set Requirements

CADD requires a specific set of personal skill abilities and characteristics in a person. Do you find many of these qualities in you?

- Ability to Follow Directions
- Basic Practical Math Skills
- Basic Understanding Science Principals
- Technical Orientation to Life
- Naturally Inquisitive
- Problem or Puzzle Solver
- Flexible and Adaptable
- Goal Oriented
- Time Management Skills
- Ability to Multitask
- Patience
- Detail Oriented
- Organizational Skills
- Ability to Follow Standards
- Sense of Humor
- Work Alone or in a Team
- Visualization Skills (3-D to 2-D)

If you can answer, "Yes.", to many of these, CADD may be an occupation for you to consider for your future.

Your Future & CADD's Future

According to recent U.S. Bureau of Labor Statistics, the following growth was predicted for students in these areas of drafting and design:

- CADD Drafters - 3-6% Average Growth
- CADD Designers - 3-6% Average Growth
- CADD Educators - 36% Critical Shortage

In addition to these predictions, the April 2004 "Reader's Digest" reported a critical shortage of CADD Animators for creating such things as Hollywood movies and video games.

To get started in CADD visit your high school or community college counselor or CADD educator for course offerings and information in your high school, area vocational center or community college district.

These education professionals may also have local area job listings of employers currently looking for CADD drafters and designers in your geographic region.

What about pay?

The GraduatingEngineer.com, website reports drafters and designers can expect to start in the field between \$30-38,000 per year.

According to the U.S. Bureau of Labor Statistics, In the United States today, there are some 216,000 CADD drafters and 125,000 CADD designers.