

**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: June 2021
Effective Date: September 2021

Program Contact: trades@nlc.bc.ca

Dean: (Interim) Leo Manning

Document Author: Wanda Dyck

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: Provide British Columbia secondary school transcripts or equivalent indicating successful completion of Grade 11 level that includes:

- Grade 11 English, OR Career and College Preparation ENGL 040 (Advanced/Grade 11) with C+ or higher;
- Grade 11 Math (Pre-Calculus, Applications or Principles), OR Career and College Preparation MATH 040 (Advanced/Grade 11), MATH 041(Advanced Trades Math) or MATH 045 (Advanced Algebraic Math) with C+ or higher;
- Grade 11 Physics (or equivalent), with C+ or higher

OR

ESTR 047 (Advanced-Level Essential Skills for Trades) with 67% or higher;

OR

Complete the following sections of the Canadian Adult Achievement Test (CAAT):

- Reading Comprehension: 12.0 grade equivalent or higher
- Number Operations: 12.0 grade equivalent or higher
- Problem Solving: 12.0 grade equivalent or higher
- Mechanical Reasoning: 51/70 (6th Stanine) or higher
- Trades Math Assessment: 70 percent or higher

Based on the results of the assessment(s), applicants may be required to participate in an assessment interview to determine admissibility. The interview may be conducted via teleconference if necessary.

Dual Credit

- Grade 11 level completion that includes Grade 11 English and Grade 11 Math (Pre-Calculus), and Grade 11 Physics (or equivalent) with C+ or higher.

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:

- Workplace Hazardous Materials Information System (WHMIS)
- Occupational First Aid - Level 1
- 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/Services/Information-Technology/minPC).

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)