Power Engineer (2nd Class)
Program Structure - Nova Scotia Apprenticeship Program

The courses listed below are required technical training in the Nova Scotia Power Engineer (Second Class) Apprenticeship Program.

Nova Scotia Course No.	Nova Scotia Course Name	Covers Content of SOPEEC Recommended Study Units	Prepares for SOPEEC Examination Papers
Part "A"			
MENT-701	Mentoring II* see pg. 2 (Optional)	N/A	N/A
PESC-1801	Industrial Legislation	ASME Code Calculations	1
		Industrial Administration	1
PESC-1802	Applied Mechanics	Applied Mechanics	1
PESC-1803	Thermodynamics	Thermodynamics	2
PESC-1804	Metallurgy	Metallurgy	2
		Testing of Materials	2
PESC-1805	Boilers	Boilers	3
PESC-1806	Pumps and Water Treatment	Pumps	3
		Water Treatment	3
Part "B"			
PESC-1807	Heat Engines and Prime Movers	Heat Engines and Prime Movers	1
PESC-1808	Lubrication, Piping and Mechanical Drawing	Lubrication	1
		Piping	1
		Mechanical Drawing	1
PESC-1809	Plant Systems and Instrumentation	Power Plant Systems	2
		Control Instrumentation	2
PESC-1810	Fuels and Combustion and Environmental Protection	Fuels and Combustion	2
		Environmental Protection	2
PESC-1811	Electro-technology	Electro-technology	3
PESC-1812	Compression and Refrigeration	Principles of Air and Gas Compression	3
		Industrial/Commercial Refrigeration	3

* Mentoring II: This course is optional, as it was offered in 4th Class and a Mentoring II digital badge was issued at that time. It may be taken again as a review of key concepts for becoming an effective journeyperson mentor. Individuals who did not take this course in 4th Class and wish to take it in 2nd Class to earn the Mentoring II digital badge may request access by contacting their Industry Training Consultant. A digital badge will be issued upon successful completion.

MENT-701 MENTORING II

Learning Outcomes:

- Demonstrate knowledge of effective communication practices as a mentor.
- Demonstrate knowledge of strategies for teaching workplace skills.

Suggested Hours:

6 hours

Theoretical Objectives:

1. Identify the different roles played by a workplace mentor.

2. Identify strategies to create a supportive learning environment.

3. Identify techniques for effective communication as a mentor.
   i) constructive feedback
   ii) active listening
   iii) leading meetings and one-on-one sessions

4. Describe the steps in teaching a skill.
   i) identifying the point of lesson
   ii) linking the lesson
   iii) demonstrating the skill
   iv) providing practice
   v) giving feedback
   vi) assessing skill and progress

5. Identify strategies to assist in teaching a skill while meeting individual learning needs.
   i) principles of instruction
   ii) coaching skills

6. Explain how to adjust a lesson for various situations.

Practical Objectives:

N/A