

# Advanced Lighting Controls Training Program

First Time in Canada! Certification for Red Seal Qualified Electricians

## About Advanced Lighting Controls

Using advanced digital systems to control interior and exterior lighting, facility operators can reduce lighting costs by 25 per cent or more.

Advanced systems also improve comfort and convenience for building occupants – but **only if systems are properly installed and maintained.**

This is a market opportunity for B.C. contractors and electricians. And now, for the first time in Canada, North America's most highly-rated training program – the National Advanced Lighting Controls Training Program (NALCTP) – will be available in B.C. starting in 2017. NALCTP trains qualified electricians in the strategies they need to make the best lighting control decisions.

B.C.'s building codes already require the installation of lighting controls in new construction. Across North America, codes and standards are changing to favour advanced systems and increased energy conservation.

NALCTP is available in Canada through E2 Inc, an industry training organization sponsored by the Electrical Contractors Association of BC and the International Brotherhood of Electrical Workers Local 213.

Public training for B.C.'s NALCTP course is targeted to begin in fall 2017. To learn more, contact Phil Davis at E2inc: pdavis@e2inc.ca



**Starting in 2017, qualified electricians in B.C. will have access to training and certification in Advanced Lighting Controls, a rapidly growing segment of the electrical industry.**

The National Advanced Lighting Controls Training Program (NALCTP) was launched in California in 2010, and more than 2,500 electricians have gained certification in that state. BC Hydro, the electrical industry and B.C. colleges are working together to introduce the program to Canada.

Lighting control features such as occupancy sensors offer big savings on energy costs, but if they don't work properly, building owners may neglect or even disconnect them.

Advanced lighting control systems are complicated, and it takes experienced, highly-trained people to make them work. The minimum 50-hour NALCTP course includes theoretical work in advanced lighting controls concepts, and hands-on instruction with current technologies.

### This training is designed for electricians who:

- Are working for employers on major projects or large commercial and industrial contracts;
- Have experience in construction, mechanical or maintenance;
- Take an interest in energy conservation and new technologies; and,
- Want to upgrade their skills to open up new opportunities.



Courtesy BC Hydro

*"We have been designing and installing energy management and lighting controls for over twenty-five years. Completing the National Advanced Lighting Controls Program has enlightened and enhanced our motivation, knowledge and expertise to continue on the same path. This is the first time in our history that we have seen a collaborative effort and initiative to encourage the industry to pursue energy management through controls."*

*Rick Piendl*

*E2 Engineering Services, Burnaby  
a division of Intech Electric Inc.*

*"I have already implemented a few things that I learned from this course in making electrical upgrades throughout the District of West Vancouver, particularly with regards to emergency uses. We are improving the efficiency of our electrical usage in West Vancouver, and learning about the various options in the market has made it easier to visualize and explain the benefits and cost savings to my colleagues. Switching to LEDs has been a start, but added controls will be a great addition to our upgrades across all our facilities and properties!"*

*Nigel Tridico*

*Electrician | District of West Vancouver*

## Why Advanced Lighting?

Advanced lighting controls make business sense. They increase energy savings and decrease maintenance costs, and they provide greater control and comfort for employees, customers and anyone else who occupies a building.

Project developers and facility owners can reduce their energy with LED fixtures, but there are even bigger savings available from advanced controls including dimmers, occupancy sensors and load scheduling. Systems can be programmed to self-adjust depending on daily demand patterns, and provide the ideal lighting environment for every interior or exterior space.

Careful planning and installation of advanced lighting controls has reduced energy costs related to lighting by as much as 75 per cent (Toronto General Hospital) or even 90 per cent (University of California at Davis.)

## NALCTP comes to Canada

EJTC Enterprises (E2inc) has taken the lead in bringing the National Advanced Lighting Controls Training Program to Canada. Four instructors from B.C., all of them trained electricians, travelled to California in June 2016 and became the first Canadians to get certified under the NALCTP.

In November 2016, E2inc conducted a pilot course at the EJTC Green Skills Campus in Port Coquitlam for 13 certified electricians from B.C. and one from Ontario, with a 100 per cent rate of completion. The trainees had positive comments about how this wide-ranging course combines theory with hands-on practice, and several said they would immediately start to apply their advanced lighting knowledge to their everyday work.

*"Only the proper installation of new technologies will yield the results customers are looking for in terms of energy savings, and occupant productivity and comfort. We are confident this program will help electricians and electrical contractors install advanced lighting controls at the highest quality level."*  
- Michael Travers, Manager, BC Hydro Alliance Network.

