



Reading 2

► The following information (divided into two parts) has been retrieved from the official webpage of the US Bureau of Labor Statistics (<https://www.bls.gov/ooh/architecture-and-engineering/electrical-and-electronics-engineers.htm>.) Before you read the texts, take a look at the table below (titled *Quick Facts*). Do you happen to know if similar facts are available about Electrical and Electronics Engineers working in your country? Where can someone find information on employment, wages, and qualifications (formal & non-formal) of Electrical and Electronics Engineers? Discuss.

Quick Facts: Electrical and Electronics Engineers	
2020 Median Pay	\$103,390 per year, \$49.71 per hour
Typical Entry-Level Education	Bachelor's degree
Work Experience in a Related Occupation	None
On-the-job Training	None
Number of Jobs, 2019	328,100
Job Outlook, 2019-29	3% (As fast as average)
Employment Change, 2019-29	10,800

► **Activity 1:** In Part I below, some of the duties of electrical and electronics engineers have been placed in the wrong list by mistake. Read on and try to find out which duty listed under 'Electrical Engineers' should be moved to the 'Electronics Engineers' list and vice versa:

Part I – What Electrical and Electronics Engineers Do

Electrical engineers design, develop, test, and supervise the manufacture of electrical equipment.

Duties

Electrical engineers typically do the following:

- Design new ways to use electrical power to develop or improve products
- Perform detailed calculations to develop manufacturing, construction, and installation standards and specifications
- Develop maintenance and testing procedures for electronic components and equipment
- Investigate complaints from customers or the public, evaluate problems, and recommend solutions
- Work with project managers on production efforts to ensure that projects are completed satisfactorily, on time, and within budget

Electronics engineers typically do the following:

- Design electronic components, software, products, or systems for commercial, industrial, medical, military, or scientific applications
- Analyze customer needs and determine the requirements, capacity, and cost for developing an electrical system plan
- Direct the manufacture, installation, and testing of electrical equipment to ensure that products meet specifications and codes
- Evaluate systems and recommend design modifications or equipment repair
- Inspect electronic equipment, instruments, and systems to make sure they meet safety standards and applicable regulations
- Plan and develop applications and modifications for electronic properties used in parts and systems in order to improve technical performance