



Electronics Engineering Technicians and Associates

Electronics engineering technicians and associates conduct and assist in the research, design, manufacture, diagnosis repair and maintenance of advanced electronic equipment and systems including audiovisual, broadcast, business and medical equipment. They usually have a range of duties that lie between trade and professional engineer levels. Some technicians may work in workshops, private homes or manufacturers' factories and have some contact with the public. They may work in confined spaces and have to stand for long periods and may also be required to work at heights on masts, towers and roofs.

Electronics engineering technicians and associates may perform the following tasks:

- Help electronics engineers develop, design, test, manufacture, assemble and maintain electronic equipment and associated circuitry such as radio, television, communications, and process-control equipment and computer systems
- Assist engineers in the research and design of process-control and instrumentation systems, communication systems, robotic systems, and computer and other electronic systems
- Test electronic instruments and equipment, and repair or replace faulty parts
- Collect and analyse data, carry out complex calculations and prepare reports
- Estimate materials, costs and quantities
- Select, start up, operate and maintain electronic equipment including computer-controlled and complex telecommunications equipment
- Find and repair faults in complex power supplies
- Service broadcast, microwave and satellite technology
- Service analogue, digital and data equipment and signals
- Dismantle, assemble and fabricate electrotechnology assemblies
- Install electrical and electronic control systems.

Specialisations:

Electronics engineering associates may specialise in aircraft electronics, communications and data systems, control systems, telecommunications, power station control systems, defence systems, medical equipment or meteorology. Electronics engineering associates usually work in a team with engineers, technologists and tradespeople.

With further training and experience, it is possible to become a registered engineer. They may also become proprietors of small businesses, or independent contractors.

Personal Requirements:

- Enjoy technical and engineering activities
- Good with hands
- Enjoy mathematics and technical activities
- Able to diagnose, identify, analyse and solve problems
- Capacity for accurate, careful work
- Good communication skills
- Able to work independently or as part of a team
- Normal eyesight (may be corrected) and normal colour vision
- Practical and good hand-eye coordination
- Able to work systematically
- An aptitude for mechanics and electronics.

Source: Job Guide 2011