NORTHERN LIGHTS COLLEGE
REGISTRAR'S OFFICE
PROGRAM INFORMATION AND COMPLETION GUIDE

Program Name: Power Engineering
Credential/Certification: Certificate in 4th Class Power Engineering
Date Submitted: May 2025
Effective Date: June 2025

Program Contact: trades@nlc.bc.ca

Dean: Rod Cork

Document Author: Josh Klassen

Program Description: The 7 month Power Engineering Program takes learners through 4th Class Power Engineering and 210 hours of firing time on the NLC Boiler. Upon completion students will qualify for the Technical Safety BC Examinations by successfully completing Parts A and B of the 4th Class Power Engineering component of the NLC program.

The focus is to provide the learner with the practical skills needed to function effectively in the industry.

Admission Requirements:
Math – one of the following:
BC Pre-Calculus Math 11 or Pre-Calculus Math 12 with a minimum final grade of c+, or equivalent.
MATH 040 or higher, with a minimum final grade of C+, or equivalent.

English – one of the following:
BC Language Arts 11 Courses – 4 credits earned, minimum individual grade of C+, or equivalent.
BC Language Arts 12 Courses – 4 credits earned, minimum individual grade of C+, or equivalent.
ENGL 040 or higher, with a minimum final grade of C+, or equivalent.
IELTS score of 5.5 overall with no band less than 5.0 or equivalent English placement test and score.

Science – one of the following:
BC Grade 11 Physics or BC Grade 12 Physics with a minimum final grade of c+, or equivalent.
Physics 040 or higher with a minimum final grade of C+, or equivalent.

OR

ESTR 047 (Advanced-Level Essential Skills for Trades) with a minimum final grade of 67%.

Post-Admission Requirements:
After being accepted into the program but before the end of the add/drop period, students will be required to provide proof of the following certifications:
• Intermediate First Aid
• H2S Alive
• Common Safety Orientation (CSO)
* All certificates must be valid for the duration of the Program. Failure to provide proof may result in immediate dismissal from the program.

Length of Program: (weeks and total hours) Approximately 27 weeks, 820 hours

Program Intake: (start/finish dates) Please refer to the Trades Intake Schedules.

Available Seats: 16

Application Deadline: All completed applications must be received one month prior to the start of the program. Completed applications received after this date will be reviewed based on seat availability.

Career Prospects:
Entry Level Power Engineers work in a wide range of plant environments including power generation, chemical, petrochemical, pulp/paper/wood product, manufacturing, and food and beverage processing. They work in the utility plants of universities, hospitals, office buildings, and shopping malls, and at large-scale refrigeration and other industrial facilities.

Entry-level job functions can include operating product loading and storage systems; raw-water, demineralization and wastewater treatment systems; compressed gas and instrument-air systems; and cooling water systems. Job functions in smaller facilities will include greater and more varied systems responsibilities, but on smaller-capacity equipment.

Affiliations/Partnerships:
Technical Safety BC
Pan Global

Location: Northern Lights College Fort St. John Campus

Additional Requirements/Supplies: (fees, supplies, materials)
Footwear having CSA safety-toe protection, cold weather Personal Protective Equipment (PPE). The program will provide the following: hardhat, hearing protection, safety glasses and fire retardant coveralls.
Textbooks
Students are required to have a computer (PC or laptop) with minimum computer requirements as listed on the NLC website (www.nlc.bc.ca/wp-content/uploads/2025/02/Minimum_Computer_Requirements_2025.pdf).

Eligibility for Canada Student Loans: (Yes or No)
Yes

Required Minimum Grade: (overall and/or minimum within a course)
70% for POPR 150, POPR 151 and POPR 152; PASS for POPR 160

Residency Requirement: (percentage of courses which must be taken at NLC)
100% or permission of the Dean

Required Courses: (list courses required to complete credential and total hours for each course)
POPR 150 4th Class Power Engineering Part A (270 hours)
POPR 151 4th Class Power Engineering Part B (270 hours)
POPR 152 Power Lab (210 hours)
POPR 160 Work Practicum (70 hours)