



Educational Topic

Electronics Engineer

Related Job Titles:

Electrical Engineer, Computer Engineer, Computer Scientist

Job Description:

Electronics Engineers design, develop, test and lead the production of electrical and electronic equipment including scientific instruments, motors, wiring in buildings, aircraft, radar, computers, robots and video equipment. Most Engineers work in office buildings or laboratories. Some work outdoors at construction sites. Some must travel to different work sites.

Interests / Abilities:

- Are you good at math?
- Is your work detailed?
- Do you like to solve problems?
- Are you interested in how things work?
- Do you like working with computers?
- Do you like to take things apart and put them back together?

Suggested School Subjects / Courses:

- Mathematics (algebra, geometry, trigonometry, calculus)
- Science (physics, biology, chemistry)
- Computers
- Engineering (thermodynamics, fluid dynamics, mechanical, electronics)

Education / Training Needed:

The minimum education required for this position is a bachelor's degree in Electrical or Electronics Engineering from an accredited college or university. To do research, a Ph.D. is highly desired for this position.

Areas of expertise:

- *Sensors and transducers:* research and develop sensing devices such as lasers that are needed in aerospace research
- *Electronic instrumentation:* research and develop equipment that can detect, record and measure data for aerospace research
- *Guidance and navigation systems:* research and develop systems used to guide and navigate aerospace vehicles and spacecraft
- *Electromagnetic systems:* research and develop instruments, such as antenna systems, that measure electromagnetics
- *Tracking and telemetry systems:* research and develop systems and devices that track the flight of aerospace vehicles or that transmit and receive data and commands between space vehicles and the ground
- *Computer design:* design and develop computers or robots

