

RSE Upgrades Course Description

Becoming a Red Seal qualified electrician requires the completion and commitment of thousands of hours of training, successful completion of several levels of post-secondary education, and a minimum of 70% on the certificate of qualification exam (or known as Inter-Provincial (IP) exam). For those undergoing their final stages of their apprenticeship, the Red Seal Endorsement Upgrader course provides review and support to those who may require or are seeking additional support to aid in the successful completion of their certificate of qualification examination.

Depending on the participant, this program may involve one, several, or all of the following:

- Identifying areas of development based on the results of attempted certificate of qualification exams
- Student directed areas of study (self-study online or tutor supported study)
- Access to all levels of trade school content and review questions
- Access to a private tutor to help work through any challenging spots in the content
- Practice IP exam questions

The content has been divided into four courses that mirror block release training. Each of which were designed to be self-paced, self-study courses with access to a tutor that can answer questions and provide further explanations.

Level 1 includes the following topics:

- Solving DC circuits, Intro to electrical theory and practices, Conductors and branch circuits, Extra low voltage magnetism and meters, Single dwelling plans lighting and services, Safety and personal protective equipment, and Wiring methods.

Level 2 includes the following topics:

- AC theory and meters, Impedance circuits, DC machines, Motor starters and control, Residential electric heat, Heating and cooling systems, Electronic instruments rectification and filtering, Services under 900 square meters, and Transformers.

Level 3 includes the following topics:

- Three-phase theory and alternators, Motor starters and controls, AC motors, Three-phase rectifying and DC power supplies, Sensors and phase control, Services for occupancies over 900 square meters, and Three-phase transformers.

Level 4 includes the following topics:

- Building systems, Power factor correction, Fire alarm systems, Thyristor applications, Programmable logic controllers, Three-phase four-wire services and code review, Primary metering and high voltage, and Hazardous locations.

During this time, students will not undergo graded assessments. However, they will find, review questions throughout the course of each unit.