



2025 Course Outline

Electrical



Curriculum Goals:

To provide the student with the opportunity to explore and experience the work of an electrician exposing them to the varied opportunities in electrical and to assist them in making an informed decision for further study and/or employment. This course is practical and experiential. The student will be given the opportunity to learn through engaging in realistic and authentic tasks.

Vocational Pathway: Manufacturing and Technology

Learner Goals and Outcomes: On completion of this course, the student will be able to:

1. Perform manual soldering and de-soldering.
2. Test electrical appliances for safety.
3. Work safely with electrical equipment.
4. Demonstrate knowledge of electrical calculations, test instruments and electrical components.
5. Use cutting tools and machines during electrical installation and maintenance.
6. Demonstrate practical application of theory and legislation for electrical appliance service persons.
7. Perform basic calculations used in trade situations
8. Isolate low-voltage electrical subcircuits and confirm isolation with checks & tests.

Unit Standards

Unit No	Title	Level	Credits	Version	SR/R
15849	Perform manual soldering and de-soldering procedures for electrotechnology work.	2	2	6	SR
6705	Test electrical appliances for safety	2	3	9	
5907	Work safely with electrical equipment.	2	1	7	SR
23751	Demonstrate knowledge of electrical calculations and theory, test instruments, and components of electrical equipment	2	6	6	
5922	Use cutting tools and machines in the performance of electrical installation and maintenance	2	2	7	SR
30645	Demonstrate practical application of theory and legislation for electrical appliance servicepersons (endorsed)	3	3	2	
30692	Perform basic calculations used in given trade situations.	2	2	1	SR
30657	Isolate low-voltage electrical subcircuits and perform basic checks and tests to confirm isolation.	2	1	1	SR
	Total DAS Credits		20		

Vocational Pathways: SR = Sector Related; R = recommended

To receive a Vocational Pathways Award, students must gain NCEA Level 2. Within the 80 credits required to achieve NCEA Level 2, 60 of these Level 2 credits must be from the recommended standards in one or more pathways, including 20 Level 2 credits from sector related standards.

Methods of Assessment: Three forms of assessment will be used:

1. Written assessment
2. Practical activities and observations
3. Practical demonstrations