

EL101
Canadian Electrical Code
4 Credits

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EL101 Version: 4



Canadian Electrical Code

Calendar Description

This introductory course on the Canadian Electrical Code is designed to acquaint the student with all the sections that are required for a first year Electrical Apprentice.

Rationale

This is a required course for the Pre-employment Electrical program. The course helps students understand the limitations imposed by the Canadian Electrical Code and provides them with the rules and regulations that must be followed to allow for safe electrical installation. It also gives the students the basics in reading construction drawings and diagrams.

Prerequisites

None

Co-Requisites

EL100, EL102, and EL110

Course Learning Outcomes

Upon successful completion of this course, students will be able to

1. read construction blueprints and drawings.
2. outline the requirements for grounding, for circuits, and for feeders for single dwellings.
3. state requirements for scaling and dimensioning.
4. state requirements for wiring and installation of lighting and electrical equipment.

Resource Materials

Required Text:

Pope, T., Technical Editor (2009). *Canadian Electrical Code Part 1* (23rd ed.). Etobicocke,

OT: Canadian Standards Association.

First year electrical for apprenticeship ILM modules. Lakeland College, Vermilion, AB.

Reference Text:

None

Conduct of Course

EL101 is a 120-hour course that usually runs 2 hours a day over a 12-week period. Six supervised exams are delivered at approximately 2-week intervals, and a final examination after completion of the final module. This is a lecture course. Theory concepts are covered in a lecture/class discussion format supplemented with a variety of audio visual aids. Modules contain self-study questions and answers. Some computer-driven exercises may be used for delivery of this course.

Evaluation Procedures

Supervised Examination 1	10%
Supervised Examination 2	15%
Supervised Examination 3	10%
Supervised Examination 4	15%
Supervised Examination 5	10%
Supervised Examination 6	15%
Final Exam	<u>25%</u>
Total	100%

To receive credit for this course, students must achieve a minimum of 65% (Grade Point 1.0) on this code portion. Code examinations are written with reference to the Canadian Electrical Code and/or construction drawings.

Grade Equivalents and Course Pass Requirements

A minimum grade of C+ is required to pass this course.

Letter	F	C+	B-	B	B+	A-	A	A+
Percent Range	0-64	65-69	70-74	75-79	80-84	85-89	90-94	95-100
Points	0.00	2.30	2.70	3.00	3.30	3.70	4.00	4.0

Attendance

Regular attendance is essential for success in any course. Absence for any reason does not relieve a student of the responsibility of completing course work and assignments to the

satisfaction of the instructor. Poor attendance may result in the termination of a student from a course(s).

In case of repeated absences due to illness, the student may be requested to submit a medical certificate. Instructors have the authority to require attendance at classes.

Course Units/Topics

MODULES	HEADINGS
030101a	Safety Legislation, Regulations and Industry Policy in the Trades
030101d	Electrician Apprenticeship Training Program Orientation
030105a	Introduction to the Code
030105b	General Rules - Section 2
030105c	Conductor
030105d	Service and Grounding Requirements
030105e	Service Feeders and Branch Circuits
030105f	Wiring Methods
030105g	Installation of Electrical Equipment
030105h	Installation of Lighting Equipment
030105i	Class 1 and Class 2 Circuits
030105j	Orthographic Projection and Drawings
030105k	Drawings
030105l	Drawing Interpretation



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