great plains college

POWER ENGINEERING (FOURTH CLASS)

8-MONTH CERTIFICATE (SAIT) • KINDERSLEY

CAREER OPPORTUNITIES

Power engineers operate and maintain reactors, turbines, boilers, generators, stationary engines and auxiliary equipment to generate electrical power and to provide heat, light, refrigeration and other utility services for commercial, industrial and institutional buildings and other work sites.

They are employed by power generation plants, electrical power utilities, heavy oil upgraders and gas processing plants, manufacturing plants, mines, hospitals, universities and government and commercial establishments.

EARNING POTENTIAL

In 2016, the average annual wage range for full-time power engineers or process operators in Saskatchewan was $66,100 - $99,000 according to the Saskatchewan Ministry of the Economy. Employees may earn more or less depending on their employer, location, size of company, level of training, experience and hours worked.

WHAT YOU WILL LEARN

This program covers basic principles of mathematics, mechanics, thermodynamics, boiler construction, combustion, boiler design and fittings, welding, compression, refrigeration, boiler operation and feed water treatment.

You will work through the 30 SAIT Fourth Class Power Engineering modules (PWEN 202 and PWEN 203), a one-week practicum and a 160-hour SIIT accredited power lab in Meadow Lake. Successful completion of the SAIT Part A and Part B course and exams, and 200 verified steam hours (earned through the 160-hour power lab and practicum) satisfies the Technical Safety Authority of Saskatchewan (TSASK)'s steam time requirements at the Fourth Class level. Students will have opportunity to write the TSASK provincial exams prior to graduation.
Optional safety courses will also be offered.

As a graduate of this full-time program, you may go straight into the workforce or enrol in the SAIT Third Class Power Engineering program once you have passed your TSASK exams.

ENTRANCE REQUIREMENTS

- Grade 12 certification including Foundations of Math 30 or Pre-Calculus 30
- English language requirement

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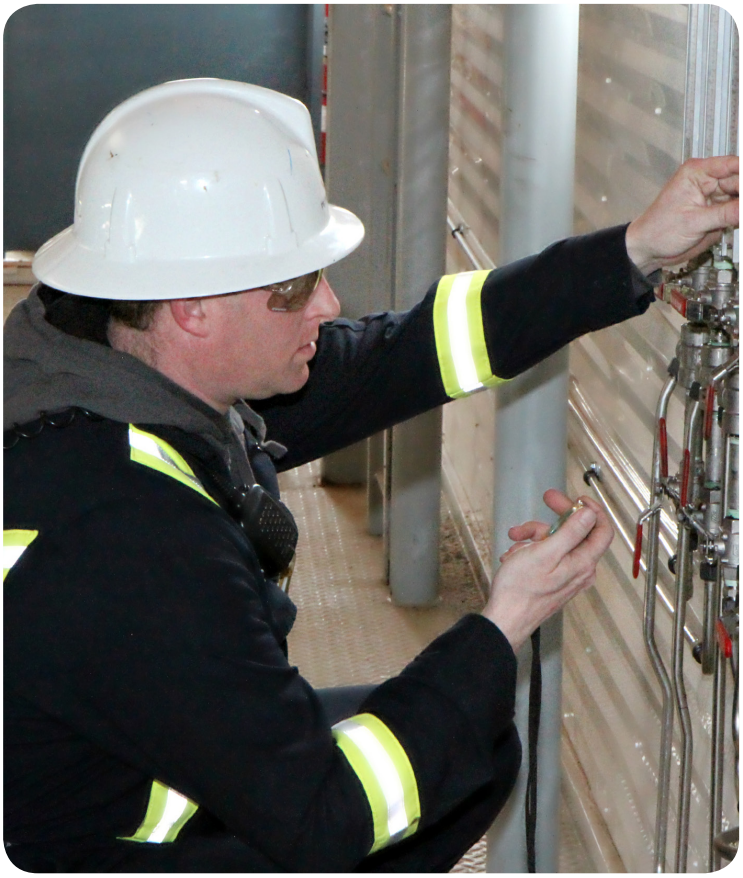

COURSE LIST

PART A1
- Applied Mathematics
- Elementary Mechanics
- Elementary Thermodynamics
- Sketching & Administration
- Codes & Standards
- Workplace Hazardous Materials
- Safety
- Plant Fire Protection

PART A2
- Environment
- Materials & Welding
- Piping
- High Pressure Boiler Design
- Draft, Combustion & Pressure Boiler Fittings
- High Pressure Boiler Operations
- Feedwater Treatment

PART B1
- Prime Movers
- Pumps & Compressors
- Lubrication
- Electricity
- Controls & Instrumentation
- Heating Boilers
- Steam & Water Heating Systems

PART B2
- Heating Boiler & Heating System Controls
- Auxiliary Building Systems
- Vapour Compression Refrigeration
- Absorption Refrigeration
- Air Conditioning
- Air Conditioning Systems
- Boiler Maintenance
- Types of Plants

Visit www.greatplainscollege.ca/programs-courses for detailed course descriptions.

SCHOLARSHIP ELIGIBLE

Apply before April 30, you may be eligible for a $500-$5,000 Entrance Scholarship. Apply before June 30 if you are in Grade 11 and have a 70% average and you are eligible for a $1,000 Early Entrance Award.

FIND OUT MORE

To find out more about the Power Engineering Fourth Class program, book an appointment with a student adviser today.

Toll-free: 1 (866) 296-2472
Kindersley: (306) 463-6431
Email: info@greatplainscollege.ca

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