

Power Engineer 4th Class

Power Engineers, Power Plant or Boiler Operators or Operating, Steam and Stationary Engineers, are some of the descriptions that summarize a technically skilled professional who is responsible for the safe operation and maintenance of equipment such as pumps, gas compressors, generators, motors, boilers, steam turbines, air conditioning systems, heat exchangers and refrigeration equipment.

The objective of this program is to prepare the student for entrance into the power engineering field at the fourth class level. Upon successful completion the student is entitled to write an Inter Provincial Certification Exam for Power Engineer, 4th Class that is conducted by the Industrial Training division of the Department of Education.

Successful completion of this 4th class exam entitles the student to work in an industrial area containing heating and power plants which can be located in areas such as refineries, paper mills, government institutions such as hospitals, and a variety of processing and manufacturing plants.

With appropriate work experience plus additional education a 4th Class Power Engineer can successfully obtain the highest certification level of 1st Class Power Engineer. It is the choice of each individual to pursue your level of qualification. The Department of Education has adopted the Standardization of Power Engineers Examination Committee (SOPEEC) Regulations as the framework to govern writing of Power Engineering Exams. Power Engineering is not a Red Seal Program but is similar in that a combination of hours worked and education enables the learner to progress to a higher level.

OBJECTIVES

1. Develop the knowledge and practical skills necessary for a Fourth Class, Power Engineer.
2. Develop and practice proper safety procedures.
3. Demonstrate problem solving skills and good work practices.
4. Provide related skills to further enhance a graduates learning and working abilities.

ENTRANCE REQUIREMENTS

Comprehensive Arts and Science Certificate (College Transition program),

OR

High School Graduation,

OR

Grade XI Certificate (Public Examinations or equivalent),

OR

Adult Basic Education (Level III) Graduation,

OR

Adult Basic Education (Level III) Graduation with General College Profile (or Business Related College Profile or Degree and Technical Profile). It is strongly recommended that courses include the following:

1. Mathematics MA3107A, MA3107B, MA3107C

2. Science 3101, 3102, 3103

OR

Persons 19 years of age or older who do not possess the educational prerequisite for this program may be considered on an individual basis under the Mature Student Clause.

EMPLOYMENT OPPORTUNITIES

Graduates may obtain employment as a 4th Class Power Engineer, in most large plants or buildings in both the public and private sector. These may include government buildings (Municipal, Provincial, Federal); health and educational institutions; manufacturing, production and service industries such as mining, fish plants, pulp and paper, electric utilities, refineries, bottling companies, food processing plants, etc.

CERTIFICATE

- One year
- Corner Brook Campus

COURSES

CODE	TITLE	Hrs
Semester 1		
	Power Engineering Mathematics	32
	Power Engineering Science	52
	Introduction to Industrial Drawings	22
	Introduction to Communication Skills	20
	Work Safety & the Environment	84
	Power Engineering Maintenance I	20
	Power Engineering Operations	80
	Workplace Communications	45
	Introduction to Computers	30
	Customer Service	30
	Workplace Skills	30
Semester 2		
	Power Engineering Operation Equipment	52
	Electrical Principals	34
	Power Engineering Controls and Instrumentation	38
	Power Engineering Heating Boilers and Systems	92
	Auxiliary Systems	22
	Power Engineering & Refrigeration Systems	60
	Power Engineering & Air Conditioning Systems	48
	Power Engineering Maintenance II	40
	Job Search Skills	15
	Entrepreneurial Skills	15
	Quality Assurance/Quality Control	30
Intersession		
	Work Job Placement 4 weeks	120
	Power Engineering and Industrial Applications	90

This program is under review and it is anticipated that changes will occur.