

## DIPLOMA

- Three years
- September start
- Corner Brook Campus

### COURSES

**CODE**      **TITLE**      **Hrs/wk**  
**Semester 1 and 2 - Refer to Engineering Technology (First Year)**

| <b>Semester 3 (Technical Intersession I)</b> |  | <b>Cr</b> | <b>Le</b> | <b>La</b> |
|--|--|-----------|-----------|-----------|
| AE1200                                       | Electronic Devices                           | 5         | 7         | 4         |
| CI1310                                       | Electrical/Electronic Fabrication Techniques | 3         | 4         | 5         |
| ET2100                                       | Electrotechnology                            | 3         | 5         | 3         |

| <b>Semester 4</b> |                                    | <b>Cr</b> | <b>Le</b> | <b>La</b> |
|-------------------|------------------------------------|-----------|-----------|-----------|
| AE2300            | Analog Electronics I               | 4         | 3         | 3         |
| CE2700            | Antennas & Microwaves              | 4         | 3         | 3         |
| CT2300            | Applied Programming                | 4         | 3         | 2         |
| DP1100            | Digital Electronics                | 4         | 3         | 2         |
| DR2410            | Electronic Computer Aided Design I | 2         | 1         | 2         |
| MA2100            | Mathematics                        | 5         | 5         | 0         |

| <b>Semester 5</b> |                                  | <b>Cr</b> | <b>Le</b> | <b>La</b> |
|-------------------|----------------------------------|-----------|-----------|-----------|
| AE2301            | Analog Electronics II            | 4         | 3         | 3         |
| CE2250            | Electronic Analog Communications | 4         | 3         | 3         |
| CI1100            | Electronic Instrumentation       | 3         | 2         | 2         |
| CM2300            | Report Writing                   | 2         | 2         | 0         |
| DP2400            | Digital/Microprocessors          | 4         | 3         | 2         |
| DR2411            | Electronics CADD II              | 2         | 1         | 2         |
| MA2101            | Mathematics                      | 5         | 5         | 0         |

| <b>Semester 6 (Technical Intersession II)</b> |  | <b>Cr</b> | <b>Le</b> | <b>La</b> |
|---|--|-----------|-----------|-----------|
| AE2210  | Power Control Devices                      | 3         | 3         | 6         |
| AE2400  | Problem Solving Electronic Troubleshooting | 2         | 0         | 4         |
| CM2200  | Oral Communications                        | 2         | 2         | 0         |
| EC1700  | Engineering Economics                      | 2         | 5         | 0         |

| <b>Semester 7</b> |                                | <b>Cr</b> | <b>Le</b> | <b>La</b> |
|-------------------|--------------------------------|-----------|-----------|-----------|
| AE3100            | Analog Integrated Circuits     | 4         | 3         | 3         |
| AE3300            | Industrial Electronics I       | 4         | 3         | 2         |
| CE3600            | Digital Communication I        | 4         | 3         | 3         |
| DP3300            | Microprocessor Interfacing     | 4         | 3         | 3         |
| MP2400            | Network Analysis               | 5         | 5         | 0         |
| PR2650            | Technological Thesis (Seminar) | 0         | 1         | 0         |

| <b>Semester 8</b> |                                | <b>Cr</b> | <b>Le</b> | <b>La</b> |
|-------------------|--------------------------------|-----------|-----------|-----------|
| AE3301            | Process Control                | 4         | 3         | 3         |
| CE3601            | Digital Communications II      | 4         | 3         | 3         |
| CG3400            | Engineering Management         | 3         | 3         | 0         |
| CP1150            | Visual Basic                   | 4         | 3         | 3         |
| CP2170            | Windows Server Management      | 4         | 3         | 3         |
| CT3120            | PC Configuration               | 4         | 3         | 3         |
| PR2651            | Technological Thesis (Project) | 3         | 2         | 3         |

## ENGINEERING TECHNOLOGY

# Electronics Engineering Technology (General)

The three year Electronics Engineering Technology Program is general in nature to ensure graduates will have access to job opportunities in a variety of areas, including: telecommunications, software programming, networking, computer aided design, industrial instrumentation, and process control.

Graduates completing this program are automatically eligible for membership in the Association of Engineering Technicians and Technologists of Newfoundland (AETT), as well as any similar association in Canada. In addition, graduates can apply to Lakehead University and if accepted, receive full credit toward an engineering degree.

### ACCREDITATION

This program is accredited by the Canadian Technology Accreditation Board under the mandate of the Canadian Council of Technicians and Technologists.

The academic credentials of graduates of accredited technology programs are recognized internationally by the signatories of the Sydney Accord.

**Note:** This program may not be suitable for applicants who do not have normal color perception.

### OBJECTIVES

The student will be able to:

1. Develop a high level of skill in the application of electronic principles.
2. Analyze and design electronic systems using computer aided design software or traditional workbench.
3. Configure and design computer circuits and systems.
4. Assemble, maintain and troubleshoot analog and digital communication systems.
5. Install, configure and maintain industrial instrumentation and process central equipment.
6. Assemble, maintain and troubleshoot computer networks.
7. Work and communicate with professionals, as well as supervise the work of skilled technicians.
8. Think and work independently.

### CURRICULUM

General education consisting of Communication Skills (oral and written), Mathematics, Physics, Chemistry, Electrotechnology, Engineering Graphics, Technology Awareness and Student Success.

Specific education in the theory and application of analog and digital electronics with a specialized emphasis on Telecommunications, Computer Programming and Networking, Microprocessor Interfacing, and Industrial Process Control.

Practical education employing labs and shops focused on installation, configuration, operation and maintenance training associated with electronic instrumentation, digital communications, wireless systems, programmable logic controllers, process control loops, transmitter calibration, microcontrollers, computer networks, and cabling systems.

### EMPLOYMENT OPPORTUNITIES

The Electronics Engineering Technology program is designed to produce a well rounded student who will be capable of working in a variety of electronic related fields. Past graduates have obtained employment in the areas of telecommunications, pulp and paper, computer sales, service and support, provincial agencies, federal agencies, consulting firms, business equipment servicing, school boards, industrial sales, NAVCAN, R&D and power companies.

Graduates with two years of appropriate work experience may receive the designation of Professional Technologist (P. Tech).

