

Important Qualities

Concentration. Electrical and electronics engineers design and develop complex electrical systems and electronic components and products. They must keep track of multiple design elements and technical characteristics when performing these tasks.

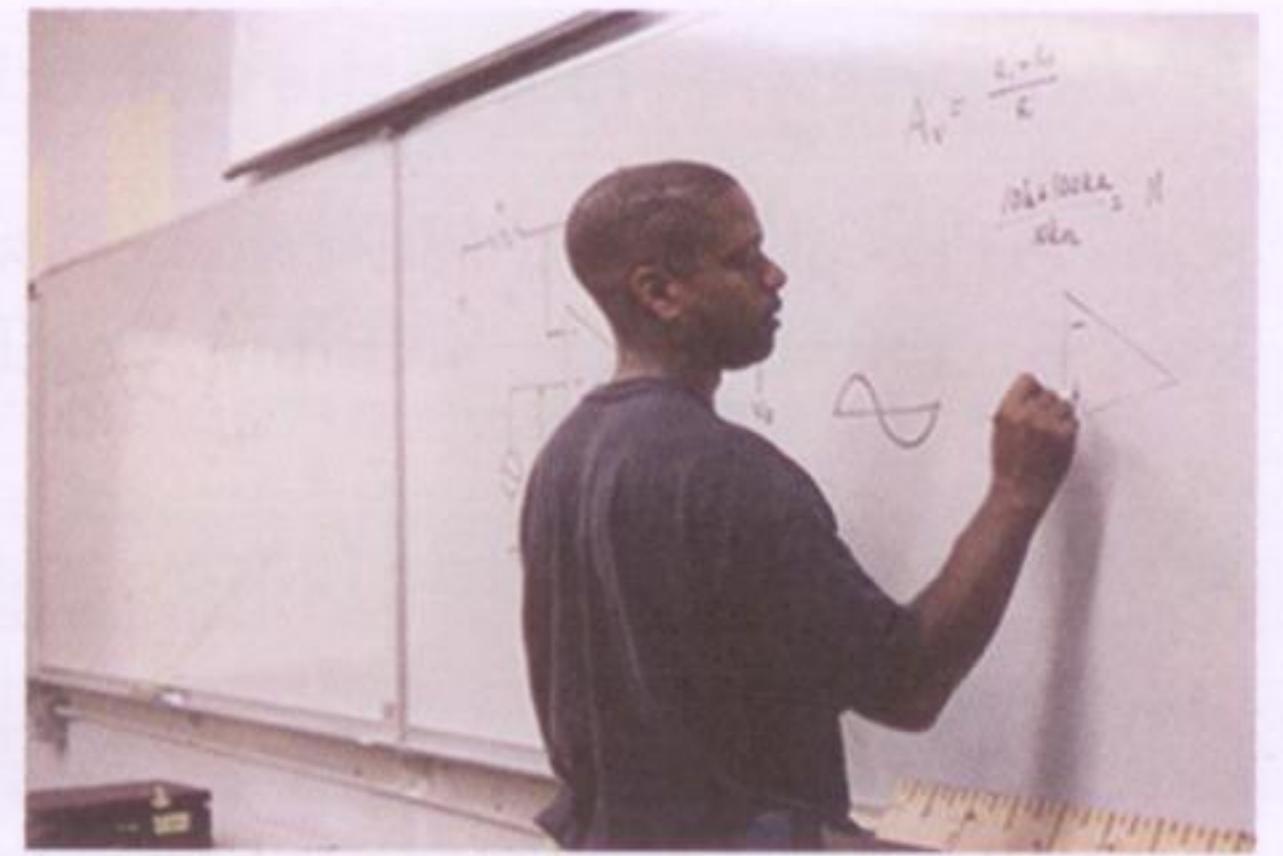
Initiative. Electrical and electronics engineers must apply their knowledge to new tasks in every project they undertake. In addition, they must engage in continuing education to keep up with changes in technology.

Interpersonal skills. Electrical and electronics engineers must work with others during the manufacturing process to ensure that their plans are implemented correctly. This collaboration includes monitoring technicians and devising remedies to problems as they arise.

Math skills. Electrical and electronics engineers must use the principles of calculus and other advanced math in order to analyze, design, and troubleshoot equipment.

Speaking skills. Electrical and electronics engineers work closely with other engineers and technicians. They must be able to explain their designs and reasoning clearly and to relay instructions during product development and production. They also may need to explain complex issues to customers who have little or no technical expertise.

Writing skills. Electrical and electronics engineers develop technical publications related to equipment they develop, including maintenance manuals, operation manuals, parts lists, product proposals, and design methods documents.



Becoming an electrical or electronics engineer involves the study of math and engineering.

Pay

The median annual wage for electrical engineers was \$100,830 in May 2020. The median annual wage for electronics engineers, except computer, was \$107,540 in May 2020.

Job Outlook

Overall employment of electrical and electronics engineers is projected to grow 3 percent from 2019 to 2029, about as fast as the average for all occupations. Employment growth is expected to be tempered by slow growth or decline in some industries, such as manufacturing and utilities.

► Activity 3: Now that you have read Part II, decide if the following statements are True or False:

1. Practical experience is a prerequisite for finding a job as an electrical or electronics engineer.
2. Sometimes, undergraduate electrical engineering students or graduates work without pay in order to gain work experience.
3. Engineering students need to know how to paint.
4. The duration of studies in all University Electrical Engineering Departments is 5 years.
5. The life learning process never stops for electrical and electronics engineers, as they need to keep track of technological advancements.
6. Electrical and electronics engineers sometimes need to supervise the technical staff in the performance of their tasks.
7. Technicians do not normally need guidance from electrical and electronics engineers as they know what to do.
8. Electrical engineers earn the same annual wages as electronics engineers.