

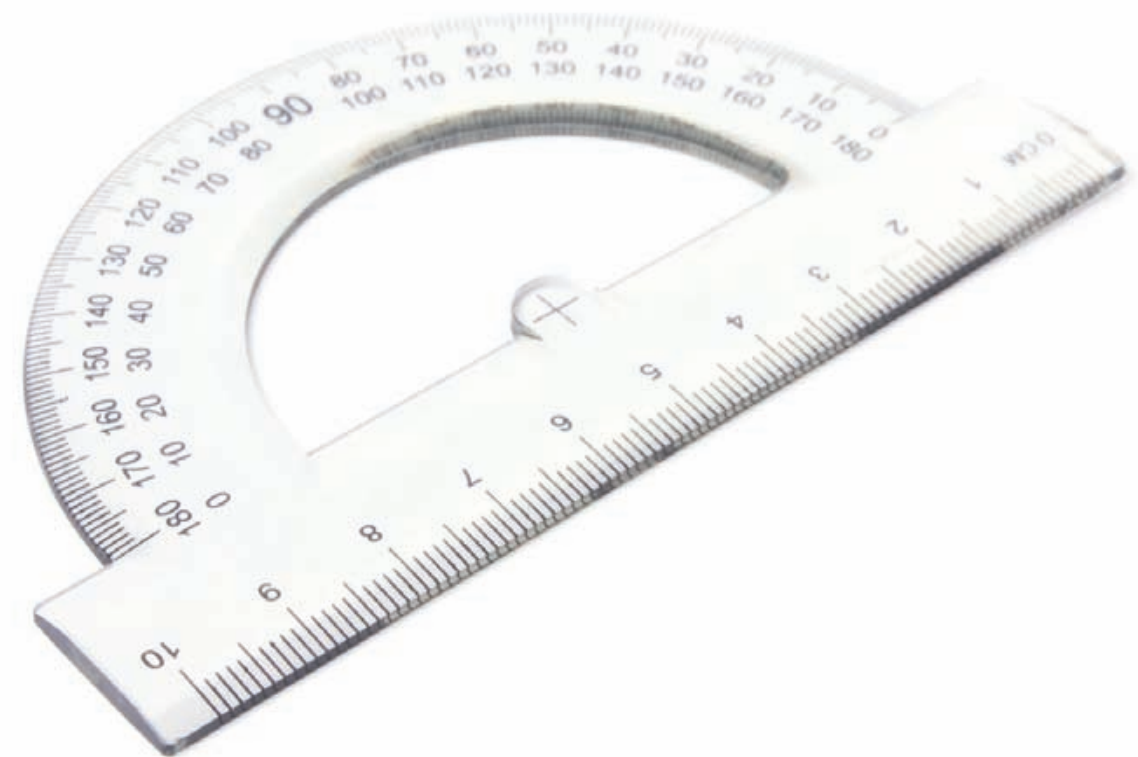
CAREER OPPORTUNITIES IN

# ENGINEERING AND DESIGN INDUSTRY SECTOR

## 10 TIPS FOR CHOOSING THE RIGHT CAREER FOR YOU

*How does a person know what career to work toward?  
There is no perfect answer, but the following 10 tips will  
get you off to a good start.*

- 1 Get to know yourself** – Complete more than one self-assessment test.
- 2 Identify your strengths and weaknesses** – What do you do well and what do you not do well?
- 3 Develop an inventory of careers** – Write down some careers that might interest you.
- 4 Research different careers** – Talk to others and use the Internet.
- 5 Write the pros and cons** – List positives and negatives about the careers that interest you.
- 6 Network** – Discuss your ideas with others.
- 7 Talk with people who work in your area of interest** – Family and friends are great resources.
- 8 Find a mentor** – Find someone with whom you can discuss your career selection.
- 9 Experiment** – Take a related class or part-time job.
- 10 Don't give up** – "If there is a will, there is a way."



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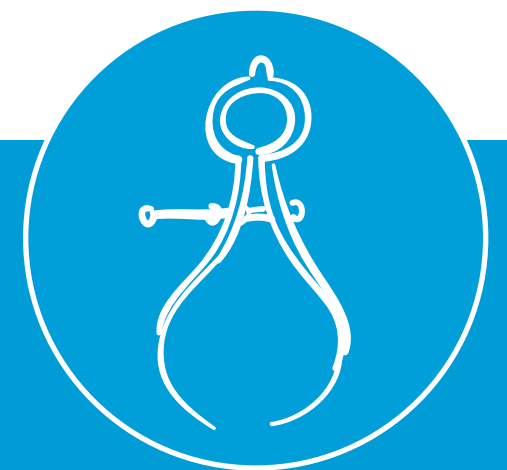
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# Career Pathways



## Architectural and Structural Engineering Pathway

The Architectural and Structural Engineering Pathway provides learning opportunities for students interested in the safety, cost, design, and construction of a building. Work elements of this pathway often involve working in conjunction with an architect. Students interested in this pathway should possess artistic ability and strong mathematical skills.

### CAREERS/CAREER AREAS:

- *Engineering Aide*
- *Architect*
- *Drafter/Designer*
- *Surveyor*
- *Structural Engineer*
- *Civil Engineer*
- *Industrial Designer/Estimator*
- *Instructor*



## Computer Hardware, Electrical, and Networking Engineering Pathway

Careers in this pathway are highly technical and require continuing education to stay abreast of constantly changing technology. Students are introduced to the design, manufacturing, assembly, programming, and maintenance of computers and networking systems essential to telecommunications and information

technology. These pathway careers will continue to be in high demand as technological systems become increasingly intricate. Students interested in this pathway should have a desire to understand, diagnose, and create within a technological framework.

### CAREERS/CAREER AREAS:

- *Computer Engineer*
- *Electrician*
- *Electrical Engineer*
- *Computer Repair*
- *Computer Networking Technician*
- *Telecommunication Engineer*
- *Network Administrator*



## Environmental and Natural Science Engineering Pathway

If your heart is set on protecting the environment, this may be your pathway. Improving and protecting our air, land, and water is the focus of this career area. Students will be involved in the design and development of equipment, processes, and systems used to create, monitor, prevent, or correct environmental events and conditions.

### CAREERS/CAREER AREAS:

- *Environmental Planner*
- *Meteorologist*
- *Oceanographer*
- *Ecologist*
- *Hydrographer*
- *Park Naturalist*
- *Survey/Mapping Technician/Engineer*
- *Environmental, Chemical, and Civil Engineer*



## Engineering Design Pathway

If you like explaining ideas in a visual way, the Engineering Design Pathway may be for you. Pathway careers encompass the design and production of visual communications. Visual communication is the conveying of ideas and information in forms that can be seen. Students will learn to plan, prepare, and interpret drawings and models through traditional drafting or computer-aided techniques.

### CAREERS/CAREER AREAS:

- *CAD/CAM Technician*
- *Civil Engineer*
- *Drafter/Designer*
- *Architect*
- *Structural Engineer*
- *Software Engineer*



## Engineering Technology Pathway

The Engineering Technology Pathway provides learning opportunities for students interested in preparing for careers in the design, production, and maintenance of mechanical, telecommunications, electrical, electronics, and electromechanical products and systems.

### CAREERS/CAREER AREAS:

- *Electrician/Electronics*
- *Industrial Engineer/Technician*
- *Telecommunications Facility Construction/Maintenance*

Web sites  
for further information:

[www.californiacareers.info](http://www.californiacareers.info)

[www.whodouwant2be.com](http://www.whodouwant2be.com)

[www.californiacolleges.edu](http://www.californiacolleges.edu)

[www.edd.ca.gov/Jobs\\_and\\_Training/](http://www.edd.ca.gov/Jobs_and_Training/)

