Engineering and Technologies

ABOUT THE DEPARTMENT
The Engineering and Technologies Department at East Los Angeles College offers a variety of courses in engineering subjects such as general engineering, civil, electrical, electrical engineering technology, electronics, support, and manufacturing and industrial technology. While you might wonder what the difference is between the types of engineering, the commonalities are a basis of math, physics, and other science courses. At ELAC, the Engineering and Technologies Department has a particular focus on the application and implementation of computer technologies. As a student, you can utilize the support community on campus including the MESA (Mathematics, Engineering, and Science Achievement) Center which offers tutoring services and houses an engineering library. Also active are student organizations, the Society of Women Engineers and the Society of Hispanic Professional Engineers, which both establish a support through teamwork and cooperation. While attending ELAC, engineering and technology students have the opportunity to earn certificates and/or an Associate in Science degree. These prepare students to enter various sectors in the industry including construction, manufacturing, product design, testing, or technical services and sales.

ABOUT THE INDUSTRY
The field of engineering is becoming broader than ever with new fields in bio-medical, computer science, communication, and other areas developing each year. The demand for engineering will always be high and historically students receive very generous entry salaries upon graduation. Almost every product invented and built has been touched by the minds and hands of engineers and technologists. Many aspects of engineering field have advanced the industry so rapidly that the technical education has become both expanded and more specific at the same time.

For more information, visit: www.elac.edu/departments/engineering/index.htm

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Carl D. Perkins
Title 1C
Engineers, technologists, and drafters are trained to be problem solvers, with subjective and critical minds that work on solutions to make our world a better place. The products they create, design, and implement enhance and improve our quality of life. This field requires an inquisitive mind, a love of details, and the ability to conceive a product before it is built.

**DESIRABLE SKILLS**
The following are skills commonly required for this field. Ability to:

- Visualize spatial relationships of plane and solid objects
- Notice details
- Use eye-hand coordination
- Analyze data, read, understand and implement written instructions
- Perform work and check for accuracy
- Make numerical calculations
- Use fingers and hands to use drawing instruments
- Concentrate for long periods of time

**JOB GROWTH AND OPPORTUNITIES**
According to the U.S. Department of Labor and Bureau of Labor Statistics, there will be approximately 216,500 job openings related to Drafting in the United States by the year 2020.

**SALARY**
Estimated hourly earnings for the middle 50% of skilled industry drafters can range from $14.50 to $22.71 per hour. Additionally, top industry employees may average $22.71 - $26.19 per hour or more.

*Information provided by EUREKA, Career Information System.*