



## NBCC Full Time Programs

2008/2009 Academic Calendar

### **POWER ENGINEERING TECHNOLOGY (CO-OP)**

#### **Available At:**

- NBCC Saint John Campus Beginning in September

#### **Program Duration:**

The requirements for this diploma program may be achieved within two years of full-time study.

#### **Program of Studies:**

Area of study include:

- Power Systems
- Thermodynamics
- Fluid Handling Systems - Fluid Mechanics
- Strength of Materials
- Rotating Electrical Machines
- Electro-Technology
- Troubleshooting Procedures
- Communication
- Mathematics
- Engineering Economics and Management
- Sciences
- Safety
- Computers

#### **Program Overview:**

Power engineering technologists participate in the design, production and installation of power equipment and systems, and control the operation of boilers, electrical generators and plant auxiliaries.

The first year of the program provides the opportunity to acquire the fundamental engineering skills and academic background necessary to work in a power plant or of similar job setting. Theoretical courses and laboratory work in thermodynamics, applied mechanics, and electro-technology ensure that this requirement is met. Some courses are common and may be used as credit courses for other technology options.

The second year provides the student with a more advanced understanding of power engineering. This is achieved by the development of skills in analytical and diagnostic techniques applied to power engineering problem solving, a study of power plant management principles, and the opportunity to work with a minimum of professional guidance.

Work attachments with industry are mandatory to provide a measure of on-the-job exposure and training.

When available, co-op students are placed in productive work positions and may be paid for their efforts while the employer and representative from the campus monitor progress.

#### **Admission Requirements:**

- High School Diploma or Adult High School Diploma or GED Diploma of High School Equivalency
- Grade 11 Mathematics Parts A and B (Level 2)
- One (1) additional science (Chemistry or Physics)-Grade 11 or 12 (Level 2)

#### **Employment Opportunities:**

Graduates who successfully complete this program may be employed in modern nuclear and conventional power plants, pulp and paper mills, oil production and refining, food and fish processing industries, marine industries, municipal treatment plants, and government inspection services.

#### **Specific Considerations:**

Consult your local campus for courses that provide the prerequisites for technology programs at New Brunswick Community College.

The Canadian Council of Technicians and Technologists nationally accredits this program at the technician level.

Upon the successful completion of this program and with two years of acceptable work experience, the student may be eligible for certification by the New Brunswick Society of Certified Engineering Technicians and Technologists.

Many universities give credit for courses completed in this program; however, assessment is normally completed on an individual basis.

Under existing articulation agreements, graduates of this nationally accredited engineering technician program can receive credits toward a Bachelor of Technology degree at the Marine Institute of Memorial University and Cape Breton University, and a Bachelor of Engineering at Lakehead University.

Upon the successful completion of the first year courses, students may challenge the Standardized Power Engineering examination (SOPEEC) for 4th Class Power Engineers in New Brunswick. Upon the successful completion of the second year courses, graduates may challenge the Standardized Power Engineering examination for 3rd Class Power Engineers in New Brunswick. Graduates who are successful on 4th and 3rd class examinations will be eligible to write the Standardized Power Engineering examination for Part "A" 2nd Class Power Engineers in New Brunswick.

Students accepted into this program may be eligible for financial awards offered through the J.D. Irving Limited Training Incentives Program.

NOTE: Applicants are recommended to participate in a standardized aptitude test. Eligibility for co-op and employment opportunities are determined on the basis of the scores for certain employers.

 [Apply for this program!](#)