

The Electrical Technology program provides students with the knowledge and skills necessary to install, operate, trouble shoot, service and repair electrical equipment in residential, commercial and industrial settings.

In the Electrical Technology program students will:

- Perform actual wiring in a series of projects, from simple circuits to more complex circuits
- Cover current, voltage, resistance, switch currents, Ohm's Law, series and parallel circuits and electronic measurement.
- Research and become familiar on how to locate and interpret the Canadian Electrical Code book
- Understand different types of AC Circuits including AC test equipment, inductive, capacitive and transformers.
- Be introduced to basic industrial wiring including fire alarm systems, conduit bending, armoured cable applications, motor controllers, blueprint reading and the Canadian Electrical Code
- Read and interpret blueprints, drawings and code specifications for layout and installation of electrical equipment
- Learn safe working procedures, conditions & injury prevention
- Receive training in human relations, customer service, organization skills running a small business and apprenticeship applications
- Install, repair and replace electrical wiring, receptacles, switch boxes, conduits, feeders, cable assemblies, lighting fixtures and other electrical components
- Test electrical and electronic equipment for continuity, current voltage and resistance
- Troubleshoot, maintain and repair electrical and electronic control systems and devices as well as micro processor-based systems
- Calibrate instrumentation devices



Apprenticeship Manitoba

Electrical Courses Include:

Section 1

9055 Intro to Electrical Trades Technology 20S
9056 Electrical Trades DC Fundamentals 30S
9057 Residential Wiring 30S
9059 Advanced Residential Wiring 40S

Section 2

9058 Electrical Wiring Methods 30S
9060 Electrical Trades AC Fundamentals 40S
9061 Advanced Electrical Wiring Methods 40S
9062 Applied Electrical Trades Technology 40S

The Electrical Technology program is aligned with Manitoba Apprenticeship Level 1 training, which offers a student who has completed this program with an accumulated average of 70% or higher eligibility for their Level 1 Apprenticeship training in the 3 Electrical Trades: (1) Construction Electrician, (2) Industrial Electrician, (3) Power Electrician.