Occupational Profile



Electrical and Electronics Engineering Technologists and Technicians







Electrical and Electronic Technologists and Technicians are versatile technical workers that perform tasks related to electrical and electronic components and systems. They conduct research on, maintain and design telecommunication, power equipment, industrial process control, and other electrical and electronic systems. A diverse skill set enables them to work in manufacturing, electrical utilities other sectors. FOCAL projects a strong demand for Electrical and Electronic Engineering Technologists and Technicians, with 350 positions opening up in the automotive sector over the next decade.

Where do Electrical and Electronic Engineering Technologists work?



Vehicle Computer
Component
Manufacturing



Power
Generation
Transmission and
Distribution



Architecturual and Engineering Services



Hospitals



Building Equipment Contractors

What do Electrical and Electronics Engineering Technologists do?

Electrical and Electronics Engineering Technologists and Technicians have a wide scope of tasks they perform in their work. They are capable of performing design and manufacturing functions as well as conducting research. Below are some of the tasks they perform in their work:

- Assist in inspection, testing, adjusting and evaluation of incoming electrical, electro-mechanical and electronic components and assemblies to ensure conformance with product specifications and tolerances
- Carry out applied research under the direction of scientists or engineers
- Conduct or supervise the installation, commissioning, and operation of electrical and electronic equipment and systems other than aircraft electronics or instruments
- Calibrate electrical or electronic equipment and instruments according to technical manuals and written instructions

Career pathways & potential earnings of Technologists and Technicians

Technologists and Technicians can progress to other roles and positions:

Electrical Engineering Tech



Electrical
Engineering Techs
begin their careers
earning about
\$23/hr, but with
experience can
scale their pay and
apply their skills to
supervision roles.

Electrical Trade Supervisors



Electrical Trade
Supervisors can
earn up to \$53/hr.
Talented
supervisors with
business
knowledge may
transition into
management.

Senior Managers



Trade Supervisors that transition into senior management may find themselves in operations or general management roles. Wages can go up to \$160/hr.

Occupational Profile



Electrical and Electronic Engineering Technologists and Technicians can also apply their skills and expertise in other occupations such as the following:

- Aircraft instrument, electrical and avionics mechanics, technicians and inspectors
- Heating, refrigeration and air conditioning mechanics

How do I become a Technician or Technologist?

There are several requirements to become a Electrical and Electronics Engineering Technologists. Some requirements may vary by province or company. Below are the most commonly required qualifications to work as a Electrical and Electronics Engineering Technologists:

- Minimum Education: Completion of two-to-three year program in electrical or electronics engineering technology, computer engineering technology, telecommunications technology or an equivalent is usually required for electrical or electronics engineering technologists, with a one to two year program required for technicians.
- Certification, Licensing, and Training: Some positions may require certification through a provincial association of engineering or applied science technologists and technicians. Two years of supervised work experience are required before certification.



Important skills to have as an Electrical Engineering Technologist?

Electrical and Electronic Technologists and Technicians possess an array of skills to help them navigate the varying tasks they encounter. They can be expected to assist in designing or supervision of other workers. The necessary skills required to be a Technologist or Technician are developed through their education and work experience.

Technical Knowledge and Skills

- Computers and Electronics
- Operation and Control
- Quality Control Analysis
- Equipment Maintenance
- Operations Monitoring
- Telecommunications

Soft Skills

- Troubleshooting
- Visualization
- Problem Sensitivity
- Complex Problem Solving
- Arm-Hand Steadiness
- Critical Thinking

Technologist and Technician jobs in Canada

In 2021, more than 42,000 Electrical and Electronics Engineering Technologists were employed across Canada's sectors and industries. FOCAL projects 350 job openings for this occupation in Canada's automotive manufacturing sector between 2021 and 2030. FOCAL also forecasts that during the same period, about 270 technologists and technicians are needed to fill recruitment gaps in the sector, especially as the sector trends towards increasing electrification of vehicles.

Jobs and Recruitment

Learn more about the job market for electrical and electronic technologists and technicians, as well as about many other developments and new technologies in Canada's automotive manufacturing by visiting our website futureautolabourforce.ca. You can also check our social media by following these links:



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