# Table of Contents

President’s Message 2  
About the College 3  
Programs by Campus 4  
Campus Directory 5  
Calendar of Events 2014-2015 5  
Administration List 7  
Admissions Regulations 8  
Academic Regulations 9  
Awards 14  
Fees and Charges 15  
Student Services 17  
Student Housing 18  
Contract Training 18  
Continuing Education 20  
Office of Distributed Learning 20  
International Students 22  
International Contracts 23  
Alumni and Advancement 24

## School of Academics, Applied Arts and Tourism

### Academics
- Aboriginal Bridging Program 26  
- Comprehensive Arts & Science (CAS) 26  
- Comprehensive Arts & Science (CAS) Transition 27  
- Community Recreation Leadership 28  
- Community Studies 28

### Applied Arts
- Digital Animation 29  
- Early Childhood Education 30  
- Early Childhood Education By Distance Education 31  
- Film and Video Production 32  
- Graphic Communications 32  
- Graphic Design 33  
- Journalism 34  
- Journalism (Post Diploma) 35  
- Music Industry and Performance 35  
- Sound Recording & Production 36  
- Textiles: Craft & Apparel Design 36  
- Video Game Design 37

### Tourism
- Hospitality Tourism Management 38

## School of Business and Information Technology

### Business
- Business Administration 40  
- Business Administration (Accounting) 40  
- Business Administration (General) 41  
- Business Administration (Human Resource Management) 41  
- Business Administration (Marketing) 42  
- Business Administration-General (DL) 43  
- Business Administration-HR Management (DL) 43  
- Business Management 44  
- Business Management (Human Resource Management) 45  
- Business Management (Marketing) 45  
- Office Administration 46  
- Office Administration (Executive) 47  
- Office Administration (Legal) 47  
- Office Administration (Medical) 47  
- Office Administration (Records and Information Management) 48

### Information Technology
- Computer Systems and Networking 48  
- Information Management (Post Diploma) 49  
- Programmer Analyst (Business) Co-op 49  
- Software Development 50  
- Web Development 51

### School of Engineering Technology and Natural Resources

### Engineering Technology
- Architectural Engineering Technology 53  
- Chemical Process Engineering Technology (Co-op) 54  
- Civil Engineering Technology (Co-op) 55  
- Computing Systems Engineering Technology (Co-op) 56  
- Electrical Engineering Technology (Power & Controls) Co-op 57  
- Electronics Engineering Technology (Biomedical) 58  
- Engineering Technology (First Year) 59  
- Geomatics/Surveying Engineering Technology (Co-op) 60  
- Industrial Engineering Technology (Co-op) 61  
- Instrumentation and Controls Engineering Technology 62  
- Mechanical Engineering Technology 63  
- Mechanical Engineering Technology (Manufacturing) Co-op 63  
- Petroleum Engineering Technology (Co-op) 65  
- Process Operations Engineering Technology 66  
- Safety Engineering Technology (Post Diploma) Co-op 67  
- Welding Engineering Technician 67

### Natural Resources
- Fish and Wildlife Technician 68  
- Forest Resources Technician 69  
- GIS Applications Specialist (Post Diploma) 70

## School of Health Sciences

### School of Health Sciences
- Diagnostic Ultrasonography 73  
- Home Support Worker/Personal Care Attendant 73  
- Medical Laboratory Assistant 73  
- Medical Laboratory Sciences 74  
- Medical Radiography 75  
- Practical Nursing 76  
- Primary Care Paramedicine 76  
- Rehabilitation Assistant (OTA & PTA) (DL) 77  
- Respiratory Therapy 78

## School of Industrial Trades

### Aircraft Maintenance Engineering Technician 81  
### Aircraft Structural Repair Technician 81  
### Automotive Service Technician 82  
### Baker 82  
### Cabinetmaker 83  
### Carpenter 83  
### Commercial Driver 84  
### Construction / Industrial Electrician 84  
### Cook 85  
### Hairstylist 86  
### Heavy Duty Equipment Technician 86  
### Heavy Equipment Operator 87  
### Heritage Carpentry 87  
### Industrial Mechanic (Millwright) 88  
### Instrumentation and Control Technician 88  
### Machinist 89  
### Metal Fabricator (Fitter) 90  
### Mining Technician 90  
### Mobile Crane Operator 91  
### Motor Vehicle Body Repairer (Metal And Paint) 91  
### Non-Destructive Testing Technician 92  
### Plumber 93  
### Power Engineer 4th Class 93  
### Powerline Technician (Operating) 94  
### Process Operator 94  
### Refrigeration & Air Conditioning Mechanic 95  
### Renovation Technician 95  
### Sheet Metal Worker 96  
### Small Equipment Service Technician 96  
### Steamfitter / Pipefitter 97  
### Truck and Transport Mechanic 98  
### Welder 98  
### Welder / Metal Fabricator (Fitter) 99
President’s Message

Welcome to College of the North Atlantic!

I invite you to explore our 2014-2015 Academic Calendar to see what CNA has to offer. Our programs and training have helped thousands of graduates achieve rewarding and wonderful careers regionally, nationally and internationally and they can do the same for you.

The college’s mandate is to provide you with the knowledge and skills students need to embark on a career and help meet the labour force needs of our province’s businesses and industries – and we hold fast on that mandate. We take a proactive approach in making our programming decisions and we have every confidence those choices will have a lasting impact on the lives of our current and future students, and the people of this province.

We focus on the success of our students by working closely with industry and community stakeholders, ensuring our program offerings meet the demands of an ever-changing workplace and economy. The educational experience at CNA is more than what is learned in classrooms, labs and workshops. Our faculty and staff take an active role in shaping the future of our students and we are proud of the nurturing environment we provide both inside and outside the classroom.

In addition to working with industry, College of the North Atlantic partners with a number of universities and post-secondary institutions throughout North America and around the world to provide graduates with the ability to further their education through credit transfer agreements. These arrangements allow students to enter degree programs with advanced standing, cutting years off the time it takes them to earn a degree and saving them money in the process.

I hope your CNA experience will be both rich and rewarding, and that it will serve you as well as it has the countless others who have chosen CNA throughout our history!

Ann Marie Vaughan
President & CEO
College of the North Atlantic
About the College

College of the North Atlantic is Newfoundland and Labrador’s public college. It is one of the largest post-secondary educational and skills training centres in Atlantic Canada, offering over 100 full-time diploma and certificate programs in:

- Academics, Applied Arts and Tourism
- Business and Information Technology
- Engineering Technology and Natural Resources
- Health Sciences
- Industrial Trades

The college also offers a full range of more than 300 part-time courses.

Enacted by the House of Assembly, through the College Act, 1996, and headquartered in Stephenville on the Province’s west coast, the college operates 17 campuses across the Province. The public college has brought together and built upon the best programs, traditions, values and vision from the predecessor regional colleges: Cabot College, Labrador College, Eastern College, Central Regional Community College and Westviking College. The focus of the college goes beyond the more traditional approaches to education and training, serving students of all ages and interests. The college offers continuous student intake, self-paced learning, and individualized specially designed contract training programs and distributed learning opportunities.

Every year approximately 3000 graduates complete career-oriented certificate and diploma programs ranging from one to three years, preparing them for employment in today’s competitive work environment.

Important Notice

This calendar is intended to assist readers to understand the academic and administrative structure, policies and procedures of College of the North Atlantic (“the college”) and to provide information about current course offerings at the college.

Various academic and administrative departments have submitted the material contained in this publication. All general information and course references have been checked for accuracy, but there may be inconsistencies or errors. If you become aware of any, please bring these to the attention of the college Registrar. The college reserves the right to make changes in the information contained in this publication without prior notice.

Students are responsible for familiarizing themselves with the specific information, rules and regulations of the college, as well as the specific requirements of each diploma, certificate or other recognition sought. While advice and counseling are available, it is the responsibility of each student to ensure that the courses selected at registration are appropriate to the requirements of the student’s chosen program.

If there is an inconsistency between the general academic regulations and policies published in this Calendar, and such regulations and policies as are established by resolution of the Board of Governors or the college’s administration, the version of such material as established by the Board of Governors or the college’s administration will prevail.

By the act of registration each student becomes bound by the policies and regulations of College of the North Atlantic.

College of the North Atlantic disclaims all responsibility and liability for loss or damage suffered or incurred by any student or other party as a result of errors in, interruptions to, or delays or termination of its services, courses, classes or operations, which are caused by events beyond the reasonable control of the college, including force majeure, fire, flood, riot, war, strike, lock-out, damage to college property, financial exigency, computer failure or the incompatibility of college computing systems with other systems.
Programs by Campus

**BAIE VERTE CAMPUS**
- Construction/Industrial Electrician
- Hairstylist
- Industrial Mechanic (Millwright)
- Welder

**BAY ST. GEORGE CAMPUS**
- Automotive Service Technician
- Baker
- Business Administration
  - Accounting
  - Human Resource Management
  - Marketing
- Commercial Driver
- Community Studies
- Comprehensive Arts & Science (CAS)
  - Transition
- Construction/Industrial Electrician
- Cook
- Construction/Industrial Electrician
- Ethernet
- Film and Video Production
- Hairstylist
- Heavy Duty Equipment Technician
- Heavy Equipment Operator
- Heavy Equipment Operator (Jan. 2015 Intake)
  - Dual campus offering with St. Anthony
- Journalism
- Journalism (Post Diploma)
- Mobile Crane Operator
- Office Administration
  - Certificate
  - Executive
  - Records & Information Management
- Powerline Technician (Operating)
- Primary Care Paramedicine
- Small Equipment Service Technician
- Sound Recording & Production
- Truck and Transport Mechanic
- Video Game Design

**BONAVISTA CAMPUS**
- Construction/Industrial Electrician
- Cook
- Heavy Equipment Operator
- Plumber

**BURIN CAMPUS**
- Comprehensive Arts & Science (CAS)
  - Transfer: College-University
- Construction/Industrial Electrician
- Cook
- Instrumentation and Control Technician
- Metal Fabricator (Fitter)
- Office Administration
  - Certificate
  - Executive
- Sheet Metal Worker
- Welder
- Welding Engineering Technician

**CARBONEAR CAMPUS**
- Business Administration (Next intake is 2015)
  - Accounting
  - Human Resource Management
- Carpenter
- Community Studies
- Comprehensive Arts & Science (CAS)
  - Transfer: College-University
  - Transition
- Construction/Industrial Electrician
- Engineering Technology (First Year)

**CLARENVILLE CAMPUS**
- Business Administration
  - Accounting
  - Human Resources Management
  - Carpenter
- Comprehensive Arts and Science (CAS)
  - Transition
- Office Administration
  - Certificate
  - Executive
- Practical Nurse
- Steamfitter/Pipefitter

**CORNER BROOK CAMPUS**
- Business Administration
  - Accounting
  - Marketing
- Civil Engineering Technology Co-op
- Comprehensive Arts & Science (CAS)
  - Transition
- Computer Systems and Networking
- Construction/Industrial Electrician
- Early Childhood Education
- Engineering Technology (First Year)
- Fish and Wildlife Technician
- Forest Resources Technician
- GIS Applications Specialist (Post Diploma)
- Home Support Worker/Personal Care Attendant
- Industrial Mechanic (Millwright)
- Office Administration
  - Certificate
  - Executive
- Power Engineer (4th Class)
- Practical Nurse
- Process Operations Engineering Technology
- Software Development
- Welder

**GANDER CAMPUS**
- Aircraft Maintenance Engineering Technician
- Aircraft Structural Repair Technician
- Automotive Service Technician
- Comprehensive Arts and Science (CAS)
  - Transition
- Engineering Technology (First Year)
- Hairstylist
- Instrumentation and Control Technician

**GRAND FALLS-WINDSOR CAMPUS**
- Business Administration
  - Accounting
  - Human Resource Management
- Business Management
  - Accounting
  - Human Resource Management
- Community Studies
- Comprehensive Arts and Science (CAS)
  - Transfer: College-University
  - Transition
- Home Support Worker/Personal Care Attendant
- Medical Laboratory Assistant
- Office Administration
  - Certificate
  - Executive
- Plumber
- Practical Nurse
- Renovation Technician (Next intake is 2015)

**HAPPY VALLEY-GOOSE BAY CAMPUS**
- Aboriginal Bridging
- Carpenter
- Comprehensive Arts and Science (CAS)
  - Transfer: College-University
  - Transition
- Construction/Industrial Electrician
- Cook
- Early Childhood Education
- Heavy Duty Equipment Technician
- Industrial Mechanic (Millwright)
- Powerline Technician (Operating)
- Practical Nurse
- Welder

**LABRADOR WEST CAMPUS**
- Comprehensive Arts and Science (CAS)
  - Transfer: College-University
  - Transition
- Construction/Industrial Electrician
- Industrial Mechanic (Millwright)
- Mining Technician
- Office Administration
  (Next intake is 2015)
  - Certificate
  - Executive
- Welder

**PLACENTIA CAMPUS**
- Heavy Duty Equipment Technician
- Heavy Equipment Operator
- Industrial Mechanic (Millwright)
- Machinist
  - Dual campus offering with Prince Philip Drive
- Process Operator
- Welder

**PORT AUX BASQUES CAMPUS**
- Business Administration
  - General
- Cabinetmaker
- Non-Destructive Testing Technician
- Office Administration
  - Certificate
  - Executive
- Welder/Metal Fabricator (Fitter)

**PRINCE PHILIP DRIVE CAMPUS**
- Automotive Service Technician
- Business Administration
  - Accounting
  - General
  - Human Resource Management
  - Marketing
- Business Management
  - Accounting
  - Human Resource Management
  - Marketing
- Comprehensive Arts and Science (CAS)
  - Transition
- Community Recreation Leadership
- Computer Systems and Networking
- Cook
- Diagnostic Ultrasonography (Post Diploma)
- Early Childhood Education
- Early Childhood Education by Distance Education
- Graphic Communications
- Graphic Design
- Home Support Worker/Personal Care Attendant
Hospitality Tourism Management
Machinist
  • Dual campus offering with Placentia
Medical Laboratory Sciences
Medical Radiography
Motor Vehicle Body Repairer (Metal and Paint)
Office Administration
  • Certificate
  • Executive
  • Legal
  • Medical
  • Records & Information Management
Primary Care Paramedicine
Programmer Analyst (Business) Co-op
Respiratory Therapy
Textiles: Craft & Apparel Design
Welder

RIDGE ROAD CAMPUS
Architectural Engineering Technology
Chemical Process Engineering Technology Co-op
Civil Engineering Technology Co-op
Computing Systems Engineering Technology Co-op
Electrical Engineering Technology
  • Power & Controls Co-op
Electronics Engineering Technology
  • Biomedical Engineering Technology (First Year)
Geomatics/Surveying Engineering Technology Co-op
Industrial Engineering Technology Co-op

RIDGE ROAD CAMPUS (CONT’D)
Instrumentation and Controls Engineering Technology
Mechanical Engineering Technology
  • Manufacturing Co-op
Petroleum Engineering Technology Co-op
Refrigeration and Air Conditioning Mechanic
Safety Engineering Technology
(Post Diploma) Co-op

SEAL COVE CAMPUS
Comprehensive Arts and Science (CAS)
  • Transition (Day)
  • Transition (Evening)
Construction/Industrial Electrician
Cook
Instrumentation and Control Technician
Powerline Technician (Operating)
Sheet Metal Worker

ST. ANTHONY CAMPUS
Commercial Driver
Comprehensive Arts and Science (CAS)
  • Transition
Construction/Industrial Electrician
Heavy Equipment Operator (Jan. 2015 Intake)
  • Dual campus offering with Bay St. George
Office Administration
  • Executive
Powerline Technician (Operating)

VIA DISTRIBUTED LEARNING
Business Administration Certificate
Business Administration Diploma
General
  • Human Resource Management
Business Management Diploma
Human Resource Management (3rd Year)
Early Childhood Education Diploma
Information Management (Post Diploma)
Office Administration Certificate
Office Administration Diploma
  • Executive
  • Medical
Rehabilitation Assistant (OTA & PTA) Diploma
Web Development Diploma

Campus Directory

Baie Verte Campus
1 Terra Nova Road
Baie Verte, NL A0K 1B0
tel: (709) 532-8066
fax: (709) 532-4624

Bay St. George Campus
DSB Fowlow Building
432 Massachusetts Drive
P. O. Box 5400
Stephenville, NL A2N 2Z6
tel: (709) 643-7838
fax: (709) 643-7734

Bonavista Campus
301 Confederation Drive
P. O. Box 670
Bonavista, NL A0C 1B0
tel: (709) 468-2610
fax: (709) 468-2004

Burin Campus
105 Main Street
P. O. Box 370
Burin Bay Arm, NL A0E 1G0
tel: (709) 891-5600
fax: (709) 891-2256

Carbonear Campus
4 Pike’s Lane
Carbonear, NL A1Y 1A7
tel: (709) 596-6139
fax: (709) 596-2688

Clarenville Campus
69 Pleasant Street
Clarenville, NL A5A 1V9
tel: (709) 466-6900
fax: (709) 466-2771

Corner Brook Campus
141 O’Connell Drive
P. O. Box 822
Corner Brook, NL A2H 6H6
tel: (709) 637-8530
fax: (709) 634-2126

Gander Campus
1 Magee Road
P. O. Box 395
Gander, NL A1V 1W8
tel: (709) 651-4800
fax: (709) 651-4854

Grand Falls-Windsor Campus
5 Corner Avenue
Grand Falls-Windsor, NL A2A 1X3
tel: (709) 292-5400
fax: (709) 489-4180

Happy Valley-Goose Bay Campus
219 Hamilton River Road
P. O. Box 1720, Station “B”

Happy Valley-Goose Bay Bay
NL A0P 1E0
tel: (709) 896-6300
fax: (709) 896-3733

Labrador West Campus
1600 Nichols-Adam Highway
Labrador City, NL A2V 0B8
tel: (709) 944-7210
fax: (709) 944-6581

Placentia Campus
1 Roosevelt Avenue
P. O. Box 190
Placentia, NL A0B 2Y0
tel: (709) 227-2037
fax: (709) 227-7185

Port aux Basques Campus
59 Grand Bay Road
P. O. Box 760
Port aux Basques, NL A0M 1C0
tel: (709) 695-3582
fax: (709) 695-2963

Prince Philip Drive
1 Prince Philip Drive
P. O. Box 1693
St. John’s, NL A1C 5P7
tel: (709) 758-7284
fax: (709) 758-7304

Ridge Road Campus
153 Ridge Road
P. O. Box 1150
St. John’s, NL A1C 6L8
tel: (709) 758-7000
fax: (709) 758-7126

Seal Cove Campus
1670 Conception Bay Highway
P. O. Box 19003, Station Seal Cove
Conception Bay South, NL A1X 5C7
tel: (709) 744-2047
fax: (709) 744-3929

St. Anthony Campus
83-93 East Street
P. O. Box 550
St. Anthony, NL A0K 4S0
tel: (709) 454-3559
fax: (709) 454-8808

St. John’s Campus
69 Pleasant Street
Clarenville, NL A5A 1V9
tel: (709) 466-6900
fax: (709) 466-2771

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Clarenville, NL A5A 1V9
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fax: (709) 466-2771

Toll free: 1-888-982-2268
www.cna.nl.ca
info@cna.nl.ca

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Conception Bay South, NL A1X 5C7
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fax: (709) 744-3929

St. Anthony Campus
83-93 East Street
P. O. Box 550
St. Anthony, NL A0K 4S0
tel: (709) 454-3559
fax: (709) 454-8808

Distributed Learning Services
69 Pleasant Street
Clarenville, NL A5A 1V9
tel: (709) 466-6961
toll free: 1-877-465-2250
fax: (709) 466-4640

PROGRAM ENQUIRY COLLEGE-WIDE
toll free: 1-888-982-2268
www.cna.nl.ca
info@cna.nl.ca
Note: The schedule contains the dates as they affect the College as a whole. Within these dates, individual campuses will set their own registration schedules, graduation dates and other significant time frames. Please check with the campus concerned for the detailed Calendar.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 4 - 15</td>
<td>On-Line Registration Period - Fall Semester</td>
</tr>
<tr>
<td>August 5</td>
<td>Registration begins – DL Fall Semester</td>
</tr>
<tr>
<td>September 1</td>
<td>College CLOSED - Labour Day</td>
</tr>
<tr>
<td>September 2</td>
<td>Classes begin - Fall Semester</td>
</tr>
<tr>
<td>September 8</td>
<td>On-Line Classes begin - DL Fall Semester</td>
</tr>
<tr>
<td>September 16</td>
<td>Last day to add courses - Fall Semester</td>
</tr>
<tr>
<td>September 23</td>
<td>Last day to opt out of Health &amp; Dental - Fall Semester</td>
</tr>
<tr>
<td>September 30</td>
<td>Fees Due - Fall Semester</td>
</tr>
<tr>
<td>October 13</td>
<td>College CLOSED – Thanksgiving Day</td>
</tr>
<tr>
<td>October 28</td>
<td>Last day to drop courses without academic prejudice - Fall Semester</td>
</tr>
<tr>
<td>November 10</td>
<td>Fall Semester Break</td>
</tr>
<tr>
<td>November 11</td>
<td>College CLOSED – Remembrance Day</td>
</tr>
<tr>
<td>December 1 - 12</td>
<td>On-Line Registration Period - Winter Semester</td>
</tr>
<tr>
<td>December 2</td>
<td>Registration begins – DL, Winter Semester</td>
</tr>
<tr>
<td>December 18</td>
<td>Last day of classes/examinations - Fall Semester</td>
</tr>
<tr>
<td>December 19</td>
<td>Christmas Break</td>
</tr>
<tr>
<td>January 5</td>
<td>Classes begin - Winter Semester</td>
</tr>
<tr>
<td>January 19</td>
<td>Last day to add courses - Winter Semester</td>
</tr>
<tr>
<td>January 26</td>
<td>Last day to opt out of Health &amp; Dental - New Learners, Winter Semester</td>
</tr>
<tr>
<td>February 2</td>
<td>Fees Due - Winter Semester</td>
</tr>
<tr>
<td>March 2</td>
<td>Last day to drop courses without academic prejudice - Winter Semester</td>
</tr>
<tr>
<td>March 2 - 6</td>
<td>Winter Semester Reading Break</td>
</tr>
<tr>
<td>April 1</td>
<td>Registration begins – DL Intersession</td>
</tr>
<tr>
<td>April 3</td>
<td>College CLOSED - Good Friday</td>
</tr>
<tr>
<td>April 6 - 17</td>
<td>On-Line Registration Period - Intersession</td>
</tr>
<tr>
<td>April 27</td>
<td>Last day of classes/examinations - Winter Semester</td>
</tr>
<tr>
<td>April 29</td>
<td>Classes begin - Intersession, Continuing Programs</td>
</tr>
<tr>
<td>May 6</td>
<td>Last day to add courses - Intersession, Continuing Programs</td>
</tr>
<tr>
<td>May 11</td>
<td>Classes begin - Technical Intersession</td>
</tr>
<tr>
<td>May 13</td>
<td>Fees Due - Intersession</td>
</tr>
<tr>
<td>May 15</td>
<td>Last day to add courses - Technical Intersession</td>
</tr>
<tr>
<td>May 18</td>
<td>College CLOSED - Victoria Day</td>
</tr>
<tr>
<td>May 20</td>
<td>Last day to opt out of Health &amp; Dental - New Learners, Spring Semester</td>
</tr>
<tr>
<td>May 25</td>
<td>Fees Due - Technical Intersession</td>
</tr>
<tr>
<td>May 27</td>
<td>Fees Due - Spring Semester</td>
</tr>
<tr>
<td>June 1</td>
<td>Last day to opt out of Health &amp; Dental - New Learners, Technical Spring Semester</td>
</tr>
<tr>
<td>June 8</td>
<td>Fees Due - Technical Spring Semester</td>
</tr>
<tr>
<td>June 12</td>
<td>Last day for classes/examinations – Intersession, Continuing Programs</td>
</tr>
<tr>
<td>June 22</td>
<td>College CLOSED - Discovery Day</td>
</tr>
<tr>
<td>June 24</td>
<td>Last day to drop courses without academic prejudice - Spring Semester</td>
</tr>
<tr>
<td>June 26</td>
<td>Last day for classes/examinations – Technical Intersession</td>
</tr>
<tr>
<td>July 1</td>
<td>College CLOSED - Canada Day</td>
</tr>
<tr>
<td>July 6</td>
<td>Last day to drop courses without academic prejudice - Technical Spring Semester</td>
</tr>
<tr>
<td>August 14</td>
<td>Last day of classes/examinations - Spring Semester</td>
</tr>
<tr>
<td>August 26</td>
<td>Last day of classes/examinations - Technical Spring Semester</td>
</tr>
</tbody>
</table>

*The Examination Timetable for the CAS Transfer: College-University Program may vary from the above as it is aligned to the MUN Examination Schedule.

The Continuing Programs Intersession includes programs such as Trades and other programs where marks from the Winter Semester are not needed prior to registration.
Administration List

BOARD OF GOVERNORS
Cheryl Stagg, Chair
Yordest Andrews
Patrick Boland
Mark Bradbury
Katelyn Carter
Patricia Dicker
Richard Dillon
Robert Gardner
Roy Hutchings
Bonita Lane-McCarthy
Troy Mitchell
Charles Penwell, Vice-Chair
Beverly Scott
Leona C. Webb
Wade Pinhorn
Edith Hunt, Executive Assistant

HEADQUARTERS
President’s Office
Ann Marie Vaughan, President & CEO
Giselle Borden, Executive Assistant
Geoff Peters, General Counsel
Edith Hunt, Executive Assistant

Corporate Services
John Hutchings, Vice President – Corporate Services / Chief Operating Officer
Mary Tait, Executive Director - Human Resources
Annette Morey, Director – Administration (Finance)
Debbie White, Executive Assistant

Academic
Brian Tobin, Senior Vice President – Academic and Chief Learning Officer (Acting)
Elizabeth Chaulk, Associate Vice President - Student Services
Chris Mercier, Associate Vice President - Strategic Enrollment Management
T.B.D. - Associate Vice President - Campus Operations
Tammy Gale, Executive Assistant

Industry and Community Engagement
Robin Walters, Vice President – Industry and Community Engagement
Dawn Leaman, Executive Assistant
Daniel Wong, Director – China Project
Kevin Deveau, Project Manager – Qatar Project
Vivienne White, Executive Assistant

Deans and Chairs
Mohammad Iqbal, Chair – Applied Research
Joanne O’Leary, Chair - Contract Training & Continuous Education
Theresa Pittman, Chair – Distributed Learning Services and Learning Technologies
Brenda Tobin, Dean – Academics, Applied Arts and Tourism
Mary Vaughan, Dean – Business and Information Technology
T.B.D., Dean – Industrial Trades
Jane Gamberg, Dean – Health Sciences
Brent Howell, Dean – Engineering Technology and Natural Resources

CAMPUS ADMINISTRATORS
Baie Verte Campus
Emily Foster
Bay St. George Campus
Chris Dohaney
Darlene Oake
Bonavista Campus
Marilyn Coles-Hayley
Burin Campus
Stephen Warren
Carbonear Campus
Gary Myrden
Clarenville Campus
Mavis Caines
Corner Brook Campus
Chad Simms
Gander Campus
Fergus O’Brien
Grand Falls-Windsor Campus
Joan Pynn
Happy Valley-Goose Bay Campus
Paul Motty
Labrador West Campus
Richard Sawyer
Placentia Campus
Darrell Clarke
Port aux Basques Campus
Jan Peddle
Prince Philip Drive Campus
John Oates
Trudy Barnes
Conrad Maillet
Ridge Road Campus
Paul Forward
Gary Tulk
Seal Cove Campus
Chris Patey
St. Anthony Campus
Cecil Roberts

Access to Information and Protection of Privacy (ATIPP) Act

College of the North Atlantic is committed to the protection of privacy and confidentiality of our students. The college collects, uses, and discloses your personal information in accordance with the Access to Information and Protection of Privacy (ATIPP) Act and under the authority of the College Act, 1996.

Personal Information

Collection
College of the North Atlantic collects your personal information for the purposes of facilitating admission, registration, academic progression, graduation, alumni relations, student services, and other activities related to our programs and courses. The types of personal information we may collect from you, includes for example, your:
- Contact information (e.g. name, address, e-mail address, telephone number).
- Demographic information (e.g. age, gender, industry, occupation).
- Registration and enrolment information (e.g. educational records, transcripts).
- Proof of identity information (e.g. signature, driver’s licence number).
- Financial information (e.g. credit card number and expiration date, social insurance number).
- Health information (e.g. MCP card number, health insurance).

Use
College of the North Atlantic uses your personal information to deliver our programs and courses and provide services to you. This includes, but is not limited to:
- Assessing an applicant’s suitability for enrollment in our programs and courses.
- Administering academic awards, scholarships, and financial aid.
- Delivering programs and courses.
- Recording academic progress and achievement.
- Providing access to our student services such as Counselling and Personal Development Services, Career Employment Services, Disability Services, Residency Services, and Library Services.
- Maintaining student records.
- Maintaining tuition accounts.
- Collecting payments.
- Issuing tax receipts.
- Administering alumni and development operations.
- Performing program evaluation or statistical and institutional research.
- Communicating with students regarding college business.

Disclosure
College of the North Atlantic collects only as much of your personal information as is necessary to achieve the purposes for which it was collected, for uses consistent with that purpose, or where authorized by the ATIPP Act or another federal or provincial Act. For example, the college may disclose your personal information to the following bodies to facilitate admissions, registration, academic progression, graduation, alumni relations, student services, and other activities related to our programs and courses: College employees and third parties contracted by the college who need the information in the performance of their assigned duties or services.
- Student associations who need the information for administering their services.
Courses with the third digit “7” may require further completion of required credit courses as specified by the college.

4. Show evidence of physical qualification in accordance with the requirements of the program selected, where applicable.

5. In the case of high school students, provide a copy of marks obtained. In the case of ABE learners, provide a Record of Achievement or an equivalent official transcript.

6. Provide further documentation or report for an interview or for testing when required.

7. Provide Certificate of Conduct when required.

High School Definition
Senior high school graduation means the successful completion of required credit courses as specified by the Department of Education.

High School students who complete modified programs and courses with the third digit “6” or alternate courses with the third digit “7” may require further assessment before eligibility is determined. The completion of a modified (or alternate) program or course may prevent the applicant from being accepted into regular college programs. Applications will be referred to the Coordinator of Disability Services.

Admissions Portfolio Guidelines
Definition:
A portfolio is a compilation of materials such as drawings, photographs, paintings, film or videos, writings, prints, collages, ceramics, crafts, textile patterns, audio tapes, musical scores, computer imaging, design or other areas of creativity that reflect the prospective student’s interests, abilities and experience.

Purpose:
The purpose of the portfolio is to establish applicant suitability for the program of study.

General Guidelines:
1. All work in the portfolio should be clearly labeled with the prospective applicant’s name, title of the work, number of pieces, date completed and materials used.
2. The college will only accept portfolios in a proper portfolio folder or case.
3. Portfolios should include a printed listing of the contents of the portfolio.
4. All works should fit into a standard size portfolio case and may be presented in their original form.
5. Large scale, fragile or 3-dimensional work should be submitted in 35 mm colour slide form, as digital images at a resolution of 150 ppi or as colour photographic or digital prints.
6. All visual-related work should be original. An affidavit is required stating that the work is original. All music-related work should be performed by the applicant and reference should be made as to whether or not the work is a. a “cover” of another’s work b. public domain
7. Applicants are advised that they are responsible for the return of submitted materials after they have been reviewed by the Assessment Committee. Applications must include pre-stamped and self-addressed mailing envelopes, prepaid courier invoices, or cheques or money orders to cover postage costs if they wish their work to be returned after review. Portfolios will be destroyed if they are not claimed within one month of the date of notice of the decision of the Assessment Committee. The college assumes no responsibility for loss of or damage to portfolios submitted.

Portfolio Screening:
All portfolios will be reviewed by an Assessment Committee that includes faculty representatives. The Assessment Committee will be looking for the following in a portfolio:
1. Originality of ideas or concepts;
2. Technical skills;
3. Observation and interpretive skills;
4. A variety of media;
5. Presentation and organization of material.

Submission Deadline:
Applications are strongly urged to apply early. Where required, portfolios should be submitted with the application.

Re-admission of Students
Academically Dismissed Students
1. Applications from academically dismissed students will be received at any time but students will not be accepted to return on a full-time basis until a six-month period from the date of dismissal has elapsed.
Students who have been academically dismissed from all programs except the Comprehensive Arts and Science Transition Program will be permitted to register for one course for credit in a certificate or diploma program or for any number of courses in the Comprehensive Arts and Science Transition Program. Students who have been academically dismissed from the Comprehensive Arts and Sciences Transition Program will be permitted to register for one course for credit per semester in a certificate or diploma program.

2. Students who have been academically dismissed from the college on two or more occasions will not be eligible for readmission to the college for a period of two years from the date of dismissal.

3. Students who are required to withdraw from the college under numbers 1 and 2 (above) must apply for readmission and their names will be placed at the end of the existing eligibility list.

**ELIGIBILITY LISTS**

Eligibility lists will be maintained for each program. Candidates will be placed on the eligibility list for first come, first served programs by the date of eligibility provided all entrance requirements are satisfied and all necessary documentation is received, or in the case of programs approved for competitive entry, on the basis of the selection criteria approved for that program.

**SELECTION PROCESSES**

For programs administered under First Come, First Served process

**Original Application:**

1. Applications will be processed on a “first-come, first-served” basis. Each application will be dated on the date of receipt provided that:
   a. The application is correctly completed with all documentation, and
   b. All educational and other requirements are met, and
   c. All required fees are paid.

2. Applicants will be notified immediately upon receipt of their application.

3. Applicants enrolled in their final year of high school will be accepted conditionally pending receipt of final exam results.

4. When accepted, applicants will be asked to confirm in writing their intent to register and will be required to pay a registration fee in advance. If applicants fail to confirm within the time specified their place will go to the applicant next on the eligibility list.

For Engineering Technology programs:

Applicants for First Year Engineering Technology: The college offers a common first year in the Engineering Technology programs. This allows students to attend the first two semesters of an engineering technology program at the campus nearest their hometown. After completing the first two semesters, students then enter the campus which offers the program of their choice, to complete the Spring Technical Intersession and the subsequent years of their program.

Individuals must submit their application to the campus where they intend to complete the first two semesters of their program. This begins a first-come, first-served provincial process which reserves a seat at the designated campus for the appropriate Technical Intersession, and subsequent years of program study. After successful completion of the first two semesters, students progress to the Technical Intersession in the program for which a seat has already been reserved. Students who, after registration, wish to change their program choice MUST apply using the Program Transfer process.

**For programs administered under Competitive Entry**

1. Applications will be processed using a competitive entry process. Each application will be dated on the date of receipt provided that:
   a. The application is correctly completed with all documentation, and
   b. All educational and other requirements are met, and
   c. All required fees are paid.

2. Applicants will be notified immediately upon receipt of their application.

3. Applicants may be required to meet additional program specific competitive entry requirements. Please refer to program applied to for any additional competitive entry admission requirements.

**STUDENT NUMBERS**

1. A student number will be assigned to every student who enters the college either on a full-time or part-time basis.

2. Students will use the number assigned to them regardless of the number of times they register at the college or the campus at which they register.

3. Student numbers must appear on all documents to be added to the student’s academic or financial files.

**ENTRY – NON PROGRAM SPECIFIC**

The only entrance requirement for applicants wishing to apply for a credit course through General Studies is the college prerequisite, if applicable. Applicants must also have reached the legal school-leaving age on the commencement of the course.

Acceptance to any of the courses under General Studies does not constitute a commitment to or admission into any college program.

**ENTRY – PART-TIME STUDENTS**

Students who apply for part-time status in any program must meet all the requirements outlined for full-time status and will be considered only if a vacancy exists after full-time students have been accommodated.

**ENTRY – CONCURRENT STUDIES STUDENTS**

Students in or about to enter their final year of high school will be admitted into college level credit courses in accordance with the following:

1. Students must hold an academic record with a minimum overall average of 80% based on the marks for all courses completed in high school.
Academic Year
Academic Calendar Year is the period from September 1 to August 31 consisting of three distinct 15-week semesters.

Access Programs
Developmental programs that students may enter prior to admission into regular Certificate/Diploma level programs.

Credit Course
An approved and recognized body of content, knowledge, skills assigned a credit value.

Credit
The weighted value of a course based on the depth and breadth of the learning objectives.

Diploma Program
An approved program of study consisting of a prescribed combination of courses that must address:
1. occupational skill development;
2. academic or general study
3. self-interest or personal growth.

Diploma Programs will normally:
1. be prescribed over a minimum of a four semester period
2. be comprised of a minimum of 80 credits; and
3. consist of a maximum of seven courses per semester.

Advanced Diploma
An approved program of study consisting of in-depth training for graduates of a diploma program or equivalent.

Advanced Diploma Programs will normally:
1. be prescribed over a minimum of one semester;
2. be comprised of a minimum of 20 credits.

Post Diploma
A diploma to be issued upon successful completion of a minimum two-semester program that requires either graduation from a recognized two- or three-year post-secondary diploma or degree, or a combination of other post-secondary work and industry experience acceptable to the college as an entrance requirement.

Certificate Program
An approved program of study consisting of a prescribed combination of courses that must address:
1. occupational skill development;
2. academic or general study;
3. self-interest or personal growth.

Certificate Programs will normally:
1. be prescribed over a two semester period;
2. be comprised of a minimum of 40 credits; and
3. consist of a maximum of seven courses per semester.

Continuing Education Studies (Certificate of Participation)
Any non-formalized course, seminar, workshop which addresses one or more of the following areas of study: occupational skill development, academic study, personal interest/growth, for which specific learning or performance is not measured or evaluated.

Certificate of Recognition
Certificates of Recognition may be awarded in various areas of study where students meet the criteria established for that area of study.

Workplace Development
The college may enter partnerships for the purpose of developing and/or delivering courses or programs. Such partnerships will be formally recognized on parchments in one of the following ways:
1. College Parchment - when a course or program is developed by the college, either in partnership with or on behalf of another institution, agency or industry; a college parchment will be issued. This parchment may contain the phrase “designed in partnership with...” as an additional description of the course/program.
2. Joint Parchment - when a course or program is developed and/or delivered in partnership with another educational institution, a joint certificate formally recognizing both institutions may be awarded. This parchment would recognize both institutions and may contain the signatures of duly authorized officers of both institutions.

Parchments for Workforce Development
1. Diploma in Skill Development
   Awarded upon completion of a program that is at least two years in duration for which learning is measured and evaluated.
2. Certificate in Skill Development
   Awarded upon completion of a program that is normally one year in duration but not less than one academic semester for which learning is measured and evaluated.
3. Certificate of Achievement
   Awarded upon successful completion of a program of less than one academic semester or upon completion of an academic course for which learning is measured and evaluated.
4. Continuing Studies Certificate (Certificate of Participation)
   Issued upon completion of a non-formalized course, workshop, seminar or program, for which specific learning or performance is not measured or evaluated.

Full-Time Student
Students who are registered for four or more courses in course-based programs.

Part-Time Student
Students who are registered for less than four courses in course-based programs.

Summer Session
A five to eight week period which will include class/learning time as well as administrative and evaluation time — usually scheduled in the second half of the Spring Semester.

Mature Student
Persons who do not meet the entrance requirements for admission into a full-time program, but who are at least 19 years of age at the time of submitting an application, and who have been out of school for at least one year.

ACADEMIC REGULATIONS
It is the policy of the college that upon the successful completion of a program of studies, students will be awarded one of five parchments:
1. A Certificate in (Program Title)
2. A Diploma in (Program Title)
3. A Post Diploma in (Program Title)
4. An Advanced Diploma in (Program Title)
5. A Certificate in Continuing Studies in (Program/Course Title)

QUALIFICATIONS FOR A DIPLOMA, AN ADVANCED DIPLOMA, A POST DIPLOMA OR A CERTIFICATE
To qualify for a diploma, an advanced diploma, a post diploma or a certificate, students must meet the following requirements:
1. Meet all the requirements as prescribed in the program of studies;
2. Obtain a mark of not less than 50% in every course in the program unless otherwise specified;
3. Attain a minimum grade point average of 2.0;
4. Obtain 25% or more of their credits from the college.

Students, other than Technology or Health Sciences students, who do not complete their diploma program in the prescribed time frame from first registration, may complete the program by following the regulations in effect at the time of first registration provided the program is completed in not more than three years beyond the regular date of completion. A student who does not complete a program within these prescribed time limits may be required to complete additional courses or to repeat certain courses before being deemed eligible to receive the diploma.

Students who return to complete a Diploma in Technology may not receive credit for courses that were completed more than five years prior to the date of readmission.

Students enrolled in accredited Health Sciences programs will be permitted a maximum of one additional year to complete their program of studies.

ADVANCED STANDING
Students may receive advanced standing for up to 75% of the content of the program to which they have been admitted on the basis of successful completion of this content in the same or similar programs at another college and as assessed by the college.

Applicants who wish to be considered for advanced standing should submit an application with the following documents:
1. Proof of high school completion;
2. Official transcript(s);
3. Calendar description of the courses claimed for credit.
Students seeking advanced standing will not be excused from any course until written authority has been received from the office of the Registrar.

**TRANSFER OF CREDIT STATUS**

Transfer of credit status is awarded for any course completed at the Marine Institute or at any one of the former colleges provided that the course uses the same course description and course number. When Transfer of Credit is awarded, the college will accept the passing grade as awarded by the institution and this mark will be used in the calculation of the G.P.A.

**EXEMPTION STATUS**

Exemption status is granted if the course has a minimum of 70% equivalency in the course material required. When exemption status is awarded, no mark is reported on the transcript and the G.P.A. is not affected. The college will consider exemptions for courses if the student received a passing grade.

The college will accept any credit course from a recognized public post-secondary institution as an exemption for an elective even if that course is not offered at the college. For example, a course in Linguistics from MUN would be considered to have equivalent value to any other “elective” and, on request, could be granted exemption as a general elective. In some programs electives must be chosen from a designated group of courses, in which case a general elective cannot be used as a substitute.

**CREDIT FOR PRIOR LEARNING**

It is the policy of the college that enrolled students will be given every opportunity to receive credit for past learning experience through a comprehensive systematic process of evaluation referred to as Prior Learning Assessment and Recognition.

Credits awarded for Prior Learning Assessment and Recognition will be recorded on the student transcript as an exemption or as a mark.

There will be no charge for Prior Learning Assessment and Recognition for students who are enrolled in a college program. The maximum number of credits that can be awarded through the Prior Learning Assessment process is 75% of the number required to complete the certificate/diploma.

**BLOCK TRANSFER/ADVANCED STANDING**

The college will recognize course work completed in other programs/courses that fulfill the requirements for a designated percentage of the program in which the student is now applying. When students are granted a block transfer, their academic grades will be calculated beginning at the point of entry to the program.

**CREDIT SYSTEM**

A credit is a weighted value of a course based on the depth and breadth of the learning objectives.

For the purpose of assigning credit values, the measurement of learning objectives is usually accomplished by equating the value with the period of time scheduled to deliver the content in the conventional lecture methodology as follows:

Learning Objectives scheduled for delivery in a one hour period per week per semester constitutes a one credit value, therefore a course that is scheduled for three hours per week per semester represents a three credit value. However, a recognized laboratory experience is usually measured in the following manner:

- 2 – 4 hours of lab/week/semester is equivalent to one credit
- 5 – 7 hours of lab/week/semester is equivalent to two credits
- 8 – 10 hours of lab/week/semester is equivalent to three credits
- 11 – 14 hours of lab/week/semester is equivalent to four credits

However, the actual process in achieving competency in specified learning objectives can be accomplished via a second equally legitimate and pedagogically sound methodology that is individualized and student-centered. In this latter methodology which embraces distance delivery, time is a flexible factor, fixed schedules do not apply and the process is student-driven. This is in contrast to the conventional lecture mode which is teacher-directed with fixed learning times and schedules. The one constant for both modes is the set of learning objectives. Therefore, credit value is assigned by determining the equivalent time required if the learning objectives were delivered in the conventional mode and applying the formula as described under the definition of a credit.

**GRADE POINT MARKING SYSTEM**

The percentage mark in any course is converted to a grade point according to the following table:

- 80% and over: 4
- 70%, 75%: 3
- 60%, 65%: 2
- 50%, 55%: 1
- Below 50%: 0

The grade point average is obtained by multiplying the credit value of each course in the program by the grade point obtained in that course. The sum of all the products is then divided by the total number of credits.

When a course is repeated or a supplementary examination is written, the highest mark attained will be used in the calculation of the grade point average.

When students complete more than the minimum number of electives, students are able to select which electives will be used in the calculation of the G.P.A. by making application at the Registrar’s Office. Without such application the Registrar will select for calculation purposes the required number of electives as recorded chronologically on the transcript.

**ACADEMIC STATUS**

**Clear Standing**

Students are in clear standing when they have passed all courses and have attained a grade point average of at least 2.0, except in the following:

a. In Diagnostic Ultrasoundography, Medical Laboratory Sciences II and III, Medical Radiography II and III, Respiratory Therapy II and III programs the pass mark is 60%, including a minimum of 60% on the final exam.

b. In Industrial Trades programs, the pass mark is 70% in the practical component and 70% in the theory component.

c. In Aircraft Maintenance Engineering Technician and Aircraft Structural Repair the passing grade is 70%.

d. In Primary Care Paramedicine, the pass mark is 80%, including a minimum of 80% on the final exam.

**Conditional Status**

Students are classified as conditional when: they have a cumulative grade point average between 1.00 and 1.99 in any semester, or when they must clear course deficiencies in order to graduate (e.g., students who must successfully complete a failed course through supplementary examinations or repetition).

Students are expected to attempt courses from previous semesters (if available), before registering for any new course, and must consult with a faculty advisor and/or counsellor on or before registration.

**Academic Dismissal**

Students will be academically dismissed if their cumulative grade point average is less than 1.0 and/or they have not passed a minimum of 40% of the credits attempted in the semester.

**One-Time Forgiveness**

The college will waive the academic dismissal policy on a “one-time forgiveness” basis as per the following:

Students, who, for the first time fail to meet the minimum re-admission requirements will be given an academic warning and will be permitted to register for the next semester provided:

1. Those students are referred to a Counsellor and will participate in a review of their career/academic goals and will develop learning strategies that will lead to success.

2. An appropriate course load will be developed by the student in consultation with the academic advisor/counsellor. The maximum course load will not exceed the normal semester workload for the program.

Students will be permitted to register only for those courses for which prerequisites have been successfully met.

**Academic Dismissal**

Students who have availed of the “one-time forgiveness” policy and who fail to meet the re-admission requirements for a second occasion will be academically dismissed.

Students who have been academically dismissed will not be accepted to return until a period of six months has elapsed.

Students who have been academically dismissed from all programs except the Comprehensive Arts and Science Transition Program will be permitted to register for one course for credit in a certificate or diploma program or for any number of courses in the Comprehensive Arts and Science Transition Program per semester. Students who have been academically dismissed from the Comprehensive Arts and Sciences Transition Program will be permitted to register for one course for credit in a certificate or diploma program per semester.

Academically dismissed students are not eligible to write supplementary exams.

Students in the Health Sciences programs will be required to withdraw from their program of study at the point in their program where it is determined that the one additional year (maximum) will not be adequate for them to complete all the requirements of the program.

Students who have been academically dismissed on two or more occasions will not be eligible for
readmission for a period of two years from the date of dismissal.

Promotion Denied (General)
Students who do not achieve a pass in all courses and a G.P.A. of 2.0 or better may not be able to continue with their program but may return to the college to complete deficiencies.

Promotion – Engineering Technology Programs from First Year
To qualify for the technical intersession, at the end of the first two semesters students must normally have successfully completed all prescribed courses and attained a minimum overall G.P.A. of 2.00. Students who have a G.P.A. between 1.00 and 1.99 at the end of the second and subsequent semesters may, with the permission of the college, be conditionally admitted to the next semester if there is a determination that the students are capable of attaining clear standing by the end of the subsequent semester.

Promotion – Medical Sciences
Health Sciences programs include mandatory clinical training rotations. Students must successfully complete all previous courses and have a minimum G.P.A. of 2.00 to be promoted to the clinical training component of their program.

Promotion in Nutrition and Food Service Management
Students must pass all first and second semester courses (minimum of 50%) and have a minimum G.P.A. of 2.00 to be eligible for promotion from Semester 2 to Semester 3.

CO-OP REGULATIONS
1. Work term learning is integral to co-operative education, and a co-op diploma will be awarded to students who successfully complete work terms as articulated in their program structure. Work terms provide unique learning experiences in a real world place setting. They are program relevant, full-time, 12 – 16 weeks in duration, and normally remunera
ted. Scheduling of work terms varies by program; however they alternate between academic semesters. Work term start and finish dates correspond with academic semesters; however specific dates are established with each employer.

2. To be eligible for a work term, a student must have “clear standing” for all courses prescribed in the program to the point where the work term marketing occurs; or be able to attain clear standing by writing one supplementary or one upgrading supplementary.

Since work term arrangements are often made in advance of the commencement of the work term and before current academic assessments are available, eligibility will be based on the most recent transcript. Once a student has been confirmed for a work term, this arrangement shall be honored regardless of academic standing.

3. The co-op term mark will result from both employer and institutional evaluation. Students must achieve a minimum of 50% in each of the work term performance evaluation and the work term report, and must achieve a combined grade of 60%. The work term mark will be recorded on the student transcript.

a. Work term performance is evaluated by the employer and monitored by the college.

b. The work term report is validated by the employer and graded by faculty/ coordinators. A student receiving a 40% or 45% grade on the work term report will be eligible to re-submit the report. The report must be re-submitted no longer than four weeks after receipt of the work term evaluation.

4. Students are encouraged to obtain their own work terms. Such work terms must be confirmed by letter from the employer and approved by the coordinator on or before the first day on which the student commences work.

5. Students are required to sign a waiver giving permission to the college to supply students’ resumes and transcripts to potential employers.

INDUSTRIAL TRADES
There are incidents where Industrial Trades programs may deviate from standard academic regulations. These differences are identified below.

Credit System
The credit system is not applicable to programs in the School of Industrial Trades. Courses are assigned hours in order to match with the Provincial Apprenticeship Program Structure (Plan of Training).

Grade Point Marking System
The Grade Point Marking System is not applicable to programs in the School of Industrial Trades. Courses are assigned hours in order to match with the Provincial Apprenticeship Program Structure (Plan of Training).

Conditional Status
Students are classified as conditional when they must clear course deficiencies in order to graduate. Students who are required to successfully complete a failed course must follow the regulations as outlined in College Rewrite Policy AC-117 / AC-117-PR.

Supplementary Exams
Students will follow regulations as outlined in the College Rewrite Policy AC-117 / AC-117PR.

A rewrite of a final evaluation provides an opportunity for students to improve their standing in a course in which they have attained a failing grade. The grade attained in the rewrite will be used to determine the final grade.

The following conditions must be met in order to qualify for a rewrite:
1. A score of at least 60% on the original exam
2. Attendance of at least 90%

Students may be eligible for a maximum of two rewrites during the fall semester; a maximum of two rewrites during the winter semester and a maximum of one rewrite during intersession. For complete details please refer to the College Rewrite Policy AC-117 / AC-117PR.

Deferred Exams
Students who are prevented by illness or bereavement or other acceptable cause from writing a final examination, where one is scheduled, may apply for permission to write a deferred exam. The deferred examination is the final examination for the individual concerned.

Incomplete
The incomplete regulation does not apply to Industrial Trades.

TRANSFER OF CREDIT STATUS
Transfer of credit status is awarded for any course completed at any post-secondary institution that matches the course numbers in the Provincial Plan of Training as outlined by the Department of Advanced Education and Skills.

EXEMPTION STATUS
Exemption status is granted if the course has a minimum of 70% equivalency in the course material required. When exemption status is awarded, no mark is reported on the transcript. The college will consider exemptions for courses if the student received a passing grade in the course.

The college will accept any course from a recognized post-secondary institution as an exemption if the course can match 70% of the objectives in the current Provincial Plan of Training as outlined by the Department of Advanced Education and Skills.

REGISTRATION
It is the policy of the college that all students will register for full-time programs at the beginning of each semester including the Intersession. Students accessing “continuous intake” programs will be admitted and will engage in the initial registration process at any time during a semester but will be required to register with all other students at the beginning of each subsequent semester.

Date of Registration
Students will register in person on the date and at the time and place prescribed and publicized by the college. Registration for continuous intake programs will be scheduled on a continuous basis, and students will be admitted as vacancies occur.

Late Registration
With permission, late registration may sometimes be acceptable, up to two weeks after the official registration day.

ADMISSION TO CLASSES
Students will not be admitted to a class until they have satisfied the regulations regarding entrance and complied with the General College Regulations.

COURSE LOAD
The number of courses constituting a normal semester workload for a student is specified in the outline for each program as published in the College Calendar.

Extended Course Loads
Students who wish to register for extra courses must make application to the campus administrator or designate.

REPEATING COURSES
With the permission of the campus administrator or designate, students may repeat any course for which a passing grade has previously been awarded, conditional on space limitations and other considerations. The original passing grade will remain on the transcript and a second entry will be recorded with the new grade. The highest mark attained will be used in the calculation of the G.P.A.

INDEPENDENT STUDIES
When required courses are not available in a particular semester, full-time students may make application to the campus administrator or designate to register for such courses through independent study. Applications must be processed within two weeks from the commencement of the term.
Access to courses through Independent Study may be permitted when resources are available and with the permission of the campus administrator or designate and the coordinator (where applicable) in consultation with the faculty. Strategies to ensure adherence to course requirements may be documented in contract format to be signed by the student, the course instructor, the campus administrator, and the program coordinator (where applicable).

**CHANGE OF REGISTRATION**

**Adding Courses**

The last date for adding courses is two weeks from the commencement of the semester (one week from the commencement of the intersession/summer session) in which that course begins. In extenuating circumstances, in the normal semester the two-week period may be extended. Students must complete the appropriate registration change form. Changes must be approved by the campus administrator or designate.

**Withdrawing**

Courses may be dropped without academic prejudice up to the end of the eighth week from the scheduled date of registration for a semester (or the end of the second week in the intersession/summer session). Courses dropped after this date are recorded as “Dropped/Fail” and will have a zero mark entered on the academic record for the course or courses dropped unless, in extenuating circumstances, the student has received the written permission of the campus administrator or designate to drop a course without penalty. Students are required to complete the appropriate registration change form which must be approved by the instructors concerned and by the campus administrator or designate.

Registered students who wish to withdraw from the college will be invited to discuss the situation with the appropriate Student Services official. The withdrawal form must be completed and signed by the appropriate faculty and the campus administrator or designate.

**Transfer Process for Engineering Technology - First Year**

If a student wishes to change his/her original program choice, he/she MUST request a program transfer and complete the appropriate form (Request to Transfer Form) which is available through the campus Student Services Office.

Applicants cannot request a change in program prior to entry into the first year. A request to transfer does not guarantee entry into one’s alternate, “new” program choice. Program transfer will be granted only if sufficient space is available. The following conditions apply:

1. The Request to Transfer Form must be received at the campus Student Services Office by February 15.
2. Transfers are granted based on (a) space availability and (b) the student’s weighted average at the end of semester one. In cases where the student has been exempted from courses in the first semester, the mark(s) obtained by the student at another post-secondary institution or high school will be used in calculating the weighted average.

**Program Transfer**

Students wishing to change their program of studies must apply for a Program Transfer. Program Transfer Request applications are available from the campus Student Services Office. Transfers will be approved provided the following conditions are met:

1. The student is enrolled at the time of the transfer request;
2. The student meets the entrance requirements for the program requested;
3. Space (i.e., a seat) is available in the program requested;
4. The appropriate counselling process has been followed;
5. The student has received the Counsellor’s written recommendation supporting the program transfer;
6. Students must complete the following steps to apply for a program transfer:
   1. Complete and sign the applicable section of the Program Transfer Request application;
   2. Complete a counselling process with the campus Counsellor regarding the requested transfer;
   3. Receive a written recommendation from the Counsellor supporting the transfer request;
   4. Receive written approval from the Campus Administrator(s) or designate at the campus of origin for the recommended transfer;
   5. Submit completed Program Transfer Request application with appropriate signatures to Student Services for processing;
   6. The Registrar’s designate at the sending campus will contact the Campus Administrator (or designate) at the receiving campus for appropriate approval and to determine appropriate transfer time frame and program start date.
7. Program transfers will be processed by date of receipt of the student’s application to the program for which they are currently enrolled.

**EXAMINATIONS AND TESTS**

Dates of mid-terms, final, and supplementary examinations will be set in advance. No more than two mid-term and final examinations will be scheduled for a student on any one day.

Student evaluation will be conducted on a continuous basis. The method of evaluation will be recommended in the official Course Description. The final grades submitted to the campus Student Services Office will be rounded in units of five.

Instructors shall not be permitted to give quizzes worth more than 10% of the total final mark in the two week period prior to the start of semester examinations. As well no previously unassigned work may be assigned in the last two weeks of the semester. This regulation does not apply to:

1. Courses with no final semester examination.
2. Laboratory examinations.
3. Self-directed and modular courses.
4. Courses with block teaching.
5. Assignments given prior to this period which are due in the two weeks prior to examinations.
6. Courses offered in the intersession and summer sessions (i.e., 5 – 7 week periods). The time frame for these courses will be one week prior to the start of examinations.

**SUPPLEMENTARY EXAMINATIONS**

Supplementary examinations provide an opportunity for students to improve their standing in a course in which they have attained a failing grade of 5 or 10 marks below the stated pass mark. For upgrading purposes, in their last semester of studies, students may be given an opportunity to write a supplementary examination for a course in which they have attained the minimum pass mark or five marks above the minimum pass mark.

The grade attained in a supplementary examination will replace only the grade attained in the final examination for the course in question and will be combined with marks previously attained for term work. The following conditions must be met in order to qualify for supplementary examinations:

1. Students may be eligible to write one supplementary per semester.
2. Supplementary exams will not apply to any course in which the final exam is worth less than 30%.
3. Supplementary examinations will be scheduled and should be written during the supplementary period following the regular examination period.
4. Students must apply in writing for supplementary examinations. The established standard fee per supplementary examination must accompany the application form. Refunds of such fees will be permitted only if permission to write an examination is not granted.
5. If the mark obtained in the supplementary is lower than the original mark obtained on the regular examination, the original mark will be included in calculating the grade point average.
6. Where circumstances warrant, supplementary examinations may be written off campus, the campus Student Services Office must be contacted for permission and guidelines prior to the examination period. All costs associated with the administration of off campus supplementary examinations will be borne by the student.
7. Academically dismissed students are not eligible to write supplementary exams.
8. For purposes of transfer of credit, students must be aware that other post-secondary institutions may not accept grades attained through Supplementary Examinations.
9. Comprehensive Arts and Science (CAS) Transfer: College-University Program students who write supplementary examinations are advised to consult with the Counsellor at a campus where the Comprehensive Arts and Science (CAS) transfer College-University Program is offered concerning their transferability of courses to Memorial University.
10. Before writing a Supplementary Examination in the Comprehensive Arts and Science (CAS) Transfer: College-University Program, students must be informed in writing of #8. The written communication (i.e., form) must be signed/dated by the student, the instructor of the course and the Campus Administrator or designate. Copies should be kept by the instructor and Campus Administrator, and a copy must be placed in the student’s file in Student Services.

**DEFERRED EXAMS**

Students, who are prevented by illness or bereavement or other acceptable cause from writing a final examination, where one is scheduled, may apply for permission to write a deferred examination. The deferred examination is the final examination for the individual concerned.

Deferred exams should be completed by the last day of exams/classes for that semester, or as soon as possible thereafter.

A request for deferred examinations must be submitted to the campus Student Services Office as soon as possible after the date on which the regular examination was scheduled. The request for a deferred exam will be assessed by the campus administrator or designate in consultation with faculty members.
Students should note that permission to write deferred examinations is a privilege, not a right, granted solely on the basis of extenuating circumstances.

**INCOMPLETE GRADES**
Subject to the approval of the campus administrator or designate, an incomplete grade may be assigned when the mandatory components of the course are not completed. Incomplete grades must be cleared by the end of the third week after the beginning of the subsequent semester. If incomplete grades are not cleared by this date, students will receive a failing grade.

**REASSESSMENT OF GRADES**
Students who feel that they may not have been accurately assessed on any assignment, examination, term paper, or laboratory or shop exercise should, in the first instance, discuss the matter with the instructor teaching the course. This should be done within three instructional days of the receipt of the assessment. If this does not result in a satisfactory resolution, students may request that the matter be reviewed by the campus administrator. If this action is taken, it must be done within five instructional days of receipt of the assessment. Unsatisfactory resolution of the dispute at this stage may enable students to request a review of the grade(s) by the Academic Appeals Committee. Such an appeal should be made within ten days of receipt of the assessment.

**RE-READ OF FINAL EXAMINATIONS**
Students may apply to have a final examination paper re-read.

An application for re-read must be made in writing to the campus Student Services Office within one month following the release of the marks.

A re-read fee must be paid at the time of application. If the mark is changed after the re-read, the fee is refunded; if the mark is unchanged, the fee is forfeited.

The mark obtained in a re-read stands as the official mark in the course and is used in all calculations of the student’s academic record.

**AEGROTAT STATUS**
Students who, through illness or other exceptional circumstances, have been absent from a scheduled final examination, or who have been unable to complete all of the required work in a course, may, on the recommendation of the Counsellor, in consultation with the campus administrator and faculty be given credit for the course.

Application for Aegrotat Standing, with full details duly authenticated, must be made to the campus Student Services Office within two weeks after the last day of examinations, indicating each course for which the application is being made.

**ACADEMIC DOCUMENTATION**
Transcripts, diplomas and certificates will be withheld from a student who is in possession of college property such as books, equipment or supplies or who owes money to the college.

**Grade Reports**
Grade reports will be issued at the end of each semester and intersession.

**Transcripts/Records of Achievement**
- Official Transcripts/Records of Achievement may be obtained at any time from the campus Student Services Office.
- A transcript includes the student’s academic record to date including academic decisions which may have been taken. Transcripts that are released will include the student’s complete academic history.

**STUDENT APPEALS (ACADEMIC)**
All registered students of the college have the right to appeal decisions or rulings which affect them and which pertain to academic matters.

**STUDENT APPEALS (NON-ACADEMIC)**
All students of the college have the right to appeal decisions or rulings that affect them and which pertain specifically to non-academic matters. Please consult the Student Handbook for details regarding these policies.

**Awards**
The college offers opportunities to students in many programs to compete for a variety of achievement awards, scholarships, bursaries, distinction awards, prizes and graduation awards. An Awards Handbook outlining all awards available, as well as the specific criteria, is available at the Student Services Office of each campus and the college website www.cna.nl.ca/awards.

**DEFINITION OF AWARDS**

- **Achievement Award**
  Monetary award given in recognition of academic excellence, leadership and community/college involvement.

- **Scholarship**
  Monetary award given in recognition of academic excellence.

- **Bursary**
  Monetary award given in recognition of academic merit and financial need.

- **Distinction Award**
  An award given in recognition of a variety of qualities. Some examples would be but are not limited to: passion for learning, demonstrated initiative, significant contribution to class, good work ethic, positive attitude, willingness to help others and/or a strong desire to succeed.

- **Prize**
  Award given in recognition of performance in a particular subject area or task.

- **Medal**
  President’s Medals of Excellence, Governor General’s Academic medals, and other medals presented upon graduation.

- **Honour Society**
  Students achieving academic excellence as prescribed by specific criteria will become members of the College of the North Atlantic Honour Society.

**Academic Excellence**
For the purpose of Achievement Awards and Scholarships, academic excellence refers to a candidate who has attained the minimum weighted/overall average of 75% or higher. Note: some programs are based on weighted average and others are based on overall average.

**Academic Merit**
For the purpose of Bursaries and Prizes, academic merit refers to a candidate who has attained the minimum weighted/overall average of 60% or higher except in cases where the grading basis is higher for their program. Note: some programs are based on weighted average and others are based on overall average.

**APPLICATION PROCESS**
Application forms for awards administered by the college are available at the campus Student Services Office and the college website. Unless otherwise stated, applications are not required in order to be considered for medals, scholarships or prizes.

The deadline for receipt of applications for bursaries and other awards can be obtained at each campus Student Services Office and College website but is generally mid-January. Please see application for exact date.

**CRITERIA FOR AWARDS**
- No achievement award, scholarship or bursary administered at the college will be awarded to a candidate who holds an award of equal or greater value, unless specifically required by the terms of the award. Certain conditions apply.
- To be eligible for any award, a student must be registered as a full-time student in a recognized college program.
- To be eligible for renewal of an achievement award, scholarship or bursary, the student must maintain full time status in their recognized college program and continue to meet eligibility requirements of the award.

The eligibility criteria for awarding an achievement award or a scholarship:
- Candidates must be in clear academic standing with a minimum weighted/overall average of 75%.
- At least 80% of the credits accumulated at the point of consideration for awards must have been obtained at the college.
- Courses which are not included in the requirements for graduation will not be included in the calculation of the weighted/overall average.
- Candidates must have attained a passing grade in ALL courses being considered in establishing weighted/overall average. Marks obtained in supplementary exams will be considered in the calculation of the weighted/overall average.
- In cases where the student repeats a course, the best earned grade will stand for calculation of the weighted/overall average.

**The eligibility criteria for awarding a bursary, distinction award or a prize:**
- Candidates must be in clear academic standing and have attained a minimum weighted/overall average of 60%, except in cases where the minimum grading basis is higher (i.e. in Industrial Trades it is 70%, and in Paramedicine it is 80%). The weighted average will be used except in cases where programs use an overall average.
• At least 80% of the credits accumulated at the point of consideration for awards must have been obtained at the college.
• Courses which are not included in the requirements for graduation will not be included in the calculation of the weighted/overall average.
• Candidates must have attained a passing grade in ALL courses being considered in establishing weighted/overall average. Marks obtained in supplementary exams will be considered in the calculation of the weighted/overall average.
• In cases where the student repeats a course, the best earned grade will stand for calculation of the weighted/overall average.

The eligibility criteria for awarding the Governor General’s Medal:
The Governor General’s Medal is awarded to a graduate who has achieved the highest weighted/overall average at each campus, where applicable. The student must be graduating from a two or three-year diploma level program.

The eligibility criteria for the President’s Medal of Excellence:
The President’s Medal of Excellence is awarded to one full time graduate in each program who attains the highest weighted/average in his/her program. The student will also receive a Certificate. The student must meet all college scholarship criteria. The medal is campus based and is available to both the Certificate and Diploma level programs.

The eligibility criteria for the Honour Society:
The college has established an Honour Society to recognize those students who meet the following criteria:
• Those in diploma-level programs where the passing grade of the courses is 50% to 65% who have a grade point average (GPA) of 4.0.
• Those in diploma-level programs where the passing grade of the courses is 80% who have a grade point average (GPA) of 4.0 and no mark less than 90%.
• Those in industrial trades programs who have 80% or greater in each course.
• Students who are registered under General Studies who have completed four (4) or more courses within any given semester and who achieve 80% or greater in each course.
• Some campuses offer Office Administration and Business Administration by the individualized instruction methodology. At campuses where this applies students must have completed 16 credits or more in a given semester. Students in this category must achieve a GPA of 4.0 in order to qualify for the Honour Society.

OUTSTANDING FEES
Award recipients who owe outstanding fees to the college will have their monetary award credited to their account.

PRIVACY DISCLAIMER
As part of the Scholarship/Awards process, your personal information (name, photo, program of study and community) may be shared with our donor to advise them of how their scholarship monies have been distributed. If you do not wish to have this information shared, please e-mail evelyn.hyde@cna.nl.ca.

All students who are selected for an award/scholarship/bursary will be required to provide their Social Insurance Number so that a T4A may be issued for income tax purposes.

College of the North Atlantic recommends that students who are receiving funding and/or sponsorship contact their funding/supporting agency for clarification of whether receiving an award may affect their funding/sponsorship status.

Fees and Charges

1.0 REGULATIONS GOVERNING PAYMENT OF FEES & CHARGES
a. All student fees must be paid by the date specified in each term. The dates are listed in the Calendar of Events. Students receiving Student Aid must present their notification of Student Aid form on the first day of classes. These students are permitted to have fees outstanding until receipt of the Student Aid, at which time these students must pay their accounts in full.

b. Students who have not paid all fees within the time limits given in these regulations may have their registration cancelled by the college.

c. Students with outstanding accounts will be ineligible for a subsequent term, will not be awarded a diploma or certificate, access to register, and will not be issued a certificate of standing (transcript), grade report, or access to on-line grades until the outstanding account has been paid in full. Students are notified of their account status on a regular basis. It is the student’s responsibility to address outstanding balances and to correct any problems.

d. Should the college cancel a program, all tuition and fees paid will be refunded.

e. Continuous intake students, registering or withdrawing within a term, will pay a pro-rated tuition and equipment and materials fee per week.

f. Senior Citizens, 60 years and older, are required to pay 50% of registration, tuition and equipment/materials fees.

g. Distributed Learning (DL): Some campuses offer programs that do not have all courses delivered in the classroom on-campus and some courses in the program are offered by DL. Students enrolled in these programs are therefore required to do courses via DL. These students will pay the regular program tuition fees. No additional DL tuition fee or DL technology fee will be charged.

However, additional tuition and DL technology fees will be charged under the following circumstances:

Any student electing to do a DL course over and above their normal term load (requires application to extend normal course load per semester).

ii. Any student choosing to do an elective through DL instead of the electives offered on-campus will be required to pay the course tuition fee and the DL technology fee for that course.

iii. Any student electing to repeat courses through DL which were previously taken on-campus or via DL.

Any student electing to do a DL course instead of an identical on-campus course.

In some instances, students may enroll in a program through Distributed Learning that may require them to attend on-campus to complete the required course. In this case, the student will pay the regular program tuition fees to DL and not pay an additional on-campus tuition fee per course. Students pay the DL technology fee for online courses only.

However, an additional tuition fee per course will be charged under the following circumstances:

Any student electing to do an on-campus course over and above their normal DL term load (requires application to extend normal course load per semester).

iii. Any student choosing to do an elective on-campus instead of the electives offered through DL.

iv. Any student electing to do an on-campus course instead of an identical DL course.

v. Any student electing to repeat courses on-campus which were previously taken on-campus or via DL.

2.0 FEES AND CHARGES

2.1 FULL-TIME Students
International students should refer to “International Students” section of calendar.

Students enrolled in four (4) or more courses:

- Application fee per program $30.00 (Non-refundable except as noted in 3.a.)
- Confirmation fee $95.00
- Student must pay a non-refundable registration fee on confirmation of acceptance to each program at the college. The fee covers registration and student association fees and is paid annually for the duration of the program.

2.2 INTENSIVE PROGRAMS

- Intercession (up to 7-weeks in duration)$343.00
- Continuous in-take programs $49.00 per week
- Winter and Summer courses $343.00 per week
- Distributed Learning (DL) Tuition $49.00 per week
- Equipment/materials fee per term (intended to help offset material costs of program; excluding DL students)

2.3 TERM BASED:

- Regular Term (15-weeks): $726.00
- Intensive Term (up to 7-weeks in duration): $343.00

www.cna.nl.ca/awards, and submit it to the Student Services Office at their campus.
Applied Arts/CAS/Access/Tourism $55.00
Business/Information Technology $27.50
Engineering/Natural Resources $82.50
Trades $82.50
Health Sciences $82.50
Heavy Equipment/Commercial Driver $275.00

ii. Continuous in-take programs:
  Business Programs ($55.00 per 15-week term)
  Fees are pro-rated on the number of weeks in attendance.

iii. Trade Programs
  Trades ($165.00 per 15-week term)
  Fees pro-rated based on the number of weeks in attendance.

iv. DL technology fee
$50.00 per course

f. On the Job (OJT) fees or Work terms
less than 7 weeks $49.00 per week

h. International Students

Please refer to the International Students section of the calendar for fees information pertaining to International students.

i. Student Health and Dental Plan Fees (based on a calendar year).
The Student Health and Dental Plan is applicable to all full time students enrolled in on-campus programs.

Please refer to Student Health/Dental Plan in the Student Services section of the calendar for coverage details and rates.

2.2 PART-TIME students
Students enrolled in three (3) or less courses.
(Including Regular Programs, Day-time General Studies, Distributed Learning and Open Learning)

a. Tuition fee per course
$230.00
b. Technology fee per course
(DL courses) $50.00

2.3 GENERAL STUDIES students
General studies students who enroll in “classroom” courses will pay a maximum tuition of $726.00 and Equipment/Materials fee of $100.00.

General studies students who enroll in “DL” courses will pay a maximum tuition of $726.00 and a $50.00 Technology fee for each DL course.

General studies students who enroll in a combination of “classroom” and “DL” courses will pay regular tuition for “classroom” courses and $230.00 tuition plus a $50.00 Technology fee for each DL course.

2.4 COMMUNITY EDUCATION
Contact local campus for course fees.

2.5 RESIDENCE FEES
Students must pay a minimum of two weeks residence fees in advance, or upon arrival in residence. Students intending to move out of residence must give 30 days’ notice or pay a penalty of $100.00.

Students are responsible for providing their own bed linens and laundry service.

a. Fees applicable to all campuses

Residence Application fee
$25.00
(This is an annual fee and is non-refundable)
Residence Registration fee
$50.00
(This is an annual fee and is non-refundable)
b. Daily Room Charges

Single
$15.00

Double
$10.00
c. Rooms and Meals

Bay St. George Campus
Room and 10 meals weekly
N/A

Burin Campus
Room and 5 meals weekly
$107.20
Room only weekly
$60.00

Happy Valley Campus
Room and 14 meals weekly
$162.85

Family Residence (Apartments)
1 Bedroom-monthly /no meals $300.00
2 Bedroom-monthly /no meals $365.00
3 Bedroom-monthly /no meals $425.00

2.6 MISCELLANEOUS FEES

a. Supplementary Fee
$25.00
b. Re-read Fee
$25.00
c. Resource Camp Fee
$33.00 per day
(Covers food & lodging - not tuition)
e. NSF Cheques
$25.00
f. Replacement I.D. cards
$15.00
g. Day Care fees
(contact applicable campus)

3.0 REFUNDS

a. Application fees are only refundable if the program does not go ahead and the applicant does not want to transfer the application to another program.
b. Confirmation fees will be refunded only to individuals who were conditionally accepted and upon receipt of High School marks do not meet the academic entrance requirement to the program.
c. Tuition and Equipment/Materials Fees

i. Term-based (15-weeks)
A student who withdraws within the first four weeks of any term will receive a full refund. If the withdrawal takes place within the fifth or sixth week, the refund will be prorated and the student will be liable for the number of weeks enrolled. No refund will be made after the sixth week of class.

ii. Intersession (up to 7 weeks)
A student who withdraws within the first two weeks of Intersession will receive a full refund upon written request. If the withdrawal takes place within the third week, the refund will be prorated and the student will be liable for the number of weeks enrolled. No refund will be made after the third week of the program start date.

iii. Contracted programs of 2 to 5 weeks
A student who withdraws/cancels after one day of a course/program start date will receive a full refund upon written request. A student who withdraws/cancels after the end of the second day of a course/program start date will receive a 50% refund upon written request. No refund will be made after two days.

iv. Part-time Continuing Education
(i.e. part-time hours/outside regular delivery hours)
Students must notify Continuing Education of their intent to withdraw or cancel at least 5 days prior to the start date of a course to be entitled to a full refund. If the student notifies the office with the intent to withdraw or cancel less than 5 days prior to the course start date, the student will receive a 50% refund. A student who registers for a course, does not notify the college of their intent to withdraw, and does not attend any classes, will be deemed a “no show” and will forfeit their tuition fees. In the event the college cancels a course offering, students will receive a full refund.

v. Client Contracts
The refund policy for client contracts is set out in the College’s standard Contract Training Agreements.

b. Textbooks
Refunds may be given for returned textbooks under the following conditions:
i. Books are unmarked and in saleable condition
ii. Books are returned within the first three weeks after the commencement of classes
iii. Original receipts are presented before a refund is issued.

Students are responsible for initiating their own refunds and are required to complete the Student Revenue Refund Form. Forms are available from the Student Services Office. All tuition refunds will be issued by Headquarter. Any refunds will be applied against outstanding accounts before any monies are returned to the student. If a student terminates or voluntarily withdraws from a program of studies, the refund from student loans will be forwarded to the National Student Loan Service Center.

4.0 FINANCIAL CREDIT
Deadline for payment of specified fees is 28 days from registration date. The College may grant credit to students to cover tuition and/or materials fees only (credit is not available to cover books or
residence fees). The College may, from time to time, institute equipment lease/purchase programs for which credit may be granted. Students applying for financial credit must meet with a Student Services representative for assessment of their request. Credit will not be granted to students with outstanding fees from prior semesters.

Financial Contract
If financial credit is recommended, the student must complete a Financial Contract in consultation with a Student Services representative. The Financial Contract will specify what is covered and for what period of time. The completed Financial Contract must be reviewed and signed by a Campus Administrator or an approved designee. The student is subject to collection action if the account is not paid.

Students Receiving Student Loans
Students with confirmed Student Loans are eligible for credit. When the student loan is issued, the amount owing will be deducted by the College as specified in the Financial Contract.

Students Receiving External Funding
Students with documentation confirming external funding will be granted credit and are expected to pay their fees once they are in possession of their funding as agreed to in the Financial Contract.

Students Not Receiving Student Loans or External Funding
Students seeking financial credit who do not meet the above criteria will only be granted financial credit in extenuating circumstances and upon written approval by the Campus Administrator or designate.

5.0 FINANCIAL APPEALS
Appeals of a financial assessment should be made in writing to the Director of Finance at P.O. Box 5400, Stephenville, NL A2N 2Z6.

Receipts are issued for any financial transactions with the college. Students should ensure that they obtain and save these receipts for use in resolving any financial conflicts. In the absence of such documentation, the college financial records shall provide the basis for any decision.

Student Services

INTRODUCTION
Student Services is the division of the college that provides services to students to support and guide them in pursuit of their educational goals. Student Services complements and supports the student’s academic experiences by establishing a college environment that fosters engagement, persistence, growth and development, and academic success.

COUNSELLING SERVICES
All students have access to counselling services from a professional Counsellor for career, social, financial, employment, and personal development needs. As well, Counsellors are responsible for standardized testing and are integral in recruitment and retention initiatives.

DISABILITIES SERVICES
Services for students with disabilities are available at all campuses through the Coordinators of Disability Services. It is the responsibility of the student to identify his/her accommodation needs/disability. The student, the Coordinator and others, as identified, will develop an acceptable program and service plan to remove barriers related to access and success. Delivery of outlined program and services may involve a Resource Facilitator at some campuses.

STUDENT DEVELOPMENT SERVICES
Student Development Officers (SDO) provide services to students at each campus with services of a non-academic nature that support overall learning and development and contribute to a positive college experience. The SDO acts as the college liaison between the students and the college administration/staff and is an advisor to the Student Representative Council on campus. SDOs may also be involved in coordinating peer tutoring, organizing social and recreation activities, awards programs, graduations, assisting students with financial aid information and serving as a contact for employment-related issues. SDOs may also be involved in campus Career Employment Services including delivering job-search seminars, promoting graduates to potential employers, and gathering information related to student and graduate employment opportunities. The SDO is also responsible for organizing and conducting recruitment liaison initiatives including participation in career fairs, school visits and trade shows.

LIBRARY SERVICES
Campus libraries are operated by a staff of library professionals who provide assistance for students wishing to make use of the library resources and services. Every campus library has a collection of materials intended to support and complement program curriculum at the particular campus along with a varying amount of materials for recreational reading. On line access to article databases and reference books is provided both on campus and from home. Library staff is available to help students with research, including assistance with finding materials in library collections and through electronic resources. Through inter-library loan, materials can be borrowed from other College of the North Atlantic libraries and most lending libraries across Canada.

Library tours and individual or group instruction in the use of the library and its resources may be arranged. Students are encouraged to visit the campus library to see exactly what is available. You can also visit the library website at: http://www.cna.nl.ca/bottomtoolbar/library/

ACCESS FOR SUCCESS
Access for Success (AFS) is a provincial strategy designed to address issues related to student retention and success. AFS involves the assessment of students’ strengths and needs, the development of personal career plans, a student success electronic tracking system, and structured academic advising processes to support student progress and persistence. For more information on Access for Success, please visit the following websites: http://www.cna.nl.ca/AccessSuccess/default.asp OR http://www.cna.la/AccessSuccess/afs.pdf

STUDENT SUCCESS/HELP CENTRES
Student Success/Help Centres, located on some campuses, provide a location for students to receive assistance with course work in which they may be experiencing difficulties. Individual and group tutoring may also be available.

The college supports a peer tutoring program whereby students may access peer tutors or earn remuneration as a peer tutor.

STUDENT GOVERNMENT
College of the North Atlantic supports the activities of the student body through campus Student Representatives Councils (SRC) and provincially through the College of the North Atlantic Student Union (CNASU). Each of these student organizations is governed by Operating Guidelines which can be obtained from the Student Development Officer, Counsellor, Student Representatives Council or online at www.cna.nl.ca.

Campus-based Student Representatives Councils (SRCs) aim to address the issues of the students locally, provincially, and nationally. In September of each year, elections are held at each campus to elect members of the Student Representatives Council. The Student Representatives Council may be involved in the organization and delivery of various extracurricular activities on behalf of students:

- Winter Carnival
- Recreational and Athletic Activities
- Social Events
- Student Newspaper
- Yearbook

College of the North Atlantic Student Union (CNASU) provides a provincial forum for representatives from the various campuses Student Representatives Councils to work cooperatively in advancing the interests of the students they represent. The CNASU promotes awareness and understanding of the needs and issues confronting students and advocates on their behalf. Students are encouraged to become involved with their Student Representatives Council and have a voice in the events that influence their educational experience.

Students interested in the Student Representatives Council or the College of the North Atlantic Student Union (CNASU) should contact the campus Student Development Officer.

STUDENT HEALTH/DENTAL PLAN
Registered students at the college have access to drug, extended medical, and dental insurance coverage upon registration. The plan is mandatory unless documents demonstrating coverage under another plan (through employment/spouse/parent) is presented during the Health and Dental enrolment period.

Beyond the coverage of Newfoundland and Labrador Medical Coverage Plan (MCP), the student plan will provide insurance for prescription drug costs (including oral contraceptives, anti-depressants, and acne medication), physiotherapy, massage therapy, speech therapy, chiropractic, and podiatry as well as accidental death and dismemberment insurance ($10,000 coverage), and emergency travel insurance to protect students when they are away from school.

The Dental coverage includes cleaning, oral exams, scaling, x-rays, fillings, amalgas, and root canal therapy with a maximum yearly benefit of $500.

For more information please contact the campus nearest you or visit our website at www.cna.nl.ca.

Please refer to the International Student section of this calendar for information regarding Health Insurance for International Students.
ACCIDENT INSURANCE
Student insurance coverage against accidents while going to and from the college, while in the college or participating in related college activities such as organized games is mandatory. The premium is included in the registration fee.

When an accident happens, minor or otherwise, students should report immediately to their instructor who will take the necessary action.

STUDENT HANDBOOK
The college provides a Student Handbook annually. This Handbook includes important information and useful tips for students and also includes a day planner. A copy of this handbook is provided free of charge.

STUDENT CODE OF CONDUCT (RIGHTS AND RESPONSIBILITIES)
College Policy SS-201 respects the general rights of students and recognizes that students also have responsibilities. Please see the Student Handbook for details.

HARRASSMENT POLICY
It is the policy of the college that all registered students have the right to pursue their studies and related activities free from personal harassment from college employees, fellow students, and agents of the college or others. Refer to the Student Handbook for the details of this policy (Policy PD-005).

THREATS AND ACTS OF VIOLENCE
All students, staff and other persons visiting the college have the right to a healthy and safe environment free from threat and/or the act of physical or sexual injury, danger or violence. Refer to the Student Handbook for details of Policy SS-215 Threats and Acts of Violence.

APPEALS
All registered students of the college may appeal a decision or ruling which affects them as it pertains to academic matters, matters of student discipline and student rights and responsibilities. Please consult the Student Handbook for more details.

STUDENT AID
Information and assistance regarding student aid and financial options is available to students at each campus. Contact the campus Student Development Officer or Counsellor.

CHAPLAINCY SERVICES
Chaplaincy services may be made available to students at the college upon request.

BOOKSTORE
Textbooks for all courses are available at the college bookstore on each campus.

DAYCARE CENTRES
Daycare centres, located on the Corner Brook, Happy Valley-Goose Bay, and Prince Philip Drive Campuses, can be utilized for children of students if space is available and set criteria met. These daycare centres are linked to the college’s Early Childhood Education programs. Interested students can contact either of these campuses for further information.

PARKING
Parking is limited at many campuses and is considered a privilege, not a right. Students, staff and visitors must park in designated parking areas. “No Parking” and “Restricted Parking” areas are designated either by a sign, road markings or both.

Student Housing
OFF-CAMPUS HOUSING
The Student Services office at each campus maintains a list of boarding accommodations available. Students attending College of the North Atlantic in St. John’s can apply to stay at Memorial University residence by calling 709-737-7590. Students attending College of the North Atlantic in Corner Brook can apply to stay at Grenfell residence by calling 709-637-6266.

COLLEGE RESIDENCES
The college maintains residence facilities at the Bay St. George, Burin and Happy Valley-Goose Bay campuses. Students wishing to apply for residence should contact the campuses listed below to obtain an application and should apply directly to the Residence Office of the appropriate campus.

The Residence Office
Bay St. George Campus
P. O. Box 5400
Stephenville, NL A2N 2Z6
tel: (709) 643-7764

The Residence Office
Burin Campus
P. O. Box 370
Burin Bay Arm, NL A0E 1G0
tel: (709) 891-5618

The Residence Office
Happy Valley-Goose Bay Campus
P. O. Box 1720, Stn. B
Happy Valley-Goose Bay, NL A0P 1E0
tel: (709) 896-6349

Residence space is limited and therefore the college cannot guarantee a room to everyone who applies. All applications are processed on a first-come, first-served basis only after a student has been confirmed in a program at the college. For more information please contact the campuses above or call 1-888-982-2268.

Contract Training
CUSTOMIZED TRAINING – ON-SITE, ON CAMPUS, ANYTIME
What is contract training? Contract training is customized training that is developed and/or delivered to meet the needs of the workplace. College of the North Atlantic can develop customized training options for small businesses, corporations, governments, individuals and communities from an extensive list of more than 100 full-time diploma and certificate programs and a comprehensive range of over 300 part-time courses. Its services are distributed throughout the province at 17 campuses each with Business Development Officers available to discuss training needs. In fact, Contract Training and Continuing Education serve over 20,000 students last year alone.

Curriculum is custom designed to meet your specific training goals with a delivery timetable suited to your needs. From a one-day session to programs of several weeks, we deliver anytime, on-site or off-site with the appropriate training infrastructure and resources. Call 1.888.982.2268 or visit www.cna.nl.ca/Corporate for more information or to speak directly with one of our contract training and continuing education professionals.

OTHER SERVICES TO HELP YOU SUCCEED
• Custom design curriculum / program development
• Meeting facilitation
• Training needs analysis
• Workplace essential skills assessments

TRAINING FOR INDUSTRY SECTORS
Organizations in all industry sectors throughout the province need access to training programs so they can remain competitive, recruit and retain employees, diversify, and sustainably develop their long-term potential in Newfoundland and Labrador.

Business & Information Technology Sector Training
Information technology, as both an enabler for existing business processes, and as a sector in itself, has significantly changed business models, operations, products and services, and the competitive environment of small and medium-sized businesses in all industry sectors as well as the public and community sectors. In order to remain competitive, employers and employees need access to quality training. CNA provides comprehensive support to the business & information technology sector.

Construction Sector Training
According to the Construction Sector Council (CSC), our future depends on the construction sector to build, repair, and maintain our homes and buildings, our roads and bridges, and the oil refineries and other structures that fuel community progress. CNA provides comprehensive support to the construction sector. Training covers the needs of a variety of employers – general contractors, builders, construction managers and specialty trade contractors – in new home building and renovation, heavy industrial, institutional and commercial, and civil engineering subsectors.

Energy Sector Training
New technologies and the changing demands of consumers, government and other stakeholders have significantly changed the energy sector. Regulations have evolved. Exploration, development and production methods are more advanced. This applies equally to the non-renewable energy sources. CNA provides comprehensive support to the oil and gas and hydro-electricity industries. We are committed to providing the same support to renewable energy including wind and geothermal sources.

Health Sector Training
Health care providers – government, professionals, researchers, business, and community organizations – along with the clients and communities they serve are challenged to meet or exceed the standards of community health services and institutional health care management, decision making, quality, innovation, program and service delivery, and accountability set by government’s vision that “… all Newfoundlanders and Labradorians will enjoy optimal health.” College of the North Atlantic provides comprehensive support to health sector professional staff, technicians and management.

Mining Sector Training
College of the North Atlantic is committed to providing comprehensive support to the mining sector. Training can address the unique needs of the sector during the exploration, development, production, processing and distribution stages. CNA’s training capabilities include training for occupations related to: prospecting, lead-
ership, management and supervisory development, environment, health and safety certifications, installation, maintenance and repair; construction and extraction; production; and transportation and material moving.

Safety Training
Businesses are required by law to meet the Occupational Health and Safety standards of the workplace. Safety training and certification is essential to ensure a healthy and productive workplace. In order to remain competitive, employers and employees need access to quality training. CNA is committed to providing comprehensive support to all of the province’s sectors with quality safety training. CNA is an approved WHSCC provider of Fall Protection, Traffic Control Person, Powerline Hazards and Confined Space Entry training.

Training for Government
College of the North Atlantic is pleased to provide a range of training courses and programs to provincial, federal, and municipal government departments to support changing technologies and client and service needs and professional development in one or more of the college’s 17 campuses across the province.

Training for Individuals and Community Organizations
Individuals and community organizations in towns and communities across the province comprise a significant number of student registrations for contract training and continuing education. These students are seeking to upgrade skills for current employment, explore new careers, and complete a range of programs to compete for jobs in Newfoundland and Labrador’s industry and other sectors.

Please refer to the Fees and Charges section of the calendar for refund information pertaining to Contract Training/Continuing Education.

TO INQUIRE ABOUT CUSTOMIZED TRAINING, CONTACT US.
Call Toll Free: 1.888.982.2268
Email: corporatetraining@cna.nl.ca
Website: www.cna.nl.ca

Business Development Offices:
Baie Verte Campus
P: 709/532-8066
F: 709/532-4624

Bay St. George Campus
P: 709/643-7825
F: 709/643-7748

Bonavista Campus
P: 709/468-1700
F: 709/468-2004

Burin Campus
P: 709/891-5606
F: 709/891-2256

Carbonear Campus
P: 709/596-8957
F: 709/596-2688

Clarenville Campus
P: 709/466-6947
F: 709/466-2771

Corner Brook Campus
P: 709/637-8570
F: 709/634-2126

Gander Campus
P: 709/651-4804
F: 709/651-3376

Grand Falls-Windsor Campus
P: 709/292-5642
F: 709/489-4180

Happy Valley-Goose Bay Campus
P: 709/896-6316
F: 709/896-3733

Labrador West Campus
P: 709/944-6908
F: 709/944-5413

Placentia Campus
P: 709/227-6281
F: 709/227-7185

Port aux Basques Campus
P: 709/695-3582
F: 709/695-2963

Prince Philip Drive Campus
P: 709/758-7259
F: 709/758-7297

Ridge Road Campus
P: 709/758-7554
F: 709/758-7059

Seal Cove Campus
P: 709/744-6845
F: 709/744-3929

St. Anthony Campus
P: 709/457-2719
F: 709/457-2163

Training Provided Includes:
Agrifood related training and activity:
- Food Processing
- Food Sanitation
- HACCP Training
- Kitchen Helper
- Meat Cutting
- National Food Safety Training (NFSTP)
- Nutritional Analysis and Labeling
- Test Market Analysis

Business and Information Technology sector training
- ArcGIS
- Atlantic Business
- Certification (Entrepreneurship for tradespersons)
- AutoCAD
- Training for Small Business startups
- CISCO certification
- Customer Service Excellence
- Fibre Optics
- Front Line Supervisory Skills
- HR for Small Business
- Microsoft Office Suite Retail Skills
- Computerized Accounting
- Supply Management Training
- Business Writing

Construction Sector training:
- Air Brake Endorsement
- Specialized Welding
- CWB Training and Testing
- Blueprint Reading
- GIS/Map and Compass
- Boom Truck Evaluation
- Canadian Electrical Code
- Excavator Training
- Grader Training
- Heavy Equipment Operator
- Mobile Crane
- ND1 (Non-Destructive Testing)

Energy Sector training:
- Alberta B Welding
- Supervisory Skills
- Development for Production Supervisors
- Cultural Diversity
- Drill Rig Safety Inspection
- H2S Alive (ENFORM Certified)
- Hazardous Area “EX” (CAPP Standard)
- Hoisting, Rigging and Slinging
- Hydraulic Safety and Testing Procedures
- Well Control (ENFORM Certified)
- Power Engineering (3rd and 4th Class)
- Primavera (Project Management Software)
- Project Management
- Tractor Trailer Endorsement (Class 3)

Recent Health Sector training:
- Changing Minds (Mental Health Awareness)
- Emergency Medical Responder (EMR) via Distance Home Support Worker/Personal Care Attendant
- Intravenous Therapy (IV) and Symptom Relief
- Introduction to Home Care
- Medical Device Reprocessing Technician
- Medical Laboratory Assistant Bridging
- Medical Terminology
- Paramedics
- Rehabilitation Assistant Bridging (for single OTA or PTA training individuals)

Recent Mining Sector training
- Leadership Development
- Computer Skills Training
- Customized Mill Operator
- Heavy Equipment Operator
- Industrial Mechanic
- Machinist
- Mining Technician
- Prospectors Training

Safety training:
- Air Brake Endorsement
- Specialized Welding
- CWB Training and Testing
- Blueprint Reading
- GIS/Map and Compass
- Boom Truck Evaluation
- Canadian Electrical Code
- Excavator Training
- Grader Training
- Heavy Equipment Operator
- Mobile Crane
- ND1 (Non-Destructive Testing)

Education:
- Culture:
- Diversity:
- Drill Rig Safety Inspection
- H2S Alive (ENFORM Certified)
- Hazardous Area “EX” (CAPP Standard)
- Hoisting, Rigging and Slinging
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- Medical Terminology
- Paramedics
- Rehabilitation Assistant Bridging (for single OTA or PTA training individuals)

Recent Mining Sector training
- Leadership Development
- Computer Skills Training
- Customized Mill Operator
- Heavy Equipment Operator
- Industrial Mechanic
- Machinist
- Mining Technician
- Prospectors Training

Safety training:
- Air Brake Endorsement
- Specialized Welding
- CWB Training and Testing
- Blueprint Reading
- GIS/Map and Compass
- Boom Truck Evaluation
- Canadian Electrical Code
- Excavator Training
- Grader Training
- Heavy Equipment Operator
- Mobile Crane
- ND1 (Non-Destructive Testing)
High Voltage
Industrial
Industrial Scaffolding
Occupational Health and Safety (OHS)
Fundamentals Certificate Program
Safety Engineering
OHS Committee/Rep (WHSCC Approved)
Overhead Crane
Power Line Hazards (WHSCC Approved)
Propane Safety
Scaffolding Safety Awareness
Transportation of Dangerous Goods (TDG)
Workplace Hazardous Materials Information Systems (WHMIS)

Natural Resources Sector:
• Conservation and Law Enforcement Training Program (CLET)
• Quality Compliance Enforcement
• Program (QCEP)
• Law Enforcement-Level 1
• Security Services
• Environmental Monitor

Training for Individuals and Community Organizations:
• Paramedic Program
• Mining Technician
• Heavy Equipment Operator
• Kitchen Helper
• Commercial Cook
• Power Engineer
• Firearms Safety/Hunter Education
• Construction Safety
• Supervisor

Training for Professional Designations:
Certified Sales Professional
Maintenance Management Professional (MMP)
Payroll Practitioner
Supply Chain Management Professional

Continuing Education
Professional and Personal Development Opportunities
For those who want to increase their chances of getting a job, upgrade their skills to advance in their present career, maintain their certification, or are interested in pursuing a personal interest, College of the North Atlantic offers a vast array of continuing education courses and certificate programs in many campus locations throughout the province.

Certificate Programs
Continuing Education certificate programs are offered on a part-time basis through evening, daytime or through print-based distance education (correspondence courses). Students enrolling in a certificate program have the convenience of studying part-time while maintaining current employment.

Certificate programs and professional development courses available include:
• Changing Minds - Mental Health Education Program
• Conservation Law Enforcement Training
• Exam Sessions (Real Estate / LLQP / RIBO)
• Maintenance Management Professional (offered in partnership with Plant Engineering and Maintenance Association of Canada)
• Marine Front Line Hospitality
• Medical-Related Training
• Applied Cardiac Life Support (ACLS)
• Cardiology Review and Altered Sensorium
• Drug Calculations for the Paramedic
• ECG Rhythm Strip Review
• Emergency Medical Dispatch (EMD)
• Emergency Medical Responder (EMR)
• Femoral Traction Splint for
• Open Femur Fracture
• IV Therapy Recertification
• IV Therapy Testing Challenge (for out-of-province entrants)
• IV Therapy Testing Challenge
• (for in-province entrants)
• Medical Device Reprocessing Technician (MDRT)
• Primary Care Paramedicine (PCCP) Refresher
• Occupational Health and Safety (OHS)
• Fundamentals Certificate Program
• Project Management Certificate Program
• Project Management Professional Exam
• Preparation Course
• Records and Information Management (RIM)
• Certificate Program
• Security Services
• Supervisory / Management / Leadership Development
• Supply Management Training

Post-Diploma Program (Post-Graduate)
Ask about our post-graduate diploma programs for those who have graduated from a 3-year diploma program or a university degree. These programs include:
- Diagnostic Ultrasonography
- GIS Applications Specialist
- International Business Management
- Journalism
- Safety Engineering Technology

Credit Courses
(transferable to full-time programs)
Credit courses offered through continuing education are part of the following full-time programs:
- Business Management
- Computer Systems and Networking
- Engineering Technology
- Health Sciences
- Office Administration
- Programmer Analyst

Leadership, Management and Supervisory Skills Training
As the country’s baby boomers retire, the nation faces major labour shortages, including administration and management positions. We must plan for that shortage now by training our existing workforce in leadership, management and supervisory skills. College of the North Atlantic offers management and supervisory courses scheduled every semester. Choose timeslots during evenings or business hours.

Personal Interest Courses
Whether you want to learn a foreign language or you want to make a gourmet dish, Continuing Education offers many personal interest courses to suit your needs:Arts and Crafts
- Belly Dancing
- B.O.A.T.
- Cooking / Baking
- Firearms Safety Courses
- Language Training
- Matting and Framing
- Photography
- Welder Testing (CWB)
- Welding Courses
- Yoga

For a list of course descriptions and schedule information, visit our Continuing Education website at http://www.cna.nl.ca/continuing-education/ and check out a campus near you. If our schedule of courses does not meet your timeframe, we can work with your business to schedule timeslots that are convenient through our customized training options.

Please refer to the Fees and Charges section of the calendar for refund information pertaining to Contract Training/Continuing Education.

TO INQUIRE ABOUT CONTINUING EDUCATION, CONTACT US.
Call Toll Free: 1.888.982.2268
Email: corporatetraining@cna.nl.ca
website: www.cna.nl.ca

Business Development Officer
Prince Philip Drive Campus
P: 709-758-7135
F: 709-758-7297

Office of Distributed Learning (http://dls.cna.nl.ca)

College of the North Atlantic’s award-winning Office of Distributed Learning (DL) provides students new opportunities to complete college courses and programs without having to attend a college campus. All online courses carry the same credentials and academic standards as their classroom equivalents. During the academic year, our Help Desk provides support seven days a week for extended hours. We provide online chat and toll-free telephone support to ensure that you are supported throughout the duration of your course or program.

Distributed Learning provides a supported alternative approach to learning for individuals who are motivated, disciplined and independent students who may not be able to attend a campus. DL courses provide the opportunity to complete course requirements from home, work, school or any other location that has an internet connection.

This flexible approach allows students to balance the demands of work, family and learning. Students and instructors are able to interact by using a digital network from different locations at times that are convenient for both. Information is exchanged between the instructor and the student primarily through the use of email and the discussion areas within the online learning management system. Audio, video and web conferencing tools are also used in some courses.

Distributed Learning is technology-mediated and students must become familiar with using computers that are Internet ready. Before registering for a course, potential students should take responsibility for learning the appropriate technology and assuring access to a computer that has all the software required to complete a course. The time and planning invested at the beginning will pay dividends with a satisfactory and rewarding learning experience. Visit the DL webpage at http://dls.cna.nl.ca

AVAILABLE COURSES AND PROGRAMS
Distributed Learning provides credit courses from all academic Schools. For further information about specific programs and courses offered through DL see the Course Descriptions section of the calendar or view the Office of Distributed Learning website at http://dls.cna.nl.ca.

Distributed Learning offers complete diploma and certificate programs in:
- Business Administration (BA)
- BA Certificate
Note: The following list of courses is subject to change.

**DISTRIBUTED LEARNING COURSES**

AC1100 Bookkeeping I
AC1260 Financial Accounting I
AC1350 Income Tax
AC2100 Bookkeeping II
AC2220 Intermediate Financial Accounting
IAC2230 Computerized Accounting I
AC2250 Managerial Accounting I
AC2260 Financial Accounting II
AC2600 Managerial Accounting for HRM
AC3220 Intermediate Financial Accounting
IAAC3250 Managerial Accounting II
AM1100 Math Essentials
AP1101 Intro to Apprenticeship
BL1020 Introductory Biology I
BL1021 Introductory Biology II
BL1330 Anatomy
BL1360 Anatomy and Physiology
CM1060 Essential English I
CM1061 Essential English II
CM1100 Writing Fundamentals
CM1240 Business Communications I
CM1241 Business Communications II
CM1260 Communications in Health Care
CM1370 IM Communications
CM1400 Technical Report Writing I
CM1401 Technical Report Writing II
CM2100 Workplace Correspondence
CM2110 Business Writing Fundamentals
CM2130 Workplace Writing
CM2160 Communication Essentials
CM2200 Oral Communications
CM2300 Report Writing
CP1120 Fundamentals of Programming I
CP1330 Windows Server Administration
CP1410 Web Analysis and Design
CP1560 Data Management
CP1570 Networking for Programmers
CP2130 Fundamentals of Programming II
CP2280 Object Oriented Programming in Java
CP2310 Electronic Spreadsheet Applications
CP2410 Micro-Database Applications
CP2420 PHP
CP2470 Web Server
CP2640 Desktop Publishing
CP3100 MVC Framework Development
CP3130 Content Management Systems
CP3150 Interface Design and Analytics
CP3160 Multimedia Development
CP3370 Software Development with ASP.NET
CP3470 IM Systems Analysis and Design
CP3510 Database Design
CR1260 Client Service for Computer Industry
CR1280 Computer Concepts for Information Management
CR1360 IM Security
CR1510 Website Development
CR2170 Trends in Web Development
CR2510 Linux Service Administration I
CR2800 Security for Programmers
CR3540 Capstone Project
DM1200 Document Production I
DM1210 Document Production II
DM1300 Transcription I
DM1301 Transcription II
DM1400 Medical Transcription I
DM1401 Medical Transcription II
DM2200 Document Production III
DM2240 Document Production IV
EC1110 Microeconomics
EC1210 Macroeconomics
EE1180 Positive Behavior Guidance
EE1290 Child Development I
EE1340 Child Development II
EE1341 Observation
EE1420 Creative Experiences I
EE1421 Creative Experiences II
EE1440 Family Studies I
EE1441 Family Studies II
EE1440 Inclusion I
EE1480 Inclusion II
EE1870 Community Resources
EE2180 Curriculum III
EE2260 Introduction to Child Care Administration
EE2280 Child Development III
EE2340 Professional Practice
EE2470 Infant Development and Care
EE2500 School-Age Development and Care
EG1110 Advanced Behavior Guidance
EG1130 Engineering Graphics
EP1100 Entrepreneurial Studies
EP1110 Introduction to Business
EP1130 Business for Information Systems
EP2130 Business Principles and Practices
EP2150 Entrepreneurship
EP2200 Business Planning
EP2250 Small Business Development
EP2400 Business Solutions
FH1340 Health and Safety
FH1360 Childhood Nutrition
FH1500 Personal Wellness
FN2110 Business Finance
HN1100 Industrial Relations
HN1200 Human Resource Management I
HN1200 Human Resource Management II
HN1200 Occupational Health and Safety
HN1240 Collective Agreement
HN1240 Dispute Settlement
HN1240 Recruitment and Selection
HN1240 Attendance and Disability Management
HN1240 Training and Development
HN1240 Strategic Compensation and Benefits
HN2210 Human Resource Management
HN3110 Current Topics in Human Resource Management
HR1300 Communications and Human Relations
KB1150 Keyboarding I
KB1151 Keyboarding II
LB1210 Labour and Employment Law
LB1230 Business Law
LB1280 Information Management Law
MA1040 Math Fundamentals I
MA1041 Math Fundamentals II
MA1100 Mathematics
MA1670 Statistics
MA1900 Problem Solving for Information Technology
MA2400 Mathematics of Finance II
MC1060 Computer Essentials
MC1150 Productivity Tools
MC1220 Productivity Tools I
MC1221 Productivity Tools II
MC1240 Computer Applications I
MC1241 Computer Applications II
MC2220 Productivity Tools III
MN2600 Strategic Management
MN3100 Business Ethics
MN3200 Performance Management
MR1100 Marketing I
MR1600 Professional Selling
MR2100 Marketing II
MR2300 Business Research
MR2400 Marketing Communications
OF1100 Office Management I
OF1101 Office Management II
OF2100 Office Management III
OF2101 Office Management IV
OF2300 MCP Billing
OF2400 Medical Office Management I
OF2401 Medical Office Management II
OF2700 Capstone Project
OF2720 Capstone Project
OJ1130 Work Exposure - BA Certificate (2 wks)
OJ1130 Work Exposure - BA Certificate (2 wks)
OJ1150 Work Exposure - BA HRM (6 wks)
OJ1580 Work Exposure - BA ACCT (6 wks)
OJ1590 Work Exposure - BA General (6 wks)
OJ1900 Work Exposure - OA Executive (6 wks)
OJ1920 Work Exposure - OA Medical (6 wks)
OP1320 Classification
OP1400 Records & Information Management I
OP1401 Records & Information Management II
OP1600 Electronic Records Management
PH1100 Physics
PH1101 Physics
PR1100 Website Project I
PR1101 Website Project II
PR2700 Project Management
PS1120 Psychology I
PS1150 Introduction to Psychology I
PS1151 Introduction to Psychology II
College of the North Atlantic welcomes students from all parts of the world. International students are attracted by the college's high quality education, reasonable costs, safe and friendly living environment, student support services, and the accessibility and transferability of its certificates and diplomas. College of the North Atlantic places a high value on the contribution that international students make towards the development of intercultural communications and understanding throughout the college and the community.

**International Student Application Procedure**

1. Applicants must complete an Application for Admission Form (available on-line at: http://www.cna.nl.ca/apply/application.asp) and forward it, along with the $100 application fee, proof of English competency and official academic transcripts and graduation certificates to the address listed below. While the application and application fee can be submitted on-line, all the supplementary documents are to be submitted in hard copies.

   **International Student Coordinator**
   Student Services Division
   College of the North Atlantic
   1 Prince Philip Drive
   P.O. Box 1693
   St. John's, N.L.
   Canada A1C 5P7
   Tel: 709 758-7290
   Fax: 709 758-7304
   E-mail: internationalweb@cna.nl.ca
   Web: www.cna.nl.ca

2. The application will be reviewed once all the appropriate documents are received by the International Student Coordinator and, if accepted, a Letter of Acceptance will be issued to the student. The letter will confirm fee, enrolment date, program of study and length of program.

3. Upon receipt of an electronic copy of the Letter of Acceptance, the student is required to pay the registration fee and tuition fee for the first semester of the program of studies. In the event that a student visa/study permit is not awarded by the Canadian Embassy and the student provides a letter and evidence to support this claim, the tuition will be refunded in full. See section below on refunds for further details.

4. Applicants should take their letter of acceptance to the nearest Canadian Embassy, High Commission, or Consulate to apply for a Student Visa (if required) and a Study Permit. Generally, applicants will need:
   - Documentation verifying personal identification (such as a passport)
   - An original Letter of Acceptance
   - Proof of funds available to cover tuition and living expenses
   - Assurance that the student will return to his/her country of residence

5. Once an applicant has been issued a Study Permit, he/she should advise the college and make arrangements to travel to Canada to begin his/her program at College of the North Atlantic.

**Language Requirements**

All international students must meet the college's English proficiency requirements for acceptance into regular programs. The college will accept most internationally recognized tests of English proficiency (e.g. TOEFL paper based 550, TOEFL Internet based 79, TOEFL computer based 213 or equivalent, IELTS overall band score of 6.5 and 6.0 for reading and writing, MELAB minimum 85, etc.).

**Academic Prerequisites**

For more information regarding the application process, please visit the Citizenship and Immigration Canada website at: http://www.cic.gc.ca/english/study/index.asp.

**Age of Students**

The minimum age accepted by College of the North Atlantic is 17 years.

**Program Start Dates**

Normally, college programs commence in September of each year, however, at smaller campuses there is more flexibility around entry times. Students with advanced standing may be able to enter a program in its second or third semester.

**Student Services and On-Campus Facilities**

The Division of Student Services provides personal and academic counseling to all students of the college. Student tutoring and other learning resources are also available. The Student Council organizes various events/activities for students throughout the year.

The International Student Coordinator should be the first contact for all international students. The Coordinator is sensitive to the special needs of international students and is experienced in providing support to them. Below is a list of services provided by the Coordinator:

- Advice on Accommodation Search.
- Language assessment.
- Orientation.
- Monthly international events.
- Liaison with sponsoring agencies, foreign governments, consulates and embassies.
- General advising and counseling regarding personal and financial concerns.

All students at college of the North Atlantic have free access to the Internet and a variety of software, accessible through the college's many networked computers.

**Health Insurance**

Newfoundland and Labrador’s Medical Care Plan (MCP) and International Students

The Medical Care Plan (MCP) program applies to any international student issued an official study permit by Citizenship and Immigration Canada before entering the country. The individual must be attending a recognized post-secondary educational institution in Newfoundland and Labrador (including College of the North Atlantic) for a period of at least 12 months. Dependents of the student will also be covered under MCP. Provided they are living in the province and have relevant documentation to support their application.

Coverage will become effective for eligible students and dependents on the date of registration. Eligible students must present a registration letter from the college and an MCP application form to be considered for the program. Coverage is renewable on a yearly basis, with a current enrollment letter, and will terminate upon completion of the study program or the end date of study permit, whichever is earlier. Students must be attending school and residing in the province.
in order to avail of coverage. Work terms outside the province are not covered.

Please note that only services listed under the Medical Care Insured Services Regulations and the Hospital Insurance Plan Regulations will be accessible for international students.

For the MCP application form and more information regarding the services offered under the plan, please visit the Newfoundland and Labrador government website at: www.health.gov.nl.ca/mcp/.

International Health Insurance Plan
Registered international students of College of the North Atlantic are covered under an accident insurance plan. This DOES NOT provide routine medical coverage for students. If a student wishes to opt out of the plan, he/she must provide proof of purchase of a similar health insurance plan to the International Student Coordinator before registration.

FEES AND COSTS
All amounts are in Canadian Dollars and all fees must be paid in Canadian Dollars.

Regular Academic Studies
Application Fee:
CAD $100
- Non-refundable – must be sent with application

Tuition Fees:
Regular-Full-time programs
CAD $3300 per semester (15 weeks - Fall or Winter Semester)
Intercession
CAD $1650 per semester (7 weeks - Intersession)
Continuous Intake
CAD $220.00 per week and prorated equipment/materials fees
In-class course - Part-time students
CAD $660 per course
DL courses
CAD $660 per course + $50 Tech Fee
Co-op work term
CAD $1650 per semester (12-16 weeks)
On the Job Training
CAD $220 per week
Equipment/Materials
CAD $55-$165 (varies from program to program; some exceptions may apply)

In general, for most programs one academic year consists of two 15-week semesters and one 7-week semester. For some programs, an academic year consists of three 15-week semesters. See program description in the college calendar for details.

Registration Fee:
All programs
CAD $95
Per academic year (September to August)

Other Costs (Note: these are estimations of expenses, not exact figures)
Textbooks
CAD $500-1000 per semester
Health Insurance
CAD $500-550 per year

SCHEDULE OF PAYMENTS
- Application Fee ($100) must accompany application form
- Registration Fee ($95) due when student receives Letter of Acceptance or during registration
- First semester tuition ($3300) due when student receives Letter of Acceptance
- Tuition and Equipment/Materials are paid during registration at the beginning of each semester
- Health Insurance must be purchased before or upon arrival in Canada

ACCEPTABLE METHOD OF PAYMENTS
Payment can be made by credit card or direct transfer into the college’s account.

REFUNDS
The following outlines the international eligibility for tuition refund:
- Application fee and registration fee are non-refundable.
- In the event a student has paid tuition fees in advance and he/she is not granted a visa by the Canadian Embassy and cannot attend the college as a result, any tuition paid will be fully refunded. If the student has registered and attended classes prior to this notification, the student will be liable for a pro-rated tuition and equipment and materials fee for the weeks attended
- In the event that a student formally withdraws their acceptance to the college 30 days prior to the program registration date, a $1000 administration fee will be deducted and the remaining tuition fees will be refunded to the student.
- Once a student is registered in his/her program of study, and holds a valid visa, he/she is not eligible for any refund of tuition for the semester in which he/she is registered or any prior semesters. If the student has paid tuition fees for more than the current semester in which he/she is registered, tuition fees for subsequent semesters will be refunded. (The application fee and the registration fee are nonrefundable)

SCHOLARSHIPS
The college does not offer scholarships or bursaries to international students upon admission. Once a student is enrolled at the college, he or she may be eligible to apply for a scholarship or bursary. Eligibility for the college’s scholarships and bursaries is usually determined by the student’s academic performance.

LIVING EXPENSES
An average monthly estimate of living expenses (not exact figure):
- Housing: $500.00-700.00
- Meals: $250.00-300.00
- Transportation: $70.00-100.00
- Total Average: $900.00

RESIDENCE
The college maintains residence facilities at the Bay St. George, Burin and Happy Valley-Goose Bay campuses. Fees for room and board at the residences range between $350 and $650 per month with optional meal plans available. Please refer to Fees & Charges section of the calendar for rates. Students wishing to apply for residence should apply directly to the Residence Office of the appropriate campus.

OFF-CAMPUS HOUSING
Newfoundland and Labrador also has many off-campus housing options including renting a single room in an apartment or house, rental apartments, rental houses, and boarding houses (which often include meals). There are often apartments within walking distance of the college and a public bus service at many college campuses. Students who would like to live off-campus can contact the International Student Coordinator for information and advice regarding off-campus housing options. Depending on the type of accommodation and location, the cost of off-campus housing can range from $500-$700 and up.

International Contracts
Economic development is strongly linked to the presence of an effective and responsive education system and the establishment of an educated and trained workforce. College of the North Atlantic embodies the concept of education-industry interface through the development of partnerships, tailor-made training, technical assistance and consultancies around the world to promote labour market renewal and develop relevant professional and skills training programs.

International Contract Training
College of the North Atlantic develops tailor-made training programs to meet the needs of businesses and organizations worldwide. Customized training can vary in duration from a one-day session to programs of several months. We pride ourselves in responding quickly and accurately to clients’ needs.

College of the North Atlantic’s instructional and support staff has the expertise to ensure quality programs and services. Training expertise at College of the North Atlantic exists in a wide range of sectors:
- Petroleum/Oil & Gas
- Safety & Construction
- Tourism & Hospitality
- Health Sciences
- Engineering Technology
- Industrial Trades
- Business
- Information Technology
- Management & Leadership
- Distance Learning Systems
- Natural Resources

International Partnerships
College of the North Atlantic works in partnership with educational institutions in joint delivery of programs, training needs assessment, curriculum and program development, teacher training, and other areas of educational cooperation. We have an excellent track record in working with partner institutes and organizations.

In 2001, College of the North Atlantic was chosen by the State of Qatar as its partner in the creation of a world-class technological institute. The Qatar campus is growing steadily towards a student population of 6000, with 22 brand new custom-designed buildings, state-of-the-art facilities and computer systems, classrooms, laboratories, industrial workshops and a comprehensive range of programs and student services.

International Consultancies and Technical Assistance
The college has extensive experience and proven success in sharing best practices and processes in both the administrative and pedagogical aspects of technical/vocational education. College of the North Atlantic has provided technical support and consultancy services to projects operated by private companies, governments, non-government organizations and development agencies such as the World Bank, the International Development Research Centre, the Canadian International Development Agency and the Colleges and Institutes Canada.
GEOGRAPHIC EXPERIENCE
In the past decade alone, College of the North Atlantic has worked with clients in Libya, Lebanon, Yemen, Qatar, West Bank/Gaza, Jordan, Egypt, Peru, Argentina, Chile, Jamaica, Barbados, the Caribbean, Tanzania, Vietnam, Malaysia, Latvia, Lithuania, Russia, India, Pakistan, Thailand, and China.

For additional information regarding custom-designed training, partnerships, and other international business initiatives please contact:

Elizabeth Vincent
Business Development Manager
International Services
College of the North Atlantic
1 Prince Philip Drive
P.O. Box 1693
St. John’s, NL
Canada A1C 5P7
tel: (+1) 709 758-7261
fax: (+1) 709 758-7222
e-mail: international@cna.nl.ca
web: www.cna.nl.ca

Alumni and Advancement
The Alumni and Advancement Office operates within the Division of Industry and Community Engagement. Its role is twofold: to foster a climate which creates and nurtures partnerships for the college – allowing for first-rate education opportunities for its students; and to provide an opportunity for all Alumni to connect with the college and with one another.

ADVEMENT
Advancement activities within the college play a pivotal role in engaging community and corporate supporters. Financial support allows for the continuous growth of the college, and through scholarships and bursaries ensures that students have access to high quality education, state of the art equipment and excellent career opportunities. Support for our advancement goals occurs through corporate and private donations and through our internal Faculty and Staff Appeal.

ALUMNI
College of the North Atlantic Alumni are those individuals who have graduated from an approved diploma or certificate program at CNA or one of its predecessor institutions.

The college has always felt a sense of responsibility, pride and interest in the lives of its graduates. With the development of an Alumni Office, our alumni have a lifelong connection to the college. This connection in turn encourages our many alumni worldwide to continue to support College of the North Atlantic and its students.

The Alumni and Advancement Office prides itself on providing key benefits to both former and current students.

BENEFITS FOR REGISTERED ALUMNI
• Free subscription to the alumni e-newsletter
• Opportunities to stay connected or to reconnect with the college, former teachers, classmates and friends through social media outlets and local events
• Continuing Education opportunities
• Free access to campus libraries
• Discounts from our select partners
• Career employment services and interview tips
• Opportunities to give back to the college by serving as a college ambassador within their communities
• Diploma frames and class rings

BENEFITS FOR STUDENTS
• Student scholarships, bursaries and awards are a key part of our Office’s activities. By securing corporate and community support, we encourage and support the development of our students.
• We build connections between students and alumni which facilitates career guidance or mentorships between these two groups.
• Students can be confident in knowing that the relationships they are forming as students will continue beyond graduation

To learn more about these benefits or to become involved contact:

Alumni and Advancement Office
College of the North Atlantic
1 Prince Philip Drive, Room L202
P.O. Box 1693
St. John’s, NL A1C 5P7
tel: 709 758-7356
fax: 709 758-7222

Visit: www.cna.nl.ca/alumni

Applied Research and Innovation

With a demonstrated capability in several areas of technology, trades, natural and social sciences, the college furnishes the necessary building blocks for an applied research and innovation system. Our strategic research plan prioritizes applied research and innovation in areas of College’s traditional strength as well as in disciplines where significant potential for growth exists as a result of industry demand. The college is equipped with modern infrastructure, state-of-the-art equipment and a cadre of researchers committed to innovation and research. As well, we enjoy strong association with the community and good working relationships with industry.

The college’s Office of Applied Research (OAR) works toward fostering a spirit of research creativity among its faculty, staff and students. An important area of our responsibility is to support researchers in the creation of new knowledge as well as in the development of innovative products and services. We are connected with local business and industry and respond to their needs in problem solving, product development, patents and licenses. Our current areas of activity in applied research include:
- Engineering Technology
- Mining Technology
- Oil & Gas
- Renewable Energy
- Environmental Science
- Interdisciplinary Research
- Natural Resources
- Nanotechnology
- Digital Animation
- Social Sciences/Humanities/Community Based Research

Our researchers in engineering and manufacturing sciences utilize the latest technologies in design software, 3-D printing, laser scanning, vacuum forming, injection molding, etc. Researchers are provided with support throughout the research process from proposal development to technology transfer and commercialization.

Projects involving multiple funding and community partnerships are ongoing in strategic areas of activity. Some of our leading initiatives include projects in: ocean energy, applied mineralogy, mobile housing, industrial research assistance to SMEs, etc. Information on current and past projects can be found on our website. http://www.cna.nl.ca/office-applied-research/default.asp

In addition to its regular staff, the office oversees several campus based positions such as industrial research chair, research technicians, and work term students, across the province. The timing and role of these positions vary according to the research needs and the availability of funding.

The Office of Applied Research can be contacted at the following coordinates:
Office of Applied Research
College of the North Atlantic
Prince Philip Drive Campus (Room K203)
P.O. Box 1693
St. John’s, NL, CA
A1C 5P7
tel: 709 758-7474
fax: 709 758-7327
e-mail: tara.jackson@cna.nl.ca

Programs and Courses

College of the North Atlantic has nearly 100 full-time program offerings and more than 300 part-time in a variety of school areas. For specific information on our programs, such as entrance requirements, duration of the program, campus the program is offered at, description of the program, and courses required for completion, please visit our website at www.cna.nl.ca/programs-courses.
School of Academics, Applied Arts and Tourism
ACADEMICS

Aboriginal Bridging Program

CERTIFICATE
• One Year
• September
• Happy Valley-Goose Bay Campus

OBJECTIVES
1. To provide Aboriginal students, who are secondary level graduates or have mature status, with the opportunity to strengthen the academic and personal development skills necessary to succeed in future post-secondary programs.
2. To provide, in response to identified occupational needs, a bridging program that enhances Aboriginal student transition to higher education.
3. To enhance the employment opportunities of secondary level graduates and mature students through improving fundamental employability skills.

ENTRANCE REQUIREMENTS
High School - Provincial High School Graduation Certificate, or equivalent;
Adult Basic Education (ABE) - Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile);
Mature Student Status - Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

ACADEMICS

Comprehensive Arts & Science (CAS) Transfer: College-University

CERTIFICATE
• One Year
• September
• Burin, Carbonear, Grand Falls-Windsor, Happy Valley-Goose Bay, and Labrador West Campuses

This program is designed to "bridge the educational gaps" in the lives of Aboriginal learners, enabling them to succeed in subsequent college programs of study. The Aboriginal Bridging program is, moreover, a valuable academic "refresher" for mature students returning to school for training, or to the workforce after a prolonged period of absence. Students enrolling in this program will receive instruction in reading comprehension, writing, numeracy, public speaking, researching, scientific experimentation, personal awareness, study skills, time management, and critical thinking.

In additional to academic courses in Communications, Mathematics and Science, the Aboriginal Bridging program also recognizes that personal skills training is often as important to success as academic studies, and that cultural supports are a necessary component for Aboriginal students entering post-secondary environments. Culturally relevant materials are therefore utilized to form a curriculum designed specifically for First Nations, Inuit, and Métis students. Elder and community participation will be incorporated into the classroom, and career and computer skills courses, as well as personal development and health and wellness training, will be offered as complements to the academics. Students will receive instruction in nutritional example, as well as stress management, healthy relationships, parenting, self-determination, and active lifestyles. Combined, this split focus – academic and personal skills development – forms a solid foundational year upon which future post-secondary success may be built.

The Aboriginal Bridging program is closely associated with the CAS Transition offering of courses and feeds directly into that college program. The successful completion of Aboriginal Bridging will enable students to gain specific credits which may be used in CAS Transition.

OBJECTIVES
1. To provide Aboriginal students, who are secondary level graduates or have mature status, with the opportunity to strengthen the academic and personal development skills necessary to succeed in future post-secondary programs.
2. To provide, in response to identified occupational needs, a bridging program that enhances Aboriginal student transition to higher education.
3. To enhance the employment opportunities of secondary level graduates and mature students through improving fundamental employability skills.

ACADEMICS

Comprehensive Arts & Science (CAS) Transfer: College-University

CERTIFICATE
• One Year
• September
• Burin, Carbonear, Grand Falls-Windsor, Happy Valley-Goose Bay, and Labrador West Campuses

This program is designed to "bridge the educational gaps" in the lives of Aboriginal learners, enabling them to succeed in subsequent college programs of study. The Aboriginal Bridging program is, moreover, a valuable academic "refresher" for mature students returning to school for training, or to the workforce after a prolonged period of absence. Students enrolling in this program will receive instruction in reading comprehension, writing, numeracy, public speaking, researching, scientific experimentation, personal awareness, study skills, time management, and critical thinking. In additional to academic courses in Communications, Mathematics and Science, the Aboriginal Bridging program also recognizes that personal skills training is often as important to success as academic studies, and that cultural supports are a necessary component for Aboriginal students entering post-secondary environments. Culturally relevant materials are therefore utilized to form a curriculum designed specifically for First Nations, Inuit, and Métis students. Elder and community participation will be incorporated into the classroom, and career and computer skills courses, as well as personal development and health and wellness training, will be offered as complements to the academics. Students will receive instruction in nutritional example, as well as stress management, healthy relationships, parenting, self-determination, and active lifestyles. Combined, this split focus – academic and personal skills development – forms a solid foundational year upon which future post-secondary success may be built.

The Aboriginal Bridging program is closely associated with the CAS Transition offering of courses and feeds directly into that college program. The successful completion of Aboriginal Bridging will enable students to gain specific credits which may be used in CAS Transition.

OBJECTIVES
1. To provide Aboriginal students, who are secondary level graduates or have mature status, with the opportunity to strengthen the academic and personal development skills necessary to succeed in future post-secondary programs.
2. To provide, in response to identified occupational needs, a bridging program that enhances Aboriginal student transition to higher education.
3. To enhance the employment opportunities of secondary level graduates and mature students through improving fundamental employability skills.
Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses:
i. English 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
iii. Science from one of the following sections:
   b. Chemistry 1102, 2102A, 2102B, 2102C, 3102A, 3102B, 3102C
c. Physics 1104, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C

Applicants with Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above has been completed.

4. Mature Student Status
Applicants who do not meet the education prerequisites of this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

REQUIREMENTS FOR COMPLETION

In order to complete the requirements of the Comprehensive Arts and Science Transfer: College-University Certificate program, students must complete 10 courses from the CAS Transfer: College-University suite of courses with a minimum Grade Point Average of 2.00.

Note: For purposes of completion of the Certificate, MA1670 Statistics and EP1110 Introduction to Business may also be included in the CAS Transfer: College-University suite of courses. Students must also meet all qualification requirements for the awarding of a Certificate from the college.

Maximum number of CAS Transfer: College-University courses per semester (i.e. Fall; Winter) is five.

ACADEMICS

Comprehensive Arts & Science (CAS) Transition

CERTIFICATE
• One Year
• September
• Bay St. George, Corner Brook, Clarenville, Carbonear, Gander, Grand Falls-Windsor, Happy Valley-Goose Bay, Labrador West, Prince Philip Drive, Seal Cove, and St. Anthony Campuses

MINIMUM CREDS REQUIREMENTS

Minimum of 10 Credits from Core Program courses:
Program Access Courses
General Education and Social Science Courses
Exploration and Student Success Courses
Minimum of 3 Credits from Electives

Additional credits as needed to attain 40 Credits

Note: While it is possible to complete the required 40 credits by doing 5 courses per semester, students who select courses with a credit value of 3 or less may have to complete more than 5 courses per semester to graduate in two semesters. The maximum number of courses a student may complete per semester is 7.

Required Courses

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<td>CM1060</td>
<td>Essential English I</td>
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<tr>
<td>CM1061</td>
<td>Essential English II</td>
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CORE PROGRAM COURSES:

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<td>MA1040</td>
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<td>MA1041</td>
<td>Math Fundamentals II</td>
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<td>SC1120</td>
<td>Introduction to Sociology</td>
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<td>SC1400</td>
<td>Sociology-Labor/Industry and C</td>
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<td>EP1100</td>
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<td>HR1120</td>
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<td>PS2340</td>
<td>Organizational Behaviour</td>
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<td>CS1120</td>
<td>Leadership Skills I</td>
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Exploration and Student Success Courses

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<td>SD1570</td>
<td>Effective Learning</td>
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<td>SF1300</td>
<td>Critical Thinking Across the Curriculum</td>
<td>4</td>
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<tr>
<td>SD1230</td>
<td>Career Exploration</td>
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</table>

Electives:

Students in the CAS Transition program may select electives for the College Calendar provided the course is offered and available to the CAS Transition Student. The student must meet the stated prerequisites/co-requisites of the course, the student’s schedule must be able to accommodate the course and the student must meet any other regulations that may apply. Courses over and above the minimum credit requirements in the Core program courses may also be counted as Electives.

Comprehensive Arts and Science (CAS) Transition is designed for high school and Adult Basic Education graduates who would like to improve their general employability skills or who are lacking either the academic courses or the required grades to meet the entrance requirements of the college program they would like to enter. The Transition program also provides a valuable “refresher” for mature students who have been away from education, training and/or the workforce for some time.

Students in the CAS Transition program will be provided the opportunity to gain a wide range of knowledge and skills in preparation for further post-secondary training and/or employment. In addition to courses in English, Mathematics and Sciences, students will be able to select courses from a range of General Education and Social Science courses as well as Exploration and Student Success courses. Transition courses such as Critical Thinking and Effective Learning provide students with the opportunity to develop the essential skills and strategies for successful learning in any college program.

OBJECTIVES

1. To provide the opportunity for secondary level graduates to meet entrance requirements for other college programs.
2. To provide secondary level graduates and mature students with the opportunity to strengthen academic skills and/or learning habits and strategies needed to succeed in post-secondary programs.
3. To enhance the employment opportunities of secondary level graduates and mature students through improving fundamental employability skills.
4. To provide the opportunity for secondary level graduates to clarify training and career goals.
5. To provide a refresher for mature students who have been away from education, training and/or the workforce for an extended period of time.

ENTRANCE REQUIREMENTS

1. High School
   a. Provincial High School Graduation Certificate, or equivalent
2. Adult Basic Education (ABE)
   a. Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile)
3. Mature Student Status
   Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

FUTURE OPPORTUNITIES

One objective of the CAS Transition program is to increase opportunities for the youth of this province to gain post-secondary qualifications, and thus improve their lifetime employment and earnings potential. A number of recent government reports have documented the declining significance of high school graduation alone as a predictor of employability/employment status.

CAS Transition has the potential to significantly affect the employment and earnings potential of many adults in this province. For those who successfully make the transition to other college programs, the prospects for employment and increased lifetime earnings potential would be greatly enhanced. The Transition program also provides students with a post-secondary credential which could be of immediate benefit to them in the labour market, both in securing part-time work during their college studies and in attaining full-time work if they choose to postpone or suspend their studies for any reason.

Graduates of the CAS Transition program who have successfully completed the appropriate courses may qualify for admission to other college programs or other post-secondary programs or they may elect to enter the workforce directly. Students are advised to speak to an Advisor regarding course selection.

Students who complete the full certificate program may seek to meet admission criteria of Memorial University.

REQUIREMENTS FOR COMPLETION
<noinput>
**Bay St. George, Carbonear, Grand Falls-Windsor, and Happy Valley-Goose Bay Campuses**

**ENTRANCE REQUIREMENTS**

- **1. High School**
  - Provincial High School Graduation Certificate with a 60% average in nine level 3000 credits or equivalent

- **2. Comprehensive Arts and Science (CAS) Transition**
  - Comprehensive Arts and Science Transition Certificate

- **3. Adult Basic Education (ABE)**
  - Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile) with an average pass mark of 60%

**APPLIED ARTS**

**Digital Animation**

**DIPLOMA**

- **Two Years**
- **September**
- **Bay St. George Campus**

**Course Descriptions**

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<thead>
<tr>
<th>CODE</th>
<th>TITLE</th>
<th>Hrs/wk</th>
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<tbody>
<tr>
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<td>Community Economic Development</td>
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Throughout the program, students receive career counseling and academic advising to assist them in making course selections best suited to their particular career choices. To this end, students may choose courses available at the campuses from a number of the following areas: Addictions, Community Corrections, Community Development, Developmental Disabilities, Family Services, and Women's Studies. Not all courses are available at all campus locations.

**FUTURE OPPORTUNITIES**

Examples of types of organizations, agencies, and departments where Community Studies graduates have been hired include the following:

- Aboriginal Communities, e.g. health and social programs
- College of the North Atlantic, e.g. resource facilitators
- Community-based Correction Services, e.g. Youth Assessment Centres, John Howard Society and Residential Centres for offenders
- Department of Health and Community Services/Department of Child, Youth and Family Services, e.g. mental health services, addiction services, family services
- Economic and Social Development Agencies, e.g. Red Boards, Family Resource Centres and Community Youth Networks
- Services and Advocacy Groups for Persons with Disabilities, e.g. Residential Support Boards, Associations for Community Living and School Boards
- Services for Women, e.g. Women's Centres, Violence Prevention Programs and Transition Houses
- Social Programs for Older Adults, e.g. Long Term Care Centres and Congregate Housing
- Graduates who wish to further their education after graduation may choose to transfer credits to the Bachelor of Arts - Community Studies degree at the Cape Breton University or to the Bachelor of Professional Arts Communication Studies or Criminal Justice degrees at Athabasca University. This program has provided many students with a foundation for advancement within the human services field or to pursue further education in areas such as Social Work or Education.

**OBJECTIVES**

1. To expose students to the knowledge, skills, and values needed to work in the human services field.
2. To develop students' understanding of human relations and of the importance of interpersonal skills as a tool for positive growth and change.
3. To introduce students to the theories and practice of leadership.
4. To develop students' abilities to perform the role of change agents with individuals, groups, and communities.
5. To develop students' abilities to organize and facilitate specific target groups.
6. To increase students' skills in effective oral and written communication.
7. To provide students with introductory knowledge of psychology and sociology.
8. To develop students' knowledge and abilities in areas such as public relations, research, crisis intervention, interviewing, and project management.
9. To provide students with direct work experience related to the human services field.

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**OBJECTIVES**

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8. To develop students' knowledge and abilities in areas such as public relations, research, crisis intervention, interviewing, and project management.
9. To provide students with direct work experience related to the human services field.
fundamentals, industry standard animation software tools and collaborative production techniques, with creative problem solving and visual storytelling methods. From the practice of sequentially drawn images to the creation of fully realized 3D characters and environments, this approach allows the student to study the subject of Digital Animation with the broadest creative scope and range of technical application. This program is task-oriented; successful progress is based on personal performance in a series of both individual and group production projects. These projects include animated short subject films and video productions from conception to the finished product. The program culminates in a final personal animation project, portfolio and resume suitable for presentation to potential employers.

**EMPLOYMENT OPPORTUNITIES**

Graduates will be prepared for employment in the global communications and entertainment industry, film, broadcasting, gaming and design, as well as visualization services for the medical, engineering, simulation training, architectural and publishing fields.

**OBJECTIVES**

1. Upon successful completion of the program, graduates will be able to:
   - Apply the concept of “Design” as a professional discipline and historical practice.
   - Use technical skills in areas such as narrative, design, storyboarding, modeling and animation to create digital animation.
   - Demonstrate appropriate work habits, attitudes and behaviors required for employment.
   - Apply entrepreneurial skills to budget, resource, schedule and market animated projects.
   - Create a final portfolio demonstrating industry applicable skills.

2. **ENTRANCE REQUIREMENTS**

   **1. High School**
   Provincial High School Graduation Certificate with a 60% average in nine level 3000 credits or equivalent.

   **2. Comprehensive Arts and Science (CAS) Transition**
   Comprehensive Arts and Science Transition Certificate.

   **3. Adult Basic Education (ABE)**
   Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile) with an average pass mark of 60%.

   **4. Mature Student Status**
   Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

**APPLIED ARTS**

**EARLY CHILDHOOD EDUCATION**

**DIPLOMA**

- **Two Years**
- **September**
- **Corner Brook, Happy Valley-Goose Bay, and Prince Philip Drive Campuses**

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CODE</th>
<th>TITLE</th>
<th>Cr</th>
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<td>3</td>
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<tr>
<td>EE1340</td>
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<td>2</td>
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<tr>
<td>EE1290</td>
<td>Positive Behaviour Guidance</td>
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<td>4</td>
<td>0</td>
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<tr>
<td>EE1420</td>
<td>Creative Experiences I</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td></td>
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<tr>
<td>FH1340</td>
<td>Health &amp; Safety</td>
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<tr>
<td>FW1600</td>
<td>Field Placement I</td>
<td>6</td>
<td>6</td>
<td>0</td>
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</tr>
</tbody>
</table>

Five weeks of Field Placement during the semester, Field Placement lecture in the other 10 weeks. Hours of other courses will be adjusted to reflect 10 weeks of the semester.

| Semester 2 | | | | | | |
| EE1181 | Curriculum II | 3 | 3 | 0 | |
| EE1341 | Child Development II | 3 | 3 | 1 | |
| EE1360 | Observation | 2 | 2 | 1 | |
| EE1421 | Creative Experiences II | 3 | 2 | 2 | |
| FH1360 | Childhood Nutrition | 2 | 2 | 0 | |
| HR1300 | Communications & Human Relations | 2 | 2 | 0 | |
| FW1601 | Field Placement II | 6 | 6 | 0 | |

Five weeks of Field Placement during the semester, Field Placement lecture in the remaining 10 weeks. Hours of other courses will be adjusted to reflect 10 weeks of the semester.

| Semester 3 (Intersession) | | | | | | |
| EE2500 | School-Age Development & Care | 4 | 4 | 0 | |
| EE1440 | Family Studies I | 3 | 3 | 0 | |
| EE1480 | Inclusion I | 2 | 2 | 0 | |

The Lecture and Lab hours per week are based on a 15-week semester. In intersession, the lecture and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

| Semester 4 | | | | | | |
| EE2180 | Curriculum III | 5 | 5 | 0 | |
| EE2340 | Child Development III | 4 | 4 | 0 | |
| CM2130 | Workplace Writing | 3 | 3 | 0 | |
| EE2255 | Advanced Behaviour Guidance | 3 | 3 | 0 | |
| EE1870 | Community Resources OR | 3 | 3 | 1 | |
| FH1500 | Personal Wellness | 2 | 2 | 0 | |
| FW2600 | Field Placement III | 5 | 4 | 4wks | |

Four weeks of Field Placement during the semester, Field Placement lecture in the other 11 weeks. Hours of other courses will be adjusted to reflect 11 weeks of the semester.

| Semester 5 | | | | | | |
| EE2260 | Introduction to Child Care Administration | 3 | 3 | 0 | |
| EE1441 | Family Studies II | 3 | 3 | 0 | |
| EE2350 | Professional Practice | 2 | 2 | 0 | |
| EE2470 | Infant Development and Care | 3 | 3 | 1 | |
| EE1481 | Inclusion II | 4 | 4 | 0 | |
| FW2601 | Field Placement IV | 5 | 4 | 4wks | |

Four weeks of Field Placement during the semester, Field Placement lecture in the other 11 weeks. Hours of other courses will be adjusted to reflect 11 weeks of the semester.

**EEC Certificate courses are those listed in Semesters 1, 2, and 3 above.**

Early Childhood Education (EEC) has a lasting, positive impact on the development of children, and provides an essential support for families, communities, and society. Early literacy and numeracy, socialization, indoor and outdoor physical activities, and creative experience in art, music, movement, and dramatic play, are some of the areas in which students will acquire knowledge and skills to support and encourage children’s development. Students will have the opportunity to apply their learning on field placements, with different age groups, in the College’s demonstration child care centres and a variety of child care settings.

The usual work environment for EECs involves daily indoor and outdoor activity. Being in good health and having, energy, patience, physical stamina, good communication and interpersonal skills are assets that will help students in this profession.

**ENTRANCE REQUIREMENTS**

**1. High School**
Provincial High School Graduation Certificate with a 60% average in nine level 3000 credits or equivalent.

**2. Comprehensive Arts and Science (CAS) Transition**
Comprehensive Arts and Science Transition Certificate.

**3. Adult Basic Education (ABE)**
Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile) with an average pass mark of 60%.

**4. Mature Student Status**
Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

AND

**Early Childhood Education (EEC) Documentation Required:**

1. Current record of immunizations
2. Clear Certificate of Conduct, including the “vulnerable sector” category, from the RNC or RCMP, to include all jurisdictions in which the applicant has lived in the past 10 years, and
3. Satisfactory Child Protection Records Check

**The Certificate of Conduct and the Child Protection Records Check:**
- Must be dated no more than three months prior to the first scheduled day of classes for the program;
- Is valid for a period of three years, unless the student is absent from the program for six months or more.

**EARLY CHILDHOOD EDUCATION - DIPLOMA**

Students in the two-year Diploma program support children’s learning, and their development in all areas: physical, social, emotional, cognitive, and language development. In addition, learners learn how to develop, maintain, and evaluate a child care program based on best practices, and support the inclusion of all children, in programming. Learners are introduced to the administrative skills necessary to manage a child care service. With relevant work experience, a Diploma graduate will be qualified to become the Operator of a licensed child care centre.

There is a direct link between the level of education an ECE has and the quality of education and care that is provided to children. The Early Childhood Education Diploma program is an important step on the career ladder (certificate, diploma, degree) to increasing qualifications as an ECE. Diploma graduates are eligible for Level II Child Care Services Certification in infant, preschool and school-age care, working with children ages 0-12.

**OBJECTIVES**

Upon successful completion of the Diploma program, graduates will be able to:

1. Support and promote the overall development of children aged birth to 12 years.
2. Develop and maintain developmentally appropriate programs, and indoor and outdoor environments that reflect best practices.
3. Explain variations in the developmental abilities of children aged birth to 12 years.
4. Maintain caring and responsive relationships with the children in their care.
5. Carry out effective and positive behaviour guidance and, and discuss challenging behaviour.
6. Create and implement a philosophy statement, and develop programs and policies based on the philosophy.
7. Support staff in the delivery of programs, policies and guidelines.
8. Set up and maintain an environment that supports diversity and inclusion.
9. Observe, document and evaluate program delivery, child development, and adult/child
10. Discuss and illustrate the principles of early learning.
11. Demonstrate professional behaviour, reflective practice, and effective relationships with children, families, staff, and the community.
12. Apply provincial child care legislation, standards and policies, and all other applicable legislative and regulatory requirements.

FIELD PLACEMENT
Students complete four Field Placements during the Diploma program, two in year 1 and two in year 2. Each Field Placement includes time spent in the College’s demonstration child care centre.

CERTIFICATION
The graduate is awarded a Diploma of Applied Arts in Early Childhood Education from the College. This parchment indicates successful completion of two years of post-secondary education, combining theory and practical experience in the care, education, and guidance of children. The graduate is awarded a Diploma of Applied Arts in Early Childhood Education from the College.

EMPLOYMENT OPPORTUNITIES
Graduates of the Certificate program will be prepared for employment with organizations caring for children, or self-employment, providing child care. With relevant work experience, graduates will be able to develop programs for and/or supervise in child care services in communities throughout the province.

EARLY CHILDHOOD EDUCATION - CERTIFICATE
Students in the one-year Certificate program support children’s learning, and their development in all areas: physical, social, emotional, cognitive, and language development. The Early Childhood Education Certificate program is the first step in becoming a qualified ECE. Certificate graduates will be eligible for Level I Child Care Services Certification in preschool and school-age care (working with children ages 2-12). The one-year Certificate is also the same as the first year of the Early Childhood Education Diploma program, so graduates can continue on to complete the Diploma in just 2 more semesters.

OBJECTIVES
1. Upon successful completion of the Certificate program, graduates will be able to:
   • Support and promote the overall development of children aged 2 to 12 years.
   • Develop and maintain developmentally appropriate programs, and indoor and outdoor environments that reflect best practices.
   • Explain variations in the developmental abilities of children aged 2 to 12 years.
   • Maintain caring and responsive relationships with the children in their care.
   • Carry out effective and positive behaviour guidance, and discuss challenging behaviour.
   • Demonstrate professional behaviour and reflective practice in interactions with children, families, and the community.
   • Identify and outline provincial child care legislation, standards and policies.

FIELD PLACEMENT
Students complete two Field Placements during the Certificate program. Each Field Placement includes time spent in the College’s demonstration child care centre.

CERTIFICATION
The graduate is awarded a Certificate of Applied Arts in Early Childhood Education from the College. This parchment indicates successful completion of two years of post-secondary education, combining theory and practical experience in the care, education, and guidance of children. This program is one of the steps towards provincial Child Care Services (CCS) Certification granted through the Association of Early Childhood Educators of Newfoundland and Labrador (AECENL). Currently, the Early Childhood Education Certificate is awarded Level I CCS Certification for infant, preschool and school-age children.

Please note: Students must possess a valid First Aid Certificate to be eligible for a Certificate of Applied Arts in Early Childhood Education from the College.

EMPLOYMENT OPPORTUNITIES
Graduates of the Certificate program will be prepared for employment with organizations caring for children, or self-employment, providing child care. With relevant work experience, graduates will be able to develop programs for and/or supervise in child care services in communities throughout the province.

APPLIED ARTS
Early Childhood Education By Distance Education

DIPLOMA
• Varies
• Fall, Winter and Intersession
• Distributed Learning

PROGRAM OF STUDIES
A plan for ECE course completion is developed with each student, based on an assessment of any previous ECE or related training they may already have, and any PLAR credits received.

Early Childhood Education (ECE) is also available by distance education, online through the College’s Office of Distributed Learning (DL). Program descriptions, objectives, and the list of courses may be found on the Early Childhood Education full-time program pages.

Distance students register each semester from a list of course offerings. These offerings, and other important information about ECE by Distance, are posted on the DL website at: http://dlis.cna.nl.ca/ece. Students may enroll on a full-time or part-time basis. Since programs at the College are normally reviewed on a five-year cycle, students who go beyond the five-year time frame for completion by distance may be required to complete additional or revised courses before being deemed eligible to graduate.

Several courses in ECE by Distance require students to be currently working/volunteering directly with children in an approved early childhood setting, for a minimum of 15 hours per week for the semester. Each semester, all ECE distance students must submit a Learner Status for Course Registration form, which includes information on employment status.

ENTRANCE REQUIREMENTS
All entrance requirements listed on the Early Childhood Education full-time program pages must be met: both the academic requirements and the ECE program documentation requirements. Further information on obtaining ECE program documentation may be found at: http://dlis.cna.nl.ca/ece.

In order to register for certain courses by distance education, please note the employment/volunteer requirement as stated above.

NOTE regarding Certificate of Conduct and Child Protection Records Check:
Applicants currently working in a regulated child care centre:
An applicant must submit the Confirmation of Documentation and Employment Status form (available at: http://dlis.cna.nl.ca/ece/) and copies of their current satisfactory Certificate of Conduct and their current satisfactory Child Protection Records Check. The form must be dated no more than three months prior to the first scheduled day of classes.

Applicants not working in a regulated child care centre:
An applicant must submit the documentation as outlined in the requirements for the full-time program. Once admitted into the program, a student who does not enroll in courses for six months or more must submit a new Certificate of Conduct and Child Protection Records Check.

FIELD PLACEMENT
Students in the Diploma program must be required to complete four Field Placements. A minimum of 4 weeks must be completed at a CNA demonstration child care centre, over a maximum of two Field Placement courses. Field Placement courses are planned in conjunction with the ECE Program Manager.

Students in the Certificate program will be required to complete two Field Placements. A minimum of 4 weeks must be completed at a CNA demonstration child care centre, over a maximum of the two Field Placement courses. Field Placement courses are planned in conjunction with the ECE Program Manager.

CERTIFICATION
The Diploma program graduate is awarded a Diploma of Applied Arts in Early Childhood Education from the College. This parchment indicates successful completion of two years of post-secondary education, combining theory and practical experience in the care, education, and guidance of children, as well as best practices in developmentally appropriate programming and environments. Completion of this program is one of the steps towards provincial Child Care Services (CCS) Certification through the Association of Early Childhood Educators of Newfoundland and Labrador (AECENL). Currently, the Early Childhood Education Diploma is awarded Level II CCS Certification for infant, preschool and school-age children.

The Certificate program graduate is awarded a Certificate of Applied Arts in Early Childhood Education from the College. This parchment indicates successful completion of one year of post-secondary education, combining theory and practical experience in the care, education, and guidance of children. Completion of this program is one of the steps towards provincial CCS Certification through AECENL. Currently, the Early Childhood Education Certificate is...
awarded Level I CCS Certification for preschool and school-age children.

PRIOR LEARNING ASSESSMENT AND RECOGNITION (PLAR)

Students will be given every opportunity to receive credit for past learning experience through a comprehensive systematic process of evaluation. Once enrolled and active in the program, learners will be permitted to submit PLAR applications for any courses in the program for which they believe they have already acquired the appropriate level of knowledge and skills, except Field Placements II, III and IV. Please refer to the ECE webpage at http://dls.cna.nl.ca/educationalprograms/plar.htm for further information.

EMPLOYMENT OPPORTUNITIES

Graduates of the Diploma program will be prepared for employment with organizations caring for children, or self-employment, providing child care. With relevant work experience, they will be able to develop programs for and/or supervise in child care services in communities throughout the province.

Graduates of the Certificate program will be prepared for employment with organizations caring for children, or self-employment, providing child care in communities throughout the province.

LOCATION

ECE by Distance is available province-wide with on-campus Field Placements currently held at the Prince Philip Drive, Corner Brook, and Happy Valley-Goose Bay Campuses.

Courses with a work/Volunteer Requirement

Several courses require learners to be currently working/volunteering directly with children in an early childhood setting, for a minimum of 15 hours per week for the semester. Please see the list of these courses below.

EE1180 Curriculum I
EE1290 Positive Behaviour Guidance
EE1420 Creative Experiences I
FH1340 Health & Safety
EE1181 Curriculum II
EE1341 Child Development II
EE1360 Observation
EE1421 Creative Experiences II
EE2500 School-Age Development & Care
EE1440 Family Studies I
EE2380 Curriculum III
EE2340 Child Development III
EE2255 Advanced Behaviour Guidance
EE2260 Introduction to Child Care Administration
EE2470 Infant Development & Care
EE1481 Inclusion II
FH1360 Childhood Nutrition

Please note that this is not the full list of courses for the Diploma or Certificate program. For the complete listing of courses required for the Diploma and Certificate programs, please see the Early Childhood Education full-time program pages.

APPLIED ARTS

Film and Video Production

DIPLOMA

• Two Years
• September
• Bay St. George Campus

3. Adult Basic Education (ABE)  

Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile) with an average pass mark of 60%

4. Mature Student Status

Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause

EMPLOYMENT OPPORTUNITIES

The Province of Newfoundland and Labrador has committed itself to the development of a healthy and viable film production industry. The establishment of the Newfoundland and Labrador Film Development Corporation in 1997 represented a concerted focus on the part of government to attract film production projects to the province, and the subsequent introduction of the most generous incentives in North America signaled the depth of the commitment to this new sector.

APPLIED ARTS

Graphic Communications

DIPLOMA

• The first year of this program is offered every alternate year.
• Two Years
• September
• Prince Philip Drive Campus

APPLIED ARTS

Graphic Communications

This program is designed to prepare students to pursue new employment opportunities in the Film and Video Production industry and to produce quality entertainment and documentary products which reflect Newfoundland and Labrador’s unique cultural heritage. Graduates will also be positioned to avail of opportunities that arise nationally or internationally.

The film and video field encompasses the use of cameras, lighting and audio equipment, editing facilities and digital effects equipment. Areas of instruction include the history and evolution of the film industry, photography, scripting and peer critique, cinematography, and rigging and grip. The primary focus of the program is to prepare students to perform the technical tasks associated with filmmaking. Graduates will be well-positioned to perform all of the tasks that occur behind the camera, while the acting and related talents that occur in front of the camera will be left to other specialized training programs.

OBJECTIVES

1. To provide students with an overview of the history and evolution of the film industry.
2. To provide students with the knowledge and technical training required to develop and produce quality entertainment and documentary products.
3. To provide students with an opportunity to develop teamwork skills and to acquire relevant industry certifications.

ENTRANCE REQUIREMENTS

1. High School

Provincial High School Graduation Certificate with a 60% average in nine level 3000 credits or equivalent

2. Comprehensive Arts and Science (CAS) Transition

Comprehensive Arts and Science Transition Certificate

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The Course and Lab hours per week are based on a 15 week semester. In intersection, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

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Digital Communications Electives

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32
Graphic Communications is a technology-based, two-year diploma program designed to provide training in modern principles and practices used in the printing and graphic communications industry. A comprehensive hands-on approach ensures that students receive a marketable set of skills within a positive learning environment.

The goal of the program is to help the student develop personal and professional competencies in communications, problem solving, teamwork, electronic pre-press, production technologies, and post-press operations that will help lead to successful employment. The program structure is in line with the national skills standards for the printing and graphic communications industry.

Program topics include: problem solving, basic layout & design, electronic pre-press, offset press operation, post-press operation skills, and screen printing. Students are exposed to the computer software applications commonly used in this industry, such as page layout, design, image manipulation, and computer graphics. Other topics include: digital scanning, colour proofing, digital photography, digital printing (colour and black & white), embroidery graphics and laser engraving.

Our fleet of equipment is constantly being modernized to offer an expanded range of technical skills. Some of our equipment and new additions include:
- Modern Heidelberg offset presses
- Xerox colour digital press
- Computer-to-plate (CIP) platesetter
- Screen printing equipment
- Vinyl cutter for signage and graphics
- Wide format inkjet printer
- Macintosh computer labs
- Embroidery machine
- Laser engraving machine

A program resembling a real-world work environment reinforces the learning process for the students.

OBJECTIVES

1. Following successful completion of the program, the graduating student will be able to:
2. Demonstrate professional and personal competencies required for the printing and graphic communications industry.
3. Apply a teamwork approach to problem-solving techniques.
4. Demonstrate a hands-on knowledge of electronic pre-press methods and equipment.
5. Operate traditional and digital printing equipment.
6. Demonstrate strong technical skills for computer programs used in the printing and graphic communications industry.
7. Demonstrate safe operation of bindery and finishing equipment.
8. Operate related graphic communications equipment such as: wide-format printer, embroidery machine, screen printing machine and laser engraver.

9. EMPLOYMENT OPPORTUNITIES
Graduates of the program may be employed in many areas of the printing and graphic communications industry. Some of the entry-level positions include: designer & layout agencies, commercial printers, implant printers, government agencies, digital copy centers, sign printers and corporate promotional suppliers.

ENTRANCE REQUIREMENTS
1. High School

Provincial High School Graduation Certificate with a 60% average in nine level 3000 credits or equivalent

2. Comprehensive Arts and Science (CAS) Transition
Comprehensive Arts and Science Transition Certificate

3. Adult Basic Education (ABE)
Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile) with an average pass mark of 60%

4. Mature Student Status
Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older,

THE COURSES AND LAB HOURS PER WEEK ARE BASED ON A 15 WEEK SEMESTER. IN INTERSESSION, THE COURSE AND LAB HOURS WILL BE ADJUSTED TO REFLECT THE SHORTER SEMESTER LENGTH. REFER TO COURSE OUTLINE.

The College's state-of-the-art facilities offer students the chance to gain hands-on experience on industry-standard tools and learn valuable real-world skills. The program's strong technical core, as well as its focus on creative problem-solving, has helped students win dozens of regional, provincial and national awards over the past ten years. Graduates are working at exciting careers throughout Canada and around the world.

OBJECTIVES

Upon successful completion of the program, graduates will be able to:
1. Demonstrate strong technical and conceptual design skills for print and screen.
2. Demonstrate hands-on knowledge of, and experience with, industry-standard design and production tools and equipment.
3. Demonstrate the business, communication, teamwork and time-management skills necessary for this industry.
4. Apply an approach to the design process that focuses on creativity while meeting clients' needs.
5. Successfully compete for entry-level employment in the Graphic Design industry.

EMPLOYMENT OPPORTUNITIES
Past graduates have a strong record of success in the Graphic Design industry, both within Newfoundland and Labrador and beyond. Graduates can choose from a variety of employment options such as advertising agencies, design companies and in-house art departments, as well as freelance work or self-employment with clients located anywhere in the world.

ENTRANCE REQUIREMENTS
1. High School
Provincial High School Graduation Certificate with a 60% average in nine level 3000 credits or equivalent

2. Comprehensive Arts and Science (CAS) Transition
Comprehensive Arts and Science Transition Certificate

3. Adult Basic Education (ABE)
Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile) with an average pass mark of 60%

4. Mature Student Status
Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older,
and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

**PLEASE NOTE:**
Basic computer skills as well as strong core skills in English and Mathematics are definite assets for this program. These core skills are important for success in the program.

**Applicant Portfolio Requirements**
All applicants to the Graphic Design program must submit a portfolio as part of the admission requirements. A portfolio is a personal selection of the applicant’s work that shows the potential to build on demonstrated skills and aptitudes when in the program.

The applicant portfolio should consist of:
A written personal statement explaining your reasons for wanting to be a graphic designer and your interest in the program at College of the North Atlantic. This should be no longer than 500 words or a single typed page.

One project, that relates to the College’s Graphic Design program, chosen from the following three options:
   a. A magazine ad promoting the program. The ad should focus on at least one positive attribute of the program, and should be produced in colour. The College’s website address should be included as well. The size of the ad should be no larger than 20 cm in any dimension.
   b. A poster promoting the Graphic Design program. The poster should focus on one positive message about the program, and should include the program name, the College’s name and the College’s website address. The size of the poster should be 28 cm x 43 cm (11 x 17 inches).
   c. A logo for the Graphic Design program. The logo should be produced in no more than two (2) colours, not including white. The program title (Graphic Design) and the College’s initials (CNA) should be part of the logo. Applicants should ensure that the logo suggests one or more of the positive attributes of the program.
   d. A minimum of five (5) personal portfolio pieces, which could include (but are not limited to) drawings and sketches, photographs, paintings, websites, computer-generated images, or motion-based work. It is preferable to submit works in more than one category but it is not required.

**Other Requirements**
Applicants should submit only copies of their work.
No originals should be submitted.

If applicants submit digital files, please burn them onto a CD or DVD, and ensure they are readable by a computer other than the one used to burn it. Digital submissions that cannot be opened will not be considered.

The applicant’s work should be submitted in a case, binder or folio, with measurements not exceeding 61 cm x 92 cm (24 x 36 inches).

Work included in the portfolio should be identified on a separate sheet with the title (if any), the completion date and the materials used. A brief explanation of each piece would be welcome.

**Please note:** For further information on the portfolio process, please refer to the Graphic Design program page on the College’s website (www.cna.nl.ca).

**APPLIED ARTS**

**JOURNALISM**

**DIPLOMA**

- Two Years
- September
- Bay St. George Campus

**Courses**

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- Semester 1 (Intersession-7 wks) Cr Le La

- Semester 2 (Intersession-7 wks) Cr Le La

**Electives**

A list of elective courses to be offered in each semester will be made available prior to registration. Offerings will be based on student demand.

Students prepare to work as professional journalists while developing media skills that are transferrable to other professions. The program nurtures their curiosity and enables them to tell stories across several platforms – text, video, audio, photoplainum and the Internet. Students learn within a hands-on environment, where they hone their skills as storytellers by producing a news website, a current affairs magazine, radio shows and TV productions. Adapting to the new realities of journalism, students learn to use social and mobile media both to tell stories and to converse with an audience. Students acquire real-world experience via partnerships between the program and professional news organizations.

**OBJECTIVES**

Upon successful completion of the program, graduates will be able to:
1. Discern newsworthiness happenings in their communities and develop them into stories.
2. Tell stories across several platforms – text, video, audio, photography, websites, social media and mobile applications.
3. Perform the writing, research, video, audio and photography skills expected of modern multiplatform journalists.
4. Apply a discipline of verification in seeking and reporting the truth.
5. Provide the context of the news to their audiences.
6. Reflect in their work a deep understanding of the news media, its influence and their own responsibilities as journalists.
7. Reflect in their work a broad understanding of politics, history, economics and current affairs.
8. Apply high ethical standards to their work.
9. Demonstrate a strong understanding of media law in their work.

**EMPLOYMENT AND OTHER OPPORTUNITIES**

There are many diverse opportunities for graduates of the Journalism Diploma program. A graduate may choose to become a broadcast journalist or may choose to use their skills as a freelance, or a graduate may become gainfully employed while working with various television networks. Online journalism and print media are also options for gainful employment. Further to employment opportunities, graduates may also choose to further their studies towards degree-related opportunities at other post-secondary institutions.

**ENTRANCE REQUIREMENTS**

1. **High School**
   Provincial High School Graduation Certificate with a 60% average in nine level 3000 credits or equivalent and a minimum of 60% in level 3000 English.

2. **Comprehensive Arts and Science (CAS) Transition**
   Comprehensive Arts and Science Transition Certificate

3. **Adult Basic Education (ABE)**
   Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile) with an average pass mark of 60%.

4. **Mature Student Status**
   Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

**APPLIED ARTS**

**Journalism (Post Diploma)**

**POST DIPLOMA**

- One Year
- September
- Bay St. George Campus

**Courses**

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<td>Reporting &amp; News Writing I</td>
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<td>JL1420</td>
<td>Journalism Ethics &amp; the Law</td>
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<td>JL1220</td>
<td>Professional Wellness</td>
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</tr>
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</table>

**Electives**

A list of elective courses to be offered in each semester will be made available prior to registration. Offerings will be based on student demand.

Students prepare to work as professional journalists while developing media skills that are transferrable to other professions. The program nurtures their curiosity and enables them to tell stories across several platforms – text, video, audio, photoplainum and the Internet. Students learn within a hands-on environment, where they hone their skills as storytellers by producing a news website, a current affairs magazine, radio shows and TV productions. Adapting to the new realities of journalism, students learn to use social and mobile media both to tell stories and to converse with an audience. Students acquire real-world experience via partnerships between the program and professional news organizations.

**OBJECTIVES**

Upon successful completion of the program, graduates will be able to:
1. Discern newsworthiness happenings in their communities and develop them into stories.
2. Tell stories across several platforms – text, video, audio, photography, websites, social media and mobile applications.
3. Perform the writing, research, video, audio and photography skills expected of modern multiplatform journalists.
4. Apply a discipline of verification in seeking and reporting the truth.
5. Provide the context of the news to their audiences.
6. Reflect in their work a deep understanding of the news media, its influence and their own responsibilities as journalists.
7. Reflect in their work a broad understanding of politics, history, economics and current affairs.
8. Apply high ethical standards to their work.
9. Demonstrate a strong understanding of media law in their work.

**ENTERANCE REQUIREMENTS**

1. **High School**
   Provincial High School Graduation Certificate with a 60% average in nine level 3000 credits or equivalent and a minimum of 60% in level 3000 English.

2. **Comprehensive Arts and Science (CAS) Transition**
   Comprehensive Arts and Science Transition Certificate

3. **Adult Basic Education (ABE)**
   Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile) with an average pass mark of 60%.

4. **Mature Student Status**
   Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.
This accelerated program allows students who already have a university degree or a college diploma (minimum two years) to obtain a Journalism Post Diploma in one year.

Students who already possess either a university degree or a college diploma acquire core journalism skills in the program. They prepare to work as professional journalists while developing media skills that are transferable to other professions. The program nurtures their curiosity and enables them to tell stories across several platforms – text, video, audio, photojournalism and the Internet. Students learn in a hands-on environment, where they hone their skills as storytellers by producing a news website, a current affairs magazine, radio shows and TV productions. Adapting to the new realities of journalism, students learn to use social and mobile media both to tell stories and to converse with an audience. Students acquire real-world experience via partnerships between the program and professional news organizations.

It is highly recommended that those applying for this program be competent in English language usage and that they possess a general knowledge of current affairs. It is further recommended that students have a word processing speed of 25 words per minute (wpm) before entering the program.

**OBJECTIVES**

Upon successful completion of the program, graduates will be able to:

1. Discern newsworthy happenings in their communities and develop them into stories.
2. Tell stories across several platforms – text, video, audio, photography, websites, social media and mobile applications.
3. Perform the writing, research, video, audio and photography skills expected of modern multiplatform journalists.
4. Apply a discipline of verification in seeking and reporting the truth.
5. Provide the context of the news to their audiences.
6. Reflect in their work a deep understanding of the news media, its influence and their own responsibilities as a journalist.
7. Apply high ethical standards to their work.
8. Demonstrate a strong understanding of media law in their work.
9. Deliver high-quality journalism on deadline via different platforms within the 24-hour news cycle.

**EMPLOYMENT AND OTHER OPPORTUNITIES**

There are many diverse opportunities for graduates of the Journalism Post-Diploma program. Graduates may choose to become a broadcast journalist or may choose a profession as a freelancer, or graduates may become gainfully employed while working with television networks. Online journalism and print media are also options for gainful employment. Further to employment opportunities, graduates may also choose to further their studies towards degree-related opportunities at other post-secondary institutions.

**ENTRANCE REQUIREMENTS**

A university degree OR a minimum of a two-year college diploma from an institution recognized by College of the North Atlantic (OR a combination of other post-secondary work and industry experience acceptable to the college as an entrance requirement).

**APPLIED ARTS**

**Music Industry and Performance**

**DIPLOMA**

- Two Years
- September
- Bay St. George Campus

**COURSES**

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<td>Music &amp; Culture</td>
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**Elective Courses**

1. A list of elective courses to be offered in each semester will be made available prior to registration. Other courses may be chosen provided that:
   2. all prerequisites have been met,
   3. the course is offered during the semester,
   4. the maximum enrolment for the course is not exceeded,
   5. the student’s schedule can accommodate all scheduled classes for that course.

The Music Industry and Performance program is designed for students who wish to pursue careers as performers in the music industry. This industry has become increasingly prominent in recent years as evidenced in a dramatic increase in the number of successful acts from the Atlantic provinces. Events such as the East Coast Music Awards and the Juno Awards highlight the success of such performers and demonstrate that the region is generating music that is gaining worldwide popularity.

The intent of this program is to provide an opportunity for students whose interests include country, traditional, fusion, pop, rock, blues, and other genres, to refine their skills in the company of like-minded students, while gaining exposure to all aspects of the music industry. Hands-on experience in the recording studio, scheduled performances in local venues and extensive exposure to sound, business, marketing and public relations skills, will enable students to realistically assess their prospects for success in a fiercely competitive industry. Indeed, some students may determine that they may not have what it takes to succeed as performers but are ideally suited for careers as agents or managers. In either case, the Music Industry and Performance program provides the skills which should ensure success.

It should be noted that the program is not intended for students seeking a career in the field of classical music. Universities provide excellent programs for students whose talents rest in this area, and the college strongly recommends these programs.

**FUTURE OPPORTUNITIES**

Graduates from this program should not expect to enter into conventional 9–5 positions with established companies. The music industry is fuelled by a combination of solid talent and strong managerial personnel. Graduates can expect to operate as independent entrepreneurs while potentially establishing long-term partnerships with recording companies, distributors, managers, and other key industry stakeholders. The environment is challenging but there are plenty of success stories.

**OBJECTIVES**

1. To provide students with training in the technical and financial aspects of the music industry, with particular emphasis on the industry’s complex standard business practices.
2. To provide students with an opportunity to review the history of music and its evolution into distinct genres.
3. To provide students with an opportunity to refine musical talent and to demonstrate that talent through scheduled performances in local venues.
4. To provide students with opportunities for social and intellectual development in order to meet the challenges of a demanding industry.

**ENTRANCE REQUIREMENTS**

1. **High School**
   - Provincial High School Graduation Certificate with a 60% average in nine levels 3000 credits or equivalent
2. **Comprehensive Arts and Science (CAS) Transition**
   - Comprehensive Arts and Science Transition Certificate
3. **Adult Basic Education (ABE)**
   - Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile) with an average pass mark of 60%
4. **Mature Student Status**
   - Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause

**PORTFOLIO**

All applicants must submit a demo recording in ONE of the following formats:

- A standard audio cassette;
- A compact disk;
- A video cassette;
- DVD;
- Website link;
- Flash drive.

The demo recording must be clearly labelled, include a list of the material contained on the demo, and specify the role of the applicant on each track.
The demo should contain three contrasting pieces, clearly demonstrating the applicant’s level of performance ability and experience.

The demo will be evaluated with the following criteria in mind:

i. Quality of performance;
ii. Quality of presentation;
iii. A demonstration of a reasonable chance of success in the MIP program;
iv. The recording should be accompanied by a resume outlining any music-related experiences, live performances, and previous training.

**APPLIED ARTS**

**Sound Recording & Production**

**DIPLOMA**

- **Two Years**
- **September**
- **Bay St. George Campus**

<table>
<thead>
<tr>
<th>COURSES</th>
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<tr>
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**Semester 1**

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<td>MA1100</td>
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**Semester 2**

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<td>Recording II</td>
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<td>CM1401</td>
<td>Technical Report Writing II</td>
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<td>Music Production Techniques</td>
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<td>Acoustics &amp; Studio Design Elective</td>
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**Semester 3 (Intersession)**

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<td>SN1180</td>
<td>Exploring Your Industry</td>
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<td>SN410</td>
<td>Stage Lighting</td>
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The lecture and lab hours per week are based on a 15 week semester. In intersession, these hours will be adjusted to reflect the shorter semester length.

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<td>SN1200</td>
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<td>SN2110</td>
<td>Mixing &amp; Mastering</td>
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<td>Sound for Visual Media</td>
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<td>Sound in Practice I</td>
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<td>EP1100</td>
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**Semester 5**

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<td>PD2190</td>
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<td>ST2300</td>
<td>Embroidery and Quilt II</td>
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<td>SA2040</td>
<td>Apparel Construction II</td>
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<td>SB2600</td>
<td>Knit II</td>
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<td>ST2181</td>
<td>Weave II</td>
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<td>ST2330</td>
<td>Print and Dye II</td>
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**Note:**

A list of elective courses to be offered in each semester will be made available prior to registration. Other courses may be chosen provided that:

1. All prerequisites have been met,
2. The course is offered during the semester,
3. The maximum enrolment for the course is not exceeded,
4. The student’s schedule can accommodate all scheduled classes for that course.

Sound Recording & Production is a two-year diploma program designed to provide training in all areas of sound production. This includes training in: live sound, music production and recording, mixing and mastering, digital audio editing, signal processing, field recording and sound design, live concert recording, and audio for the film, video, animation and gaming industries.

In the first year of the program, most of the core theory is covered along with some practical and hands-on components. In the second year, students will find themselves in a project-rich environment where they have many opportunities to further develop their knowledge and skills through practice and mentorship.

As well as the core courses in sound production, the student will learn business and entrepreneurial knowledge and skills, career management and exploration, electronics basics, acoustics, computer troubleshooting, technical writing, stage lighting and more. This extensive hands-on experience will fully prepare the graduate for employment in any of the numerous exciting occupations found in the sound recording and production industry.

**OBJECTIVES**

Upon successful completion of the program, graduates will be able to:

1. Explain the concept of sound, including its generation, transmission and effects, and apply that knowledge to select appropriate tools for its capture in a myriad of situations.
2. Analyze sound and lighting equipment requirements for live sound events, prep and connect all required equipment and use the equipment successfully in running the event from a technical perspective.
3. Intelligently speak the language of music when interacting with musicians in live sound and recording environments.
4. Demonstrate proficiency in Digital Audio Workstation applications, including editing and signal processing.
5. Apply logic and deductive reasoning to fix problems.
6. Demonstrate proficiency in analog signal processing required by clients in any field of music, video production, video game design, feature film and live sound industries.
7. Demonstrate safe working practices in lighting and various sound production environments.
8. Use entrepreneurial and personal finance skills to help establish recording studios, live sound companies and run these operations successfully.
10. Demonstrate competencies in writing technical documents.

**EMPLOYMENT AND OTHER OPPORTUNITIES**

Graduates of the Sound Recording & Production program can find work as the following in their appropriate venues: Production Mixer, Boom Operator, Production Sound Assistant, Sound Transfer Operator, Dialogue Editor, Sound Effects Editor, Music Editor, Assistant Sound Editor, ADR/Sound Effects Mixer, Music Mixer, Re-recording Mixer (Film Mixer), Sound Designer, Front of House Mixer, Monitor Mixer, System Technician, Mixing Engineer, Mastering Engineer, Tracking Engineer, Music Producer, Foley Artist and On-Air Production (Radio).

**ENTRANCE REQUIREMENTS**

**1. High School**

Provincial High School Graduation Certificate with a 60% average in nine level 3000 credits or equivalent including:

i. Mathematics (4 credits) chosen from: Advanced: 2200, 3200 (50% in each course)
   Academic: 2201 (50% minimum), 3201 (60% minimum)
Applications who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

Please note: This program is not suitable for applicants with respiratory problems or colour blindness.

APPLIED ARTS

**Video Game Design**

**DIPLOMA**
- 2 Years
- September
- Bay St. George Campus

**COURSES**

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**Semester 1**

- CM1520  Writing for the Arts  3  3  0
- GD1301  Game Design II  4  3  2
- MATH200  Introduction to 3D Animation  2  2  0

The lecture and lab hours per week are based on a 15-week semester. In intersession, the lecture and lab hours will be adjusted to reflect the shorter semester length.

**Semester 2**

- GD1521  Game Design Project I  4  3  2
- GD1501  Game Design Project II  4  3  2
- CM1520  Writing for the Arts  3  3  0
- GD1301  Game Design III  4  3  2

The lecture and lab hours per week are based on a 15-week semester. In intersession, the lecture and lab hours will be adjusted to reflect the shorter semester length.

**Semester 3 (Intersession)**

- GD1101  Level Design I  4  3  2
- MATH200  Introduction to 3D Animation  2  2  0
- GD1301  Game Design III  4  3  2
- GD1520  Game Design Project I  4  3  2

The lecture and lab hours per week are based on a 15-week semester. In intersession, the lecture and lab hours will be adjusted to reflect the shorter semester length.

**Semester 4**

- CM2200  Digital Audio Sound Track Design  3  2  3
- GD1301  Game Design IV  4  3  2
- GD1501  Game Design Project IV  4  3  2
- CM2200  Oral Communications  2  2  0

The lecture and lab hours per week are based on a 15-week semester. In intersession, the lecture and lab hours will be adjusted to reflect the shorter semester length.

**Semester 5**

- GD1101  Level Design II  4  3  2
- GD1301  Game Design V  4  3  2
- CM1520  Writing for the Arts  3  3  0
- GD1101  Level Design I  4  3  2
- CM2200  Digital Audio Sound Track Design  3  2  3

Video games are a recognized technological, cultural and economic force in today’s society. The game industry is a growing industry with a varying range of career opportunities. If you have a passion for creating stories, characters, environments and gameplay for video games, this is the program for you.

The primary focus of this program is Game Design. Today’s Game Designer needs to have skills or knowledge in many different areas. The Video Game Design program provides students a marketable set of skills by studying game theory, level design, cinematics, art, animation, and production methods. It emphasizes creative writing and non-linear storytelling skills. Students will study design principles and game documentation, the creative process and pre-production planning, the processes of game design, level design, audio, and visual-based principles such as game interface design, and 2D and 3D modeling.

These skills are further built on by a rigorous look at the production process, project and team management techniques, and the business of games. The program’s focus will allow students to create quality content to place in personal portfolios to demonstrate a thorough understanding of video game design.

**OBJECTIVES**

1. To introduce students to computer software and the hardware resources to create video games.
2. To provide students with the knowledge and technical training to design video games.
3. To assist students in the development of appropriate attitudes, behaviours, and work practices for employment in the game design industry.
4. To assist students in the development of the ability to market their work in the advancement of communication skills and portfolio development.
5. To assist students in the development of skills to work productively in a team environment.
6. To assist students to cultivate a desire for lifelong learning.

**ENTRANCE REQUIREMENTS**

1. **High School**
   Provincial High School Graduation Certificate with a 60% average in nine level 3000 credits or equivalent.

2. **Comprehensive Arts and Science (CAS) Transition**
   Comprehensive Arts and Science Transition Certificate.

3. **Adult Basic Education (ABE)**
   Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile) with an average pass mark of 60%

4. **Mature Student Status**
   Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.
TOURISM
Hospitality Tourism Management

DIPLOMA
• Two Years
• Alternate Year Intake
• Prince Philip Drive Campus

COURSES

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<td>Productivity Tools</td>
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<td>TR1600</td>
<td>Newfoundland and Labrador Tourism Destinations</td>
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<td>Introduction to Tourism &amp; Hospitality</td>
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<td>Rooms Division Systems</td>
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<td>MKT270</td>
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<td>Newfoundland and Labrador Interpretation</td>
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The Course and Lab hours per week are based on a 15-week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

NOTE: Students may qualify for a Certificate in Hospitality Services, if exiting at the end of Year I.

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Tourism is a dynamic part of our economy. The global tourism industry is the world’s largest industry and, in Canada, this industry is growing at a steady pace. There is ongoing demand for qualified staff to manage growing and increasingly sophisticated hospitality/tourism operations. If you are a “people-oriented” individual with a desire to work in a fast-paced environment, then this is the program for you.

This program prepares students for careers in tourism by focusing on the skills, competencies, and attitudes necessary to meet the needs of this industry. The program combines practical, theoretical and experiential learning in the classroom, in College of the North Atlantic’s hospitality facilities, and during work terms.

The first year of the program focuses on the core skills and characteristics of the hospitality tourism industry. Students will complete a six-week work term between semesters two and four that will provide valuable work experience and knowledge of what is required to manage a hospitality tourism establishment. Students may exit after the successful completion of year one (semesters 1, 2 and 3 with required certifications) with a Certificate in Hospitality Services.

Year two provides an opportunity to develop strong supervisory and management skills.

The curriculum is designed to meet the standards established by the Canadian Tourism Human Resource Council and the provincial hospitality tourism industry. Graduates of this program may find work in a wide variety of tourism organizations. Alternatively, employment may be possible with government and non-government agencies or associations dedicated to hospitality and tourism. Graduates may also decide to take the entrepreneurial route and start their own businesses.

OBJECTIVES
1. To enable students to acquire an understanding of the hospitality tourism industry and the role and economic importance it has in society.
2. To have students understand the operation and management principles of the hospitality tourism industry.
3. To develop practical, theoretical and experiential skills and competencies necessary for the management of a tourism business/organization.
4. To provide students with skill development for entry level and managerial positions; for interpersonal relations and quality customer service, with a focus on leadership; and for team building and problem solving.

EMPLOYMENT OPPORTUNITIES
The growth of the tourism sector globally offers employment opportunities throughout the world, and graduates will be well qualified to seek opportunities nationally and internationally. Graduates of this program should have medium-term career goals that include junior supervisory and supervisory positions, and long-term goals such as departmental or facility management. Employment opportunities exist in corporations, non-profit tourism organizations, tourism associations, hotels, resorts, attractions, and private businesses.

PROGRAM TRANSFERABILITY
Graduates of the Hospitality Tourism Management program wishing to pursue additional post-secondary studies can apply for entry with advanced standing at a number of Canadian Universities that the College has established credit transfer agreements with. Please refer to the NL Department of Education’s transfer guide (www.cna.nl.ca/transfer), or contact your intended university or college.

ENTRANCE REQUIREMENTS
Eligibility for admission to the Hospitality Tourism Management program requires the applicant to meet one of the following four academic criteria:

1. High School
High School Graduation Certificate with a 60% average in nine Level 3000 credits or equivalent
2. Comprehensive Arts and Science (CAS) Transition
Comprehensive Arts and Science Transition Certificate
3. Adult Basic Education (ABE)
Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile) with an overall average pass mark of 60%.
4. Mature Student Status
Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

CERTIFICATIONS
In addition to the formal semester subjects listed in the program of studies, students in the Hospitality Tourism Management program are required to complete the following certifications for the Hospitality Services Certificate or the Hospitality Tourism Management Diploma:

- NFSTP (National Food Safety Training Program)
- CPI (Non-Violent Crisis Prevention Intervention Seminar)
- Weapons in the Workplace
- It’s Good Business (Responsible Alcohol Service)
- Senior Friendly
- St. John Ambulance Standard First Aid
- World Host® Fundamentals
- WHMIS – Workplace Hazardous Materials Information System
- Back Injury Prevention
- ‘Check online offerings

Note: Students should be aware that additional fees apply for the above certifications, field trips, tours and OJ1480. Additional expenses will also be incurred for the purchase of items of clothing which are required for the program.
School of Business and Information Technology Business
Applicants with Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. Mature Student Status
Applicants who do not meet the education prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

PROGRAM TRANSFERABILITY
The Business Administration/Management programs offer exit points after Year 1, Year 2, and Year 3.

Year 1: The first year is a common year at the end of which students may graduate with a Business Administration Certificate.

Year 2: Students select one area of specialization for the second year from the following options: Accounting, General, Human Resource Management, and Marketing. Students may graduate at the end of Year 2 with a Business Administration Diploma.

Year 3: The third-year options are Accounting, Human Resource Management, and Marketing. Students may graduate with a Business Management Diploma at the end of Year 3.

Graduates of the Business Administration/Management programs may have the opportunity to transfer credits to institutions/associations such as:
- Memorial University of Newfoundland
- Cape Breton University, Sydney, Nova Scotia
- Athabasca University, Alberta
- Lakehead College, Alberta
- University of Lethbridge, Alberta
- Lakehead University, Ontario
- University of New Brunswick, Saint John campus
- Okanagan College, British Columbia
- Northwood University, Michigan, USA
- Certified General Accountants of Canada (CGA)
- The Society of Management Accountants of Canada
- The Payroll Association of Canada

Graduates may also wish to further their studies to achieve professional designations with:
- Canadian Institute of Financial Planning
- Canadian Professional Sales Association
- Canadian Public Relations Society
- International Personnel Management Association (IPMA) - Canada
- Certified General Accountants of Canada (CGA)
- The Society of Management Accountants of Canada
- The Payroll Association of Canada

The Business Administration (Accounting) program has been developed to provide the student with the knowledge and skills required in the field of general financial accounting. The graduate will be able to provide complex information and comprehensive reports to management.

Throughout the program the student will develop a learning portfolio and career and educational plans.

**Note:** Year 2 of the Business Administration (Accounting) and the Business Management (Accounting) programs is common.

**OBJECTIVES**
1. Prepare and analyze financial statements for internal and external decision making.
2. Use current technology to analyze results and generate appropriate reports.
3. Develop financial and budgetary plans based on varying business objectives, changing business environments, and underlying business assumptions.
4. Demonstrate accounting skills needed to secure employment in an entry-level accounting position.
5. Demonstrate application of the Conference Board of Canada employability skills.

**CAREER OPPORTUNITIES**
Graduates may obtain employment in a variety of businesses, organizations and government departments. Possible positions are: accountant, comptroller, business analyst, tax officer, financial officer, administrative manager, payroll officer.
CM2200 Oral Communications 2 2 0
MC1242 Computer Applications II 3 2 3
The Course and Lab hours per week are based on a 15 weeks semester. In internship, the Course and Lab hours will be adjusted to reflect the shorter length. Refer to course outline.

**Year 1 courses can be completed at campuses offering the Business Administration certificate program.**

**Semester 4**

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**Semester 6 (Intersession)**

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Graduates may also wish to further their studies to achieve professional designations with:

- Certified General Accounts of Canada (CGA)
- The Society of Management Accountants of Canada (CMA)
- Canadian Institute of Financial Planning
- The Payroll Association of Canada

**BUSINESS**

**Business Administration (General)**

**DIPLOMA**

- Two Years
- Varies
- Corner Brook, Clarenville, Grand Falls-Windsor, Port aux Basques, Prince Philip Drive, and Distributed Learning Campuses

**COURSES**

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**Semester 1**

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**PROGRAM TRANSFERABILITY**

The Business Administration/Management programs offer exit points after Year 1, Year 2, and Year 3.

**Year 1:** Students select one area of specialization for the second year from the following options:

- Accounting, General, Human Resource Management, and Marketing. Students may graduate at the end of Year 2 with a Business Administration Diploma.

**Year 2:** Students select one area of specialization for the second year from the following options:

- Accounting, General, Human Resource Management, and Marketing. Students may graduate at the end of Year 2 with a Business Administration Diploma.

Graduates of the Business Administration/Management programs may have the opportunity to transfer credits to institutions/associations such as:

- Memorial University of Newfoundland
- Cape Breton University, Sydney, Nova Scotia
- Athabasca University, Alberta
- Lakehead College, Alberta
- University of Lethbridge, Alberta
- Lakehead University, Ontario
- University of New Brunswick, Saint John campus
- Okanagan College, British Columbia
- Northwood University, Michigan, USA

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- Certified General Accounts of Canada (CGA)
- The Society of Management Accountants of Canada (CMA)
- The Payroll Association of Canada

**BUSINESS**

**Business Administration (Human Resource Management)**

**DIPLOMA**

- Carbonear Campus - Alternate intake
- Two Years
- September
- Bay St. George, Clarenville, Carbonear, Grand Falls-Windsor, Prince Philip Drive, and Distributed Learning Campuses

**COURSES**

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**Semester 3 (Intersession)**

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The course and lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

### Year 1 courses can be completed at campuses offering the Business Administration certificate program.

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The Business Administration (Human Resource Management) program has been designed to provide students with insight into the theory and practice of effective Human Resource Management. In today’s competitive business environment, managers recognize the importance of their human resources to the success of their organization.

The program is designed to provide students with an opportunity to pursue a career in Human Resource Management, Industrial/Labour Relations, Supervision and General Management.

#### CAREER OPPORTUNITIES

Graduates may obtain employment in a variety of areas such as private businesses, consulting agencies, associations, unions, federal/provincial/municipal governments.

The following is a brief list of the positions that graduates may occupy after successful completion of the program: recruitment/selection officer, personnel officer, training and development officer; compensation/benefits specialist, sexual harassment officer, employee assistance coordinator, labour relations officer, professional development officer, human resource officer, personnel manager, manager of human resources, classification officer.

#### ACCREDITATION

Business Administration (Human Resource Management) is accredited by the Accreditation Council for Business Schools and Programs (ACBSP) in all campus locations. ACBSP is the leading specialized accreditation association for business education supporting, celebrating, and rewarding teaching excellence.

### PROGRAM TRANSFERABILITY

The Business Administration/Management programs offer exit points after Year 1, Year 2, and Year 3.

#### Year 1:
The first year is a common year at the end of which students may graduate with a Business Administration Certificate.

#### Year 2:
Students select one area of specialization for the second year from the following options: Accounting, General, Human Resource Management, and Marketing. Students may graduate at the end of Year 2 with a Business Administration Diploma.

#### Year 3:
The third-year options are Accounting, Human Resource Management, and Marketing. Students may graduate with a Business Administration Diploma at the end of Year 3.

Graduates of the Business Administration/Management programs may have the opportunity to transfer credits to institutions/associations such as:

- Memorial University of Newfoundland
- Cape Breton University, Sydney, Nova Scotia
- Athabasca University, Alberta
- Lakehead University, Alberta
- Lakehead University, Ontario
- University of New Brunswick, Saint John campus
- Okanagan College, British Columbia
- Northwood University, Michigan, USA

Graduates may also wish to further their studies to achieve professional designations with:

- Canadian Institute of Financial Planning
- Canadian Professional Sales Association
- Canadian Public Relations Society
- International Personnel Management Association (IPMA) - Canada
- Certified General Accountants of Canada (CGA)
- The Society of Management Accountants of Canada (CMA)
- The Payroll Association of Canada

Graduates may also pursue a career in Human Resource Management, Industrial/Labour Relations, Supervision and General Management.

Note: Year 2 of the Business Administration (Human Resource Management) and the Business Administration (Human Resource Management) programs is common.

### OBJECTIVES

1. Examine and critique the key fundamentals of strategic human resource management and the employment related legislation (regulations and acts).
2. Propose and apply various human resource practices to effectively manage an organization's human resources.
3. Demonstrate effective research, negotiation, conflict resolution, and leadership skills for use in the business environment.
4. Demonstrate application of the Conference Board of Canada employability skills.

### CAREER OPPORTUNITIES

Graduates may obtain employment in a variety of areas such as private businesses, consulting agencies, associations, unions, federal/provincial/municipal governments.

The following is a brief list of the positions that graduates may occupy after successful completion of the program: recruitment/selection officer, personnel officer, training and development officer; compensation/benefits specialist, sexual harassment officer, employee assistance coordinator, labour relations officer, professional development officer, human resource officer, personnel manager, manager of human resources, classification officer.

### ACCREDITATION

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### PROGRAM TRANSFERABILITY

The Business Administration/Management programs offer exit points after Year 1, Year 2, and Year 3.

#### Year 1:
The first year is a common year at the end of which students may graduate with a Business Administration Certificate.

#### Year 2:
Students select one area of specialization for the second year from the following options: Accounting, General, Human Resource Management, and Marketing. Students may graduate at the end of Year 2 with a Business Administration Diploma.

#### Year 3:
The third-year options are Accounting, Human Resource Management, and Marketing.

The two-year program leading to a Diploma in Business Administration (Marketing) is designed to give students a broad background in business management with emphasis on the area of marketing. Graduates find employment in marketing, sales, retailing, administration, advertising, and general management.

### OBJECTIVES

1. Analyze the marketing environment and develop, implement, and monitor a comprehensive marketing strategy.
2. Critically analyze and provide business solutions to marketing product, price, promotion, and distribution decisions.
3. Integrate ethical marketing strategies and tactics for application in both domestic and global marketing environments.
4. Create materials for use with a marketing strategy.
5. Demonstrate application of the Conference Board of Canada employability skills.

### CAREER OPPORTUNITIES

Graduates of this program may obtain employment in a variety of marketing areas such as distribution, media, advertising, retailing, and personal selling in a variety of industries and associations.

### ACCREDITATION

Business Administration (Marketing) is accredited by the Accreditation Council for Business Schools and Programs (ACBSP) in all campus locations. ACBSP is the leading specialized accreditation association for business education supporting, celebrating, and rewarding teaching excellence.

### PROGRAM TRANSFERABILITY

The Business Administration/Management programs offer exit points after Year 1, Year 2, and Year 3.

#### Year 1:
The first year is a common year at the end of which students may graduate with a Business Administration Certificate.

#### Year 2:
Students select one area of specialization for the second year from the following options: Accounting, General, Human Resource Management, and Marketing. Students may graduate at the end of Year 2 with a Business Administration Diploma.

#### Year 3:
The third-year options are Accounting, Human Resource Management, and Marketing.
Students may graduate with a Business Management Diploma at the end of Year 3.

Graduates of the Business Administration/Management programs may have the opportunity to transfer credits to institutions/associations such as:
- Memorial University of Newfoundland
- Cape Breton University, Sydney, Nova Scotia
- Athabasca University, Alberta
- Lakehead University, Alberta
- University of New Brunswick, Saint John campus
- Okanagan College, British Columbia
- Northwood University, Michigan, USA

Graduates may also wish to further their studies to achieve professional designations with:
- Canadian Institute of Financial Planning
- Canadian Professional Sales Association
- Canadian Public Relations Society
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- Certified General Accountants of Canada (CGA)
- The Society of Management Accountants of Canada (CMA)
- The Payroll Association of Canada

**BUSINESS Administration-General (DL)**

**DIPLOMA**
- **Two Years**
- **Varies**
- **Distributed Learning**

**COURSES**

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| Semester 2  | Cr | Le | La |
| AC2260  | Financial Accounting II | 5 | 4 | 3 |
| CM1241  | Business Communications II | 4 | 4 | 0 |
| HN1240  | Human Resource Management II | 3 | 3 | 1 |
| LW1230  | Business Law | 3 | 3 | 0 |
| MA2400  | Mathematics of Finance II | 3 | 3 | 1 |
| MR2100  | Marketing II | 4 | 4 | 0 |
| SD1341  | Student, Career & Portfolio Development II | 1 | 1 | 0 |

| Semester 3 (Intersession)  | Cr | Le | La |
| AC2230  | Computerized Accounting I | 3 | 2 | 3 |
| CM1220  | Oral Communications | 2 | 2 | 0 |
| MC1242  | Computer Applications II | 3 | 2 | 3 |

The Course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

**Year 1 courses can be completed at campuses offering the Business Administration certificate program.**

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| Semester 5  | Cr | Le | La |
| EP2150  | Entrepreneurship | 3 | 3 | 1 |
| PS2340  | Organizational Behavior | 4 | 4 | 0 |
| SD2370  | Student, Career & Portfolio Development III | 2 | 2 | 0 |

**Semester 5**

| One of:  | Cr | Le | La |
| AC1350  | Income Tax | 4 | 3 | 2 |
| AC3220  | Intermediate Financial Accounting II | 5 | 3 | 5 |
| AC3250  | Managerial Accounting II | 4 | 3 | 2 |

| One of:  | Cr | Le | La |
| HN1400  | Occupational Health & Safety | 3 | 3 | 1 |
| HN2100  | Collective Agreement Administration | 3 | 3 | 1 |
| LW1210  | Labour and Employment Law | 4 | 3 | 2 |
| MR2200  | Retailing | 3 | 2 | 3 |
| MR2350  | E-Business | 4 | 3 | 2 |
| MR2400  | Marketing Communications | 4 | 3 | 2 |

**Semester 6 (Intersession II)**

| OJ1590  | Work Exposure (General) | 6 wks |

The successful business administrator must be an effective leader, communicator and problem solver; one who can integrate rapidly emerging technology with diverse business functions such as accounting, marketing, and human resource management.

Students in the Business Administration (General) program develop interpersonal and organizational skills. They will use the latest computer technology in business decision making and learn practical skills which will help them to be productive members of the workforce. Graduates can expect to build on this solid base during their entire business career.

**Note:** Year 1 courses can be completed at campuses that offer the Business Administration certificate program.

**OBJECTIVES**

1. Demonstrate the ability to effectively engage in research and information gathering processes.
2. Integrate general knowledge of accounting, human resources, and marketing, for application in a business environment.
3. Apply entrepreneurship skills for use in small to medium sized business environment.
4. Demonstrate application of the Conference Board of Canada employability skills.

**CAREER OPPORTUNITIES**

Graduates may find entry level job opportunities in a wide spectrum of organizations such as public institutions, small and/or large businesses, and financial institutions.

**ACCREDITATION**

Business Administration (General) is accredited by the Accreditation Council for Business Schools and Programs (ACSBP) in all campus locations. ACSBP is the leading specialized accreditation association for business education supporting, celebrating, and rewarding teaching excellence.

**PROGRAM TRANSFERABILITY**

The Business Administration/Management programs offer exit points after Year 1, Year 2, and Year 3.

**Year 1:** The first year is a common year at the end of which students may graduate with a Business Administration Certificate.

**Year 2:** Students select one area of specialization for the second year from the following options: Accounting, General, Human Resource Management, and Marketing. Students may graduate at the end of Year 2 with a Business Administration Diploma.

**Year 3:** The third-year options are Accounting, Human Resource Management, and Marketing. Students may graduate with a Business Management Diploma at the end of Year 3.

Graduates of the Business Administration/Management programs may have the opportunity to transfer credits to institutions/associations such as:
- Memorial University of Newfoundland
- Cape Breton University, Sydney, Nova Scotia
- Athabasca University, Alberta
- Lakehead College, Alberta
- University of Lethbridge, Alberta
- Lakehead University, Ontario
- University of New Brunswick, Saint John campus
- Okanagan College, British Columbia
- Northwood University, Michigan, USA

Graduates may also wish to further their studies to achieve professional designations with:
- Canadian Institute of Financial Planning
- Canadian Professional Sales Association
- Canadian Public Relations Society
- International Personnel Management Association (IPMA) - Canada
- Certified General Accountants of Canada (CGA)
- The Society of Management Accountants of Canada (CMA)
- The Payroll Association of Canada

**BUSINESS Administration-Management (DL)**

**DIPLOMA**
- **Two Years**
- **September**
- **Distributed Learning**

**COURSES**

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| Semester 2  | Cr | Le | La |
| AC2260  | Financial Accounting II | 5 | 4 | 3 |
| CM1241  | Business Communications II | 4 | 4 | 0 |
| HN1240  | Human Resource Management II | 3 | 3 | 1 |
| LW1230  | Business Law | 3 | 3 | 0 |
| MA2400  | Mathematics of Finance II | 3 | 3 | 1 |
| MR2100  | Marketing II | 4 | 4 | 0 |
| SD1341  | Student, Career & Portfolio Development II | 1 | 1 | 0 |

| Semester 3 (Intersession)  | Cr | Le | La |
| AC2230  | Computerized Accounting I | 3 | 2 | 3 |
| CM1220  | Oral Communications | 2 | 2 | 0 |
| MC1242  | Computer Applications II | 3 | 2 | 3 |

The Course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

**Year 1 courses can be completed at campuses offering the Business Administration certificate program.**

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| Semester 5  | Cr | Le | La |
| AC2600  | Managerial Accounting for HRM | 4 | 3 | 2 |
| HN1400  | Occupational Health and Safety | 3 | 3 | 1 |
| HN2100  | Collective Agreement Administration | 3 | 3 | 1 |
| LW2110  | Labour and Employment Law | 4 | 3 | 2 |
| PS2340  | Organizational Behavior | 4 | 4 | 0 |
| SD2340  | Student, Career & Portfolio Development III | 2 | 2 | 0 |
| EP2150  | Entrepreneurship | 3 | 3 | 0 |

| Semester 6 (Intersession II)  | Cr | Le | La |
| OJ1590  | Work Exposure (HRM) | 6 wks |
The Business Administration (Human Resource Management) program has been designed to provide students with insight into the theory and practice of effective Human Resource Management. In today’s competitive business environment, managers recognize the importance of their human resources to the success of their organization.

The program is designed to provide students with an opportunity to pursue a career in Human Resource Management, Industrial/Labour Relations, Supervision and General Management.

**Note:** Year 2 of the Business Administration (Human Resource Management) and the Business Management (Human Resource Management) programs is common.

**OBJECTIVES**

1. Examine and critique the key fundamentals of strategic human resource management and the employment related legislation (regulations and acts).
2. Propose and apply various human resource practices to effectively manage an organization’s human resources.
3. Demonstrate effective research, negotiation, conflict resolution, and leadership skills for use in the business environment.
4. Demonstrate application of the Conference Board of Canada employability skills.

**CAREER OPPORTUNITIES**

Graduates may obtain employment in a variety of areas such as private businesses, consulting agencies, associations, unions, federal/provincial/municipal governments.

The following is a brief list of the positions that graduates may occupy after successful completion of the program: recruitment/selection officer, personnel officer, training and development officer; compensation/benefits specialist, sexual harassment officer, employee assistance coordinator, labour relations officer, professional development officer, human resource officer, personnel manager, manager of human resources, classification officer.

**ACCREDITATION**

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**PROGRAM TRANSFERABILITY**

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- The Payroll Association of Canada

The course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

**BUSINESS**

**Business Management (Accounting)**

**DIPLOMA**

- **Three Years**
- **September**
- **Grand Falls-Windsor, and Prince Philip Drive Campuses**

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The course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

**Year 1 courses can be completed at campuses offering the Business Administration certificate program.**

**Semester 4**

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**Semester 6 (Intersession II)**

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**Year 2 courses can be completed at campuses offering the Business Administration (Accounting) diploma program.**

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Option Course (minimum 3 credits, selected from list below)

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Option Course (minimum 3 credits, selected from list below)

The student is required to complete all of the courses that are listed above.

Options will be selected from the following list by each campus after consultation with the students and/or local industry. Please note that not all courses may be available at each campus.

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<thead>
<tr>
<th>Option Courses</th>
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The three-year program leading to a Diploma in Business Management (Accounting) has been developed to achieve competencies required in the field of general financial accounting. Management now requires personnel with skills to provide complex information and to produce comprehensive reports.

Upon completion of this program, students will be capable of performing many accounting functions in small and large businesses and at various levels of government.

**OBJECTIVES**

1. Prepare and analyze financial statements for internal and external decision making.
2. Use current technology to analyze results and generate appropriate reports.
3. Develop financial budgetary plans based on varying business objectives, changing business environments, and underlying business assumptions.
4. Demonstrate accounting skills needed to secure employment in an entry-level accounting position.
5. Integrate business concepts for effective business planning and strategic management.
6. Demonstrate application of the Conference Board of Canada employability skills.

**CAREER OPPORTUNITIES**

Graduates may obtain employment in a variety of businesses, organizations and government departments including accountant, comptroller, auditor, business analyst, taxation officer, financial officer, administrative manager, and payroll officer.

**ACCREDITATION**

Business Management (Accounting) is accredited by the Accreditation Council for Business Schools and Programs (ACBSP) in all campus locations. ACBSP is the leading specialized accreditation association for business education supporting, celebrating, and rewarding teaching excellence.

**PROGRAM TRANSFERABILITY**

The Business Administration/Management programs offer exit points after Year 1, Year 2, and Year 3.

**Year 1:** The first year is a common year at the end of which students may graduate with a Business Administration Certificate.
Year 2: Students select one area of specialization for the second year from the following options: Accounting, General, Human Resource Management, and Marketing. Students may graduate at the end of Year 2 with a Business Administration Diploma.

Year 3: The third-year options are Accounting, Human Resource Management, and Marketing. Students may graduate with a Business Management Diploma at the end of Year 3.

Graduates of the Business Administration/Management programs may have the opportunity to transfer credits to institutions/associations such as:
- Memorial University of Newfoundland
- Cape Breton University, Sydney, Nova Scotia
- Athabasca University, Alberta
- Lakehead College, Alberta
- University of Lethbridge, Alberta
- Lakehead University, Ontario
- University of New Brunswick, Saint John campus
- Okanagan College, British Columbia
- Northwood University, Michigan, USA

Graduates may also wish to further their studies to achieve professional designations with:
- Canadian Institute of Financial Planning
- Canadian Professional Sales Association
- Canadian Public Relations Society
- International Personnel Management Association (IPMA) - Canada
- Certified General Accountants of Canada (CGA)
- The Society of Management Accountants of Canada (CGA)
- The Payroll Association of Canada

BUSINESS

Business Management (Human Resource Management)

DIPLOMA
- Three Years
- September
- Prince Philip Drive, and Distributed Learning Campuses

COURSES

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<tr>
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Semester 2

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Semester 3 (Intercession)

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<tr>
<td>HN2130</td>
<td>Recruitment and Selection</td>
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The Business Management (Human Resource Management) program has been designed to provide students with insight into the theory and practice of effective Human Resource Management. The program seeks to provide the student with a broad understanding of fundamental business principles and practices essential to effective and efficient management.

The Business Management (Human Resource Management) program is designed to provide students with an opportunity to pursue a career in Human Resource Management, Industrial/Labour Relations, Supervision and General Management.

OBJECTIVES

1. Examine and critique the key fundamentals of strategic human resource management and the employment related legislation (regulations and acts).
2. Propose and apply various human resource practices to effectively manage an organization’s human resources.
3. Demonstrate effective research, negotiation, conflict resolution, and leadership skills for use in the business environment.
4. Integrate business concepts for effective business planning and strategic management.
5. Demonstrate application of the Conference Board of Canada employability skills.

CAREER OPPORTUNITIES

Graduates of the program may obtain employment in a variety of areas such as private business, federal/Provincial/Municipal Government, industry, consulting agencies, institutions, associations, and unions.

The following is a list of positions that graduates may occupy after successful completion of the program:
- recruitment/selection officer, personnel officer, training and development officer, compensation/benefits specialist, sexual harassment officer, employee assistance coordinator, labour relations officer, professional development officer, human resource officer, personnel manager, manager of human resources, classification officer, and other business related occupations.

ACCREDITATION

Business Management (Human Resource Management) is accredited by the Accreditation Council for Business Schools and Programs (ACBSP) in all campus locations. ACBSP is the leading specialized accreditation association for business education supporting, celebrating, and rewarding teaching excellence.

PROGRAM TRANSFERABILITY

The Business Administration/Management programs offer exit points after Year 1, Year 2, and Year 3.

Year 1: The first year is a common year at the end of which students may graduate with a Business Administration Certificate.

Year 2: Students select one area of specialization for the second year from the following options: Accounting, General, Human Resource Management, and Marketing. Students may graduate at the end of Year 2 with a Business Administration Diploma.

Year 3: The third-year options are Accounting, Human Resource Management, and Marketing. Students may graduate with a Business Management Diploma at the end of Year 3.

Graduates of the Business Administration/Management programs may have the opportunity to transfer credits to institutions/associations such as:
- Memorial University of Newfoundland
- Cape Breton University, Sydney, Nova Scotia
- Athabasca University, Alberta
- Lakehead College, Alberta
- University of Lethbridge, Alberta
- Lakehead University, Ontario
- University of New Brunswick, Saint John campus
- Okanagan College, British Columbia
- Northwood University, Michigan, USA

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- Canadian Public Relations Society
- International Personnel Management Association (IPMA) - Canada
- Certified General Accountants of Canada (CGA)
- The Society of Management Accountants of Canada (CGA)
- The Payroll Association of Canada

BUSINESS

Business Management (Marketing)

DIPLOMA
- Three Years
- September
- Prince Philip Drive Campus

COURSES

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Semester 2

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Semester 3 (Intercession)

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</table>
The three-year Business Management (Marketing) diploma program is designed to give students a background in business management with emphasis on the area of Marketing. Students acquire a solid understanding of the practices involved in marketing and promoting a product or service. This includes advertising, market research, professional selling, distribution, business planning, and customer relations.

OBJECTIVES
1. Analyze the marketing environment and develop, implement, and monitor a comprehensive marketing strategy.
2. Critically analyze and provide business solutions to marketing product, price, promotion, and distribution decisions.
3. Integrate ethical marketing strategies and tactics for application in both domestic and global marketing environments.
4. Create materials for use with a marketing strategy.
5. Integrate business concepts for effective business planning and strategic management.
6. Demonstrate application of the Conference Board of Canada employability skills.

CAREER OPPORTUNITIES
Graduates of the program may obtain employment in a variety of marketing areas such as distribution, media, advertising, retailing, and personal selling in a variety of industries and associations.

ACCREDITATION
Business Management (Marketing) is accredited by the Accreditation Council for Business Schools and Programs (ACBSP) in all campus locations. ACBSP is the leading specialized accreditation association for business education supporting, celebrating, and rewarding teaching excellence.

PROGRAM TRANSFERABILITY
The Business Administration/Management programs offer exit points after Year 1, Year 2, and Year 3.

Year 1: The first year is a common year at the end of which students may graduate with a Business Administration Certificate.

Year 2: Students select one area of specialization for the second year from the following options:
- Accounting, General, Human Resource Management, and Marketing. Students may graduate at the end of Year 2 with a Business Administration Diploma.

Year 3: The third-year options are Accounting, Human Resource Management, and Marketing. Students may graduate with a Business Administration Diploma at the end of Year 3.

Graduates of the Business Administration/Management programs may have the opportunity to transfer credits to institutions/associations such as:
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- Canadian Public Relations Society
- International Personnel Management Association (IPMA) - Canada
- Certified General Accountants of Canada (CGA)
- The Society of Management Accountants of Canada (CMA)
- The Payroll Association of Canada

BUSINESS Office Administration

CERTIFICATE
- One Year
- Varies
- Bay St. George, Burin, Corner Brook, Clarenville, Grand Falls-Windsor, Labrador West, Port aux Basques, Prince Philip Drive, St. Anthony, and Distributed Learning Campuses

COURSES CODE TITLE Hrs/wk

Semester 1 Cr Le La
AC1100 Bookkeeping I 4 4 2
CM1100 Writing Fundamentals 3 3 1
DB1200 Document Production I 6 6 4
EP1110 Introduction to Business 4 4 0
OF1100 Office Management I 3 3 1

Semester 2 Cr Le La
AC2100 Bookkeeping II 4 4 2
CM2110 Business Writing Fundamentals 3 3 0
CP2310 Electronic Spreadsheet Applications 3 3 2
DB1210 Document Production II 5 5 3
KB1150 Keyboarding I 1 1 1
OF1101 Office Management II 3 3 1

Semester 3 (Internession) Cr Le La
AC2200 Business Elective I 4 4 2
CM1100 Writing Fundamentals 3 3 1
EP2310 Electronic Spreadsheet Applications 3 3 2
DB1210 Document Production II 5 5 3
KB1150 Keyboarding I 1 1 1
OF1101 Office Management II 3 3 1

Semester 4 Cr Le La
AC2100 Bookkeeping II 4 4 2
CM2110 Business Writing Fundamentals 3 3 0
OF2200 Office Management I 3 3 1

Semester 5 Cr Le La
AC2200 Business Elective I 4 4 2
CM2110 Business Writing Fundamentals 3 3 0

Year 2: Students going on to complete the diploma program can select one area of specialization for the second year from the following options: Executive,
**BUSINESS Office Administration (Executive)**

**DIPLOMA**
- Two Years
- Varies
- Bay St. George, Burin, Corner Brook, Clarenville, Grand Falls-Windsor, Labrador West, Port aux Basques, Prince Philip Drive, St. Anthony, and Distributed Learning Campuses

**COURSES**

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<th>Hrs/wk</th>
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The Course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

**BUSINESS Office Administration (Legal)**

**DIPLOMA**
- Two Years
- September
- Prince Philip Drive Campus

**COURSES**

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The Course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

**ENTRANCE REQUIREMENTS**

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. **High School**
   - High School Graduation

**ACCREDITATION**

Office Administration (Executive) is accredited by the Accreditation Council for Business Schools and Programs (ACBSP). ACBSP is the leading specialized accreditation association for business education supporting, celebrating, and rewarding teaching excellence.

**Related courses include communications, computerized accounting, organizational behaviour and computerized business applications.**

**ENTRANCE REQUIREMENTS**

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. **High School**
   - High School Graduation

2. **Comprehensive Arts and Science Certificate (College Transition program)**
3. **Adult Basic Education**
   - Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile)
4. **Mature Student Status**
   - Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

**ACCREDITATION**

Office Administration (Legal) is accredited by the Accreditation Council for Business Schools and Programs (ACBSP). ACBSP is the leading specialized accreditation association for business education supporting, celebrating, and rewarding teaching excellence.

**BUSINESS Office Administration (Medical)**

**DIPLOMA**
- Two Years
- September
- Prince Philip Drive, and Distributed Learning Campuses

**COURSES**

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The Course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

**Year 1 courses can be completed at campuses offering the Office Administration certificate program.**

**Year 2 courses can be completed at campuses offering the Office Administration certificate program.**

**ENTRANCE REQUIREMENTS**

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. **High School**
2. **Comprehensive Arts and Science Certificate (College Transition program)**
3. **Adult Basic Education**
   - Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile)
4. **Mature Student Status**
   - Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

**ACCREDITATION**

Office Administration (Legal) is accredited by the Accreditation Council for Business Schools and Programs (ACBSP). ACBSP is the leading specialized accreditation association for business education supporting, celebrating, and rewarding teaching excellence.

**ENTRANCE REQUIREMENTS**

Requirements for admission require the applicant to meet one of the following academic criteria:

1. **High School**
2. **Comprehensive Arts and Science Certificate (College Transition program)**
3. **Adult Basic Education**
   - Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile)
4. **Mature Student Status**
   - Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

**ACCREDITATION**

Office Administration (Medical) is accredited by the Accreditation Council for Business Schools and Programs (ACBSP). ACBSP is the leading specialized accreditation association for business education supporting, celebrating, and rewarding teaching excellence.

**ENTRANCE REQUIREMENTS**

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. **High School**
2. **Comprehensive Arts and Science Certificate (College Transition program)**
3. **Adult Basic Education**
   - Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile)
4. **Mature Student Status**
   - Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

**ACCREDITATION**

Office Administration (Medical) is accredited by the Accreditation Council for Business Schools and Programs (ACBSP). ACBSP is the leading specialized accreditation association for business education supporting, celebrating, and rewarding teaching excellence.

**ENTRANCE REQUIREMENTS**

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. **High School**
2. **Comprehensive Arts and Science Certificate (College Transition program)**
3. **Adult Basic Education**
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**ACCREDITATION**

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**ENTRANCE REQUIREMENTS**

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. **High School**
2. **Comprehensive Arts and Science Certificate (College Transition program)**
3. **Adult Basic Education**
   - Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile)
4. **Mature Student Status**
   - Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.
This two-year diploma program is designed to enable students to develop the knowledge, skills and abilities needed to be a medical secretary or a medical office assistant.

The major areas of the program include document production, medical transcription, medical terminology and medical office management. Related areas include communications, medical billing, computer applications and biology.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
High School Graduation

2. Comprehensive Arts and Science Certificate (College Transition program)

3. Adult Basic Education
Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile)

4. Mature Student Status
Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

ACCREDITATION
Office Administration (Medical) is accredited by the Accreditation Council for Business Schools and Programs (ACBSP). ACBSP is the leading specialized accreditation association for business education supporting, celebrating, and rewarding teaching excellence.

BUSINESS
Office Administration (Records and Information Management)

DIPLOMA
• Two Years
• September
• Bay St. George, and Prince Philip Drive Campuses

COURSES

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The Course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

Year 1 courses can be completed at campuses offering the Office Administration certificate program.

| Semester 4 | Cr | Le | La |
| CM2200 | Oral Communications            | 2 2 0  |
| DM2300 | Document Production III        | 6 4 6  |
| OF2100 | Office Management III          | 3 3 1  |
| RP1100 | Introduction to Records Management | 4 4 0 |
| RP1200 | Archives Principles            | 2 2 0  |
| RP1300 | Active and Semi-active Records | 2 2 0  |
| Elective | (minimum 2 credits)           | 2 2 0  |

This two-year diploma program incorporates a strong emphasis on office management, computer skills, and an intense study of records and information theories and practices. Major areas are Record Management Principles and Procedures, Document Production, and Office Management. Related areas include Communications (oral and written), Organizational Behaviour, and Human Resource Management.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
High School Graduation

2. Comprehensive Arts and Science Certificate (College Transition program)

3. Adult Basic Education
Adult Basic Education (Level III) Graduation with General College Profile (or Business-Related College Profile or Degree and Technical Profile)

4. Mature Student Status
Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

ACCREDITATION
Office Administration (Records and Information Management) is accredited by the Accreditation Council for Business Schools and Programs (ACBSP). ACBSP is the leading specialized accreditation association for business education supporting, celebrating, and rewarding teaching excellence.

INFORMATION TECHNOLOGY
Computer Systems and Networking

DIPLOMA
• Two Years
• September
• Corner Brook, and Prince Philip Drive Campuses

COURSES

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The Computer Systems and Networking two-year program focuses on the skills, competencies and attitudes required to research, design, install and maintain computer systems and network infrastructure in a highly available and secure computing environment. The program combines theoretical and practical learning experiences in a team-oriented setting encompassing front-line computer systems, back-end server environments and the local and wide-area network infrastructure.

The program includes course work, team-oriented projects, and a final 15-week work term focusing on areas of technical learning, team building, communications, interpersonal skills, ethics, and best practices. This diversity provides opportunities for the student to acquire the skills, professionalism and adaptability required to succeed in the dynamic and challenging field of Information Technology infrastructure support.

The student will create and maintain a career plan and learning portfolio throughout the program to provide the opportunity to continually assess skill development and create/adapt career plans that set personal expectations and professional goals.

The capstone project will enable the student to demonstrate the application of knowledge and skills developed throughout the program by performing an in-depth study of a problem, design, or technological application and fully documenting and presenting the findings.

Objectives
The aim of the Computer Systems and Networking program is to graduate a student with:

1. the theoretical and practical skills in information technology infrastructure support. This will enable her/him to:
   a. provide computer technical assistance, support, and advice to customers and other users
   b. install, modify and repair computer hardware and software
   c. support local-area networks (LAN), wide-area networks (WAN), network segments, and Internet
and intranet systems

d. design an organization’s computer system in
which all of the components including comput-
ers, the network, and software, work properly
together
e. plan, coordinate, and implement the organiza-
tion’s information security policy

2. the skills required to interpret and effectively
apply industry procedures and policies in the
workplace

3. the social, interpersonal and communication
skills necessary to be a productive member of
a team

4. the self-awareness and reflective skills required
to create, evaluate and modify personal growth
and career plans

The College of the North Atlantic is a Cisco
Networking Academy. Students have the opportunity
to complete courses in the Academy program which
provide a strong foundation in computer network-
ning knowledge and skills utilizing the equipment of
the industry’s leading provider. As well, the College
of the North Atlantic is the only accredited Cisco
Academy Instructor Training Center in Atlantic Canada.

Employment Opportunities

Given the presence of computer systems and
networks in all industries, Computer Systems and
Networking graduates may find employment in both
the private and public sectors.

Graduates of the program will be able to fill roles in
industry such as:

Computer Support Specialist
Network Specialist
Computer Support Technician
LAN Team Member
I.T. Support Technician
Help Desk Technician
Server Support Analyst/Technician
Help Desk Analyst
Technology Support Analyst

ENTRANCE REQUIREMENTS

Eligibility for admission to Computer Systems and
Networking program requires the applicant to meet
one of the following four academic criteria:

1. High School

Provincial High School Graduation Certificate with a
60% overall average in the following (or equivalent):

i. English 3201 or English 3202 (60% minimum)
ii. Mathematics (4 credits) chosen from:
Advanced: 2200, 3200 (50% minimum in each
course)
Academic: 2201 (50% minimum), 3201 (60% mini-
num)
iii. 5 credits from 3000 Level

2. Comprehensive Arts and
Science (CAS) Transition

Comprehensive Arts and Science (Transition)
Certificate with the following courses:

i. Math Fundamentals: MA1040, MA1041

3. Adult Basic Education (ABE)

Adult Basic Education (Level III) Graduation with
Business-Related College Profile including the follow-
ing courses (or equivalent):

i. English 3101A, 3101B, 3101C or 3102A, 3102B,
3102C
ii. Mathematics 1104A, 1104B, 1104C, 2104A, 2104B,
2104C, 3104A, 3104B, 3104C

Applicants with Adult Basic Education (Level III)
Graduation with a different profile may be eligible for
admission to the program provided the appropriate
selection of courses including those outlined above
have been completed.

4. Mature Student Status

Applicants who do not meet the educational prereq-
usites for this program, are 19 years of age or older,
and have been out of school for at least one year
may be considered on an individual basis under the
Mature Student Clause.

INFORMATION TECHNOLOGY

Information Management
(Conrad Diploma)

POST DIPLOMA

• One Year
• September
• Distributed Campus

COURSES

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</table>

The Information Management professional organizes
and manages all activities involved in the informa-
tion life cycle. This is an on-line program designed
to provide the student with the knowledge, skills
and attitudes needed to function in this role.

The program is designed so that the student gains
knowledge and skills in:

• the theory of records and Information
  Management (IM)
• the operation of IT infrastructure and its
  relation to IM
• information security and its relation to IM
• the legal environment that impacts IM
• project management
• analysis and design
• educational workshop design and delivery

The student will complete a capstone project where
she/he will apply her/his knowledge and skills to
analyze and design a solution to an IM prob-
lem. Effective communication and interpersonal skills
are emphasized throughout the curricula.

OBJECTIVES

1. The objective of the Information Management
   program is to develop graduates with the ability
to:
2. organize and manage all activities involved in
   the record life cycle
3. efficiently gather and analyze data required to
   inform the information management processes
   of an organization
4. conduct themselves professionally in a
   business environment
5. participate as a member of a team involved in
   information management policy development
   and implementation
6. advocate the importance of and advise on
   Information Management policies and pro-
cedures throughout the organization through
   education, training and consultation

ACADEMIC ADVISING

Each student will be assigned an academic advisor to help guide you
through the college experience. He or she is trained to
advise you on college-related issues or to make
mutually agreed upon referrals for you to other col-
lege professionals.

Students intending to complete the program on a
part-time basis (less than four courses per semester)
will be contacted by her/his advisor to create an
academic plan that will enable them to complete
the program. A part-time student must complete the
program within five years from the date of program
enrolment.

EMPLOYMENT OPPORTUNITIES

Graduates of the Information Management program
can expect to find employment as Information
Management Analysts, Records Analysts, and Records
Management Consultants in industries such as oil &
gas, healthcare and in government agencies.

Due to the nature of this field, employers may
require a clear Certificate of Conduct from the
Royal Newfoundland Constabulary (RNC), the Royal
Canadian Mounted Police (RCMP) or local provincial/
municipal police force prior to hiring.

ENTRANCE REQUIREMENTS

Graduation from a recognized two or three year post-
secondary diploma or degree, or a combination of
other postsecondary work and industry experience
acceptable to the College.

INFORMATION TECHNOLOGY

Program Analyst
(Conrad Diploma)

DIPLOMA

• Three Years
• September
• Prince Philip Drive Campus

COURSES

<table>
<thead>
<tr>
<th>CODE</th>
<th>TITLE</th>
<th>Hrs/wk</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM1300</td>
<td>Technical Report Writing I</td>
<td>3</td>
</tr>
<tr>
<td>CP1290</td>
<td>Fundamentals of Programming I</td>
<td>4</td>
</tr>
<tr>
<td>CP1490</td>
<td>HTML5/CSS3</td>
<td>3</td>
</tr>
<tr>
<td>MC1305</td>
<td>Software Applications</td>
<td>2</td>
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<tr>
<td>MA1400</td>
<td>Problem Solving for Information Technology</td>
<td>4</td>
</tr>
<tr>
<td>PD1100</td>
<td>College and Career Preparation</td>
<td>3</td>
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<tr>
<td>CM1401</td>
<td>Technical Report Writing II</td>
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<td>CP2320</td>
<td>Fundamentals of Programming II</td>
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</tr>
<tr>
<td>CP2481</td>
<td>Database Programming</td>
<td>4</td>
</tr>
<tr>
<td>CP1880</td>
<td>Computer Systems Architecture</td>
<td>4</td>
</tr>
<tr>
<td>CP1200</td>
<td>Security for Programmers</td>
<td>2</td>
</tr>
<tr>
<td>CP1210</td>
<td>JavaScript</td>
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<tr>
<td>WC1510</td>
<td>Work Term I</td>
<td>5</td>
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<tr>
<td>AC1300</td>
<td>Accounting</td>
<td>4</td>
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<tr>
<td>CM2300</td>
<td>Reporting Writing</td>
<td>2</td>
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<tr>
<td>CP2280</td>
<td>Object-Oriented Programming in Java</td>
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</tr>
<tr>
<td>CP3410</td>
<td>Fundamentals of Database Design</td>
<td>4</td>
</tr>
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</table>
| CP3421 | Fundamentals of Systems Analy-
   sis and Design                | 3      |
| PD2130 | Personal and Professional Deve-
   lopment                      | 2      |
| CP1290 | Advanced JavaScript            | 2      |

49
PROGRAMME OVERVIEW

The Software Development two-year program focuses on the competencies required to design, implement and maintain software systems that operate in a secure networked environment containing stationary and mobile devices. The program combines theoretical and practical learning experiences in a team-oriented setting.

ENTRANCE REQUIREMENTS

Eligibility for admission to Programmer Analyst (Business) Co-op program requires the applicant to meet one of the following academic criteria:

1. High School

Provincial High School Graduation Certificate with a 60% overall average in the following (or equivalent):
   i. English 3201 or English 3202 (60% minimum)
   ii. Mathematics (4 credits) chosen from:
       Advanced: 2200, 3200 (50% minimum in each course)
   Academic: 2201 (50% minimum), 3201 (60% minimum)

2. Comprehensives Arts and Science (CAS) Transition

Comprehensive Arts and Science (Transition) Certificate with the following courses:
   i. Math Fundamentals: MA2040, MA2041
   ii. English: 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
   Applicants with Adult Basic Education (ABE)Adult Basic Education (Level III) Graduation with a different profile may be eligible for admission to the program provided the appropriate selection of courses includes those outlined above have been completed.

4. Mature Student Status:

Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

INFORMATION TECHNOLOGY

Software Development Diploma

• 2 Years
• September
• Corner Brook Campus

OBJECTIVES

The aim of the Programmer Analyst (Business) Co-op program is to graduate a student with:
1. the theoretical knowledge and practical programming skills enabling her/him to function as an entry-level programmer in an object-oriented, database-oriented business programming environment
2. the skills required to interpret and effectively apply industry procedures and policies in the workplace
3. the social, interpersonal and communication skills necessary to be a productive member of a team
4. the self-awareness and reflective skills to create, evaluate and modify personal growth, learning plans and career plans

ACREDITATION

The Programmer Analyst (Business) Co-op program has been accredited by the Canadian Information Processing Society (CIPS) until 2013. The Co-op delivery method of the program has been accredited by the Canadian Association for Co-operative Education (CAFCE) until 2015.

EMPLOYMENT OPPORTUNITIES

Graduates of the Programmer Analyst (Business) Co-op program may find employment in computer-related industries, such as: provincial and federal government departments, as well as small, medium and large corporations. Typical job titles may include junior programmer analyst, junior developer, programmer, database programmer and web developer.

ENTRANCE REQUIREMENTS

Eligibility for admission to Programmer Analyst (Business) Co-op program requires the applicant to meet one of the following academic criteria:

1. High School

Provincial High School Graduation Certificate with a 60% overall average in the following (or equivalent):
   i. English 3201 or English 3202 (60% minimum)
   ii. Mathematics (4 credits) chosen from:
       Advanced: 2200, 3200 (50% minimum in each course)
   Academic: 2201 (50% minimum), 3201 (60% minimum)

2. Comprehensives Arts and Science (CAS) Transition

Comprehensive Arts and Science (Transition) Certificate with the following courses:
   i. Math Fundamentals: MA2040, MA2041
   ii. English: 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
   Applicants with Adult Basic Education (ABE)Adult Basic Education (Level III) Graduation with a different profile may be eligible for admission to the program provided the appropriate selection of courses includes those outlined above have been completed.

4. Mature Student Status:

Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

INFORMATION TECHNOLOGY

Software Development Diploma

• 2 Years
• September
• Corner Brook Campus

OBJECTIVES

The aim of the Software Development program is to graduate a student with:
1. the knowledge of the fundamental computing skills necessary to work effectively and efficiently in the Information Technology industry
2. the problem solving and programming skills in desktop, enterprise, and Internet environments
3. the ability to analyze, write, and maintain secure, customized computer applications based on user requirements
4. effective communication skills, a capacity for leadership, teamwork, quality assurance and co-operation in problem solving
5. the skills required to design and develop database applications

EMPLOYMENT OPPORTUNITIES

Software Development graduates may find employment in both the private and public sectors.

Graduates of the program will be able to fill roles in industry such as:
  • Software Developer
  • Web Developer
  • Computer Programmer
  • Database Developer

ENTRANCE REQUIREMENTS

Eligibility for admission to Software Development program requires the applicant to meet one of the following four academic criteria:

1. High School

Provincial High School Graduation Certificate with a 60% overall average in the following (or equivalent):
i. English 3201 or English 3202 (60% minimum)
ii. Mathematics (4 credits) chosen from:
   Advanced: 2200, 3200 (50% minimum in each course)
   Academic: 2201 (50% minimum), 3201 (60% minimum)
iii. 5 credits from 3000 Level

2. Comprehensive Arts and Science (CAS) Transition
   Comprehensive Arts and Science (Transition) Certificate with the following courses:
   i. Math Fundamentals: MA1040, MA1041

3. Adult Basic Education (ABE)
   Adult Basic Education (Level III) Graduation with Business-Related College Profile including the following courses (or equivalent):
   i. English 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
   Applicants with Adult Basic Education (Level III) Graduation with a different profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. Mature Student Status
   Applicants who do not meet the educational prerequisites for this program, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

INFORMATION TECHNOLOGY

Web Development

DIPLOMA
• Two Years
• September
• Distributed Campus

COURSES

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<thead>
<tr>
<th>CODE</th>
<th>TITLE</th>
<th>Hrs/Wk</th>
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<tbody>
<tr>
<td>CM1400</td>
<td>Technical Reporting Writing I</td>
<td>3 Cr, 3 Le, 3 La</td>
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<tr>
<td>CP1120</td>
<td>Fundamentals of Programming I</td>
<td>6 Cr, 5 Le, 3 La</td>
</tr>
<tr>
<td>CP1510</td>
<td>Website Development</td>
<td>3 Cr, 2 Le, 3 La</td>
</tr>
<tr>
<td>CP1570</td>
<td>Networking for Programmers</td>
<td>2 Cr, 2 Le, 0 La</td>
</tr>
<tr>
<td>MA1900</td>
<td>Problem Solving for Information Technology</td>
<td>4 Cr, 1 Le, 1 La</td>
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<tr>
<td>SD750</td>
<td>College and Career Preparation</td>
<td>2 Cr, 2 Le, 0 La</td>
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The Course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length.

Semester 2

<table>
<thead>
<tr>
<th>CODE</th>
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<tbody>
<tr>
<td>CM1401</td>
<td>Technical Report Writing II</td>
<td>3 Cr, 3 Le, 3 La</td>
</tr>
<tr>
<td>CP3510</td>
<td>Database Design</td>
<td>3 Cr, 2 Le, 2 La</td>
</tr>
<tr>
<td>CP2130</td>
<td>Fundamentals of Programming II</td>
<td>4 Cr, 3 Le, 3 La</td>
</tr>
<tr>
<td>CR2510</td>
<td>Linux Server Administration I</td>
<td>3 Cr, 2 Le, 3 La</td>
</tr>
<tr>
<td>EP1130</td>
<td>Business for Information Systems</td>
<td>3 Cr, 3 Le, 0 La</td>
</tr>
<tr>
<td>CP3160</td>
<td>Multimedia Development</td>
<td>3 Cr, 3 Le, 3 La</td>
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Semester 3

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<tbody>
<tr>
<td>CP2280</td>
<td>Object-Oriented Programming in Java4</td>
<td>3 Cr, 3 Le, 3 La</td>
</tr>
<tr>
<td>PR1100</td>
<td>Website Project I</td>
<td>2 Cr, 0 Le, 5 La</td>
</tr>
</tbody>
</table>

The Course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length.

Semester 4

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<th>CODE</th>
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<tbody>
<tr>
<td>CR1260</td>
<td>Client Service for Computer Industry</td>
<td>2 Cr, 2 Le, 1 La</td>
</tr>
<tr>
<td>CP3370</td>
<td>Software Development with ASP.NET</td>
<td>3 Cr, 3 Le, 3 La</td>
</tr>
<tr>
<td>CP1330</td>
<td>Windows Server Administration</td>
<td>4 Cr, 3 Le, 3 La</td>
</tr>
<tr>
<td>CS2000</td>
<td>Security for Programmers</td>
<td>3 Cr, 3 Le, 0 La</td>
</tr>
<tr>
<td>CP4110</td>
<td>Web Analysis and Design</td>
<td>4 Cr, 3 Le, 2 La</td>
</tr>
<tr>
<td>CP4240</td>
<td>PHP</td>
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Semester 5

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<tbody>
<tr>
<td>EP2400</td>
<td>Business Solutions</td>
<td>4 Cr, 4 Le, 0 La</td>
</tr>
<tr>
<td>CP3100</td>
<td>MVC Framework Development</td>
<td>4 Cr, 3 Le, 2 La</td>
</tr>
<tr>
<td>CP2470</td>
<td>Web Server</td>
<td>3 Cr, 2 Le, 3 La</td>
</tr>
<tr>
<td>CP3130</td>
<td>Content Management Systems</td>
<td>3 Cr, 3 Le, 3 La</td>
</tr>
<tr>
<td>CR2170</td>
<td>Trends in Web Development</td>
<td>3 Cr, 2 Le, 2 La</td>
</tr>
<tr>
<td>CP3150</td>
<td>Interface Design and Analytics</td>
<td>3 Cr, 2 Le, 2 La</td>
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Semester 6

<table>
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<tbody>
<tr>
<td>PR1101</td>
<td>Website Project II</td>
<td>5 Cr, 3 Le, 7 La</td>
</tr>
</tbody>
</table>

The Course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length.

Web Development is a two-year program offered online through Distributed Learning. It provides the student with the skills needed to design, create and maintain database-driven web applications. Students will receive hands-on training in:
- Computer programming and secure coding
- Web site design and development for both large and small screens
- Multimedia development
- Database design and development
- Web server administration
- Web analytics
- Social media integration
- The latest trends in web development

Fundamental skills such as: technical communications, business solutions, and personal and career development round out the program. This diversity provides opportunities for the student to acquire the skills, professionalism and adaptability required to succeed in the dynamic and challenging field of Web Development.

Two major web site project courses will enable the student to demonstrate the application of knowledge and skills developed throughout the program by performing an in-depth analysis of a client’s needs; designing a website that meets the client’s needs; creating web pages, graphics and coding to support the design; implementing software to support the website; documenting the solution; and presenting the solution to team members and the client.

The student will create and maintain a career plan and learning portfolio throughout the program to provide the opportunity to continually assess skill development and create/adapt career plans that set personal expectations and professional goals. Students will graduate with a personal portfolio, including websites and multimedia they have designed.

OBJECTIVES

The aim of the Web Development program is to graduate a student with the ability to:
1. use the fundamental computing skills necessary to work effectively and efficiently in the Information Technology industry
2. demonstrate problem solving, design and programming skills to create interactive, secure, database-driven web sites based on user requirements
3. demonstrate effective communication skills, a capacity for leadership, teamwork, quality assurance and co-operation
4. design and create content-rich web sites

EMPLOYMENT OPPORTUNITIES

Web Development graduates may find employment in both the private and public sectors in small, medium and large businesses. Graduates of the program will be able to fill roles in industry such as:
- Web Designer
- Web Developer
- Website Administrator/Developer

ENTRANCE REQUIREMENTS

Eligibility for admission to the Web Development program requires the applicant to meet one of the following four academic criteria:

1. High School
   Provincial High School Graduation Certificate with 60% overall average in the following (or equivalent):
   i. English 3201 or English 3202 (60% minimum)
   ii. Mathematics (4 credits) chosen from:
      Advanced: 2200, 3200 (50% minimum in each course)
      Academic: 2201 (50% minimum), 3201 (60% minimum)
   iii. 5 credits from 3000 Level
SCHOOL OF ENGINEERING TECHNOLOGY AND NATURAL RESOURCES
Buildings are an exciting and vital part of our physical environment. Not only must they provide shelter, but they must do it in a way which provides safe, healthy, and comfortable environments which can be built and operated within given cost guidelines. To achieve these goals buildings have become complex structures requiring teams of specialists. An important member of the design and construction team is the Architectural Engineering Technologist.

The Architectural Engineering Technology Program has been developed in response to provincial needs with input from professionals associated with the design and construction of buildings. Projects and assignments are designed to be as close as possible to the type of work graduates will encounter when entering the workforce.

Every effort is made to expose the learner to the latest technology. Computers are used as a tool in problem solving in many technical courses. Microcomputers, computer aided drafting (CAD) equipment, and a variety of architectural and engineering software packages are made available to learners to carry out their projects and assignments.

Graduates completing this program are automatically eligible for membership in the Association of Engineering Technicians and Technologists of Newfoundland and Labrador and Labrador (AETNL), as well as any similar association in Canada.

Upon completion of this program graduates may choose to further their education by completing a bachelor degree in technology or engineering at one of several institutions that have articulation agreements with College of the North Atlantic.

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

OBJECTIVES

As an architectural engineering technologist, the graduate will have the knowledge and skill that will allow him/her to:

1. Prepare complete sets of architectural drawings and related documentation for residential and commercial construction/renovation projects.
2. Have a complete understanding of the basic architectural principles in building design and detailing.
3. Apply the principles of building science and construction engineering to analyze and solve technical problems for construction projects.
4. Understand the relationship between architectural, structural, mechanical, electrical, and environmental building systems.
5. Apply the principles of project management to planning, scheduling, and monitoring of project development.
6. Communicate effectively with clients, contractors, other building professionals and municipal authorities during the design and construction of the building project.
7. Apply knowledge of applicable codes, zoning bylaws, and regulations to the building project.

CURRICULUM

General education consisting of Project Management Skills (theoretical and applied), Communication Skills (oral and written), Mathematics, Physics, Chemistry, Electrical and Magnetic Theory, Engineering Graphics, Engineering Technology Awareness.

Specific education in various aspects (theory and principles) of the Architectural Engineering Technologist profession including building services, site supervision, project management and construction management.

Practical education in various aspects of working drawings, architectural utility systems, and architectural graphics layouts.

CAREER OPPORTUNITIES

The need is growing for people trained in building technology. Graduates may find employment in a variety of areas such as architectural firms, engineering firms, government departments, crown corporations, construction firms, manufacturing industries, and supply and sales companies.

Graduates with two years of progressive work experience may be eligible to receive the designation of Professional Technologist (P. Tech) upon completion of a Professional Practice and Ethics Exam.

ENTRANCE REQUIREMENTS

Eligibility for admission to an Engineering Technology program requires the applicant to meet one of the following four academic criteria:

1. High School

High School Graduation Certificate with a 60% overall average in the following (or equivalent):
   i. English (2 credits) (minimum 60%) from: 3201 or 3202
   ii. Mathematics (4 credits) chosen from:
      Advanced: 2200, 3200 (50% minimum in each course)
      Academic: 2201 (50% minimum), 3201 (60% minimum)
   iii. Science (4 credits) two of which must be selected from:
      Biology: 3201
      Physics: 3204
      Chemistry: 3202
      Earth Systems: 3209

Note: The remaining two Science credits to be chosen from the highest Science mark in level 1, 2 or 3.

2. Comprehensive Arts and Science (CAS) Transition

Comprehensive Arts and Science (Transition) Certificate with the following courses:
   i. Math (60% MINIMUM) MA1040, MA1041
   ii. Two Science courses chosen from one of the following three combinations:
      a. Introductory Biology: BL1020, BL1021
      b. Introductory Chemistry: CH1030, CH1031
      c. Introductory Physics: PH1050, PH1051

Note: It is strongly recommended that CAS learners who intend to enroll in Engineering Technology programs complete both of the Chemistry courses and both of the Physics courses.

3. Adult Basic Education (ABE)

Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses (or equivalent):
   i. English (60% minimum) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
   ii. Mathematics (60% minimum) 1104A, 1104B, 1104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
   iii. Science from one of the following sections:
      b. Chemistry 1102, 2102A, 2102B, 2102C, 3102A, 3102B, 3102C
      c. Physics 1104, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C

Applicants with Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. Mature Student Status

Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.
ENGINEERING TECHNOLOGY

Chemical Process Engineering Technology (Co-op)

DIPLOMA
• Three Years
• September
• Ridge Road Campus

COURSES

<table>
<thead>
<tr>
<th>CODE</th>
<th>TITLE</th>
<th>Cr</th>
<th>Le</th>
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<tbody>
<tr>
<td>Semester 1 and 2 - Refer to Engineering Technology (First Year)</td>
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<td>Semester 3 (Intersession)</td>
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<tr>
<td>SE1500</td>
<td>Introduction to Occupational Health and Safety</td>
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<td>PO1200</td>
<td>Introduction to Industrial Processes</td>
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<tr>
<td>AH1200</td>
<td>Mechanical Systems I</td>
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<td>AH1210</td>
<td>Mechanical Systems II</td>
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<td>C2S120</td>
<td>Process Control I (Basic Control Systems and Technologies)</td>
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<td>2</td>
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The Course and Lab hours per week are based on a 15 week semester; therefore, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

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<th>Semester 5 (Winter)</th>
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<tbody>
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<td>TD3111</td>
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<td>CH2450</td>
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<td>PO2310</td>
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<td>MH2520</td>
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<table>
<thead>
<tr>
<th>Semester 6 (Spring)</th>
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<tbody>
<tr>
<td>SE2150</td>
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<tr>
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<tr>
<td>SE2500</td>
</tr>
<tr>
<td>PR3150</td>
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<tr>
<td>C3S12</td>
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</table>

Leavers in Chemical Process Engineering Technology (Co-op) complete SE2150, SD2220, SE2500, PR3150 and C3S12 (6 weeks) prior to beginning their Work Term.

<table>
<thead>
<tr>
<th>Semester 7 (Fall)</th>
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<tbody>
<tr>
<td>PR2640</td>
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<tr>
<td>MH1401</td>
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<th>Semester 8 (Winter)</th>
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<tbody>
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<td>PO3101</td>
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This program is currently under review and is subject to change.

Chemical Process Engineering Technologists play a vital role in the monitoring, operation, control and maintenance of equipment in a variety of industries including oil & gas. The program equips graduates with both the knowledge and practical skills necessary to begin their career as competent process operators and chemical engineering technologists.

The program covers safety practices, process operations, chemical engineering principles and regulatory processes, process stream analysis, instrumentation and process control. Learners will also acquire valuable work experience through the completion of two co-op work terms.

Graduates completing this program are automatically eligible for membership in the Association of Engineering Technicians and Technologists of Newfoundland and Labrador and Labrador (AETNLI), as well as any similar association in Canada.

Upon completion of this program graduates may choose to further their education by completing a bachelor degree in technology or engineering at one of several institutions that have articulation agreements with the College of the North Atlantic.

ACCREDITATION
College of the North Atlantic will seek accreditation for this program from the Canadian Technology Accreditation Board (CTAB) of the Canadian Council of Technicians and Technologists (CCTT).

OBJECTIVES
As a chemical process engineering technologist, the graduate will have the knowledge and skills that will allow him/her to:

1. Assist in safe and efficient design, operation, troubleshooting, and maintenance of chemical process equipment.


3. Establish and maintain a safe work environment by following and enforcing safety standards and procedures and adhering to established standards, practices, and procedures.

4. Work with other technologists, engineers and skilled trades persons to develop innovative solutions to problems in chemical process industries.

5. Work and communicate as members of a team with other professionals, as well as supervise the work of skilled professionals and trades persons in a variety of chemical processes and procedures.

CURRICULUM

General education
Consisting of Project Management Skills (theoretical and applied), Communication Skills (oral and written), Mathematics, Physics, Chemistry, Electrical and Magnetic Theory, Engineering Graphics, Engineering Technology Awareness.

Specific education
In various aspects (theory and principles) of the chemical process control discipline including industrial chemistry, fluid mechanics, and power plant systems.

Practical education
In various aspects of chemical process applications including process controls, chemical reactors, and separation processes.

Work exposure
Consisting of field experience, gained from compensated work terms, in the field of chemical processes.

 CAREER OPPORTUNITIES
Graduates of the Chemical Process Engineering Technology program can expect to find employment as process operators and technologists in areas such as oil & gas extraction and refining offshore petroleum production installations, petrochemical industries, primary metal manufacturing, thermal power plants and water and waste treatment facilities.

Graduates with two years of progressive work experience may be eligible to receive the designation of Professional Technologist (P. Tech) upon completion of a Professional Practice and Ethics Exam.

Note: Learners will also be required to complete a number of non-credit co-op education seminars throughout the program (resume writing, job search skills and interview preparation).

ENTRANCE REQUIREMENTS
Eligibility for admission to an Engineering Technology program requires the applicant to meet one of the following four academic criteria:

1. High School
High School Graduation Certificate with a 60% overall average in the following (or equivalent):
   i. English (2 credits) (minimum 60%) from: 3201 or 3202
   ii. Mathematics (4 credits) chosen from:
       Advanced: 2200, 3200 (50% minimum in each course)
       Academic: 2201 (50% minimum), 3201 (60% minimum)
   iii. Science (4 credits) two of which must be selected from:
       • Biology: 3201
       • Physics: 3204
       • Chemistry: 3202
       • Earth Systems: 3209

Note: The remaining two Science credits to be chosen from the highest Science mark in level 1, 2 or 3.

2. Comprehensive Arts and Science (CAS) Transition
Comprehensive Arts and Science (Transition) Certificate with the following courses:
   i. Math (60% MINIMUM) MA1040, MA1041
   ii. Two Science courses chosen from one of the following three combinations:
       a. Introductory Biology: BL1020, BL1021
       b. Introductory Chemistry: CH1030, CH1031
       c. Introductory Physics: PH1050, PH1051

Note: It is strongly recommended that CAS learners who intend to enroll in Engineering Technology programs complete both of the Chemistry courses and both of the Physics courses.

3. Adult Basic Education (ABE)
Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses (or equivalent):
   i. English (60% minimum) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
   ii. Mathematics (60% minimum) 3104A, 3104B, 3104C, 3104A, 3104B, 3104C
   iii. Science from one of the following sections:
       b. Chemistry 1102, 2102A, 2102B, 2102C, 3102A, 3102B, 3102C
       c. Physics 1104, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C

Applicants with Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. Mature Student Status
Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered
The field of civil design and construction plays a central role in the economic viability of many industries and the province as a whole. The civil field includes such areas as residential, commercial, and industrial buildings, harbours, airports, roads, and other transportation facilities, and municipal infrastructure.

Natural resource development projects (hydropower, oil and gas, mineral processing, etc.) will continue to create substantial employment opportunities for Civil Engineering Technology (Co-op) graduates.

The Civil Engineering Technology (Co-op) program will enable graduates to play an important role in the professional team which is responsible for the translation of ideas into the finished product. The program will ensure that the graduates understand the need for, and have the skills to contribute to, the cost effective and efficient planning of construction projects from concept to completion.

Graduates completing this program are automatically eligible for membership in the Association of Engineering Technicians and Technologists of Newfoundland and Labrador (AETNL), as well as any similar association in Canada.

Upon completion of this program graduates may choose to further their education by completing a bachelor degree in technology or engineering at one of several institutions that have articulation agreements with College of the North Atlantic.

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.

OBJECTIVES

The main objective of the program is to produce graduates who can function in the Civil Engineering Environment at the technologist level. Some of the tasks which a graduate will be able to perform are:

1. Analyze the structural reactions of engineering work.
2. Participate in the scheduling of civil engineering projects and monitor the work.
3. Assist in planning, designing, inspecting, supervising, and constructing civil engineering projects.
4. Plan and design municipal infrastructure projects.
5. Assist with designing, inspecting and troubleshooting of transportation infrastructure.
6. Design, calculate and test asphalt and concrete mixes to industry standards and specifications.
7. Carry out engineering survey and construction layouts using conventional survey instruments, GIS, and GPS systems.

CURRICULUM

General education consisting of Project Management Skills (theoretical and applied), Communication Skills (oral and written), Mathematics, Physics, Chemistry, Electrical and Magnetic Theory, Engineering Graphics, Engineering Technology Awareness.

Specific education in various aspects (theory and principles) of the civil discipline including strength of materials, structures, fluid mechanics, soils & foundations, building codes & services and planning & estimating.

Practical education in various aspects of the civil discipline including CAD drawings, material testing, highway technology, and construction surveying.

Work exposure consisting of field experience, gained from a compensated work term, in the field of civil engineering technology.

CAREER OPPORTUNITIES

The learner, upon graduation, may find employment with contractors, consultants, house builders, manufacturers, suppliers, municipalities, provincial and federal governments and their agencies, and many others involved in such projects as the design of offshore and on-shore structures and facilities, testing and inspection of structural components, estimation, sales, construction surveying, and project management.

Graduates with two years of progressive work experience may be eligible to receive the designation of Professional Technologist (P. Tech) upon completion of a Professional Practice and Ethics Exam.

Note: Learners will also be required to complete a number of non-credit co-op education seminars throughout the program (resume writing, job search skills and interview preparation).

ENTRANCE REQUIREMENTS

Eligibility for admission to an Engineering Technology program requires the applicant to meet one of the following four academic criteria:

1. High School

High School Graduation Certificate with a 60% overall average in the following (or equivalent):
   i. English (2 credits) (minimum 60%) from: 3201 or 3202
   ii. Mathematics (4 credits) chosen from: Advanced: 2200, 3200 (50% minimum in each course)

   Academic: 2201 (50% minimum), 3201 (60% minimum)
   iii. Science (4 credits) two of which must be selected from:
      Biology: 3201
      Physics: 3204
      Chemistry: 3202

2. Comprehensive Arts and Science (C&S) Transition

Comprehensive Arts and Science (Transition) Certificate with the following courses:
   i. Math (60% MINIMUM) MA1040, MA1041
   ii. Two Science courses chosen from one of the following three combinations:
      a. Introductory Biology: BL1020, BL1021
      b. Introductory Chemistry: CH1030, CH1031
      c. Introductory Physics: PH1050, PH1051

   Note: It is strongly recommended that CAS learners who intend to enroll in Engineering Technology programs complete both of the Chemistry courses and both of the Physics courses.

3. Adult Basic Education (ABE)

   Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses (or equivalent):
   i. English (60% minimum) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
   ii. Mathematics (60% minimum) 1104A, 1104B, 1104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
   iii. Science from one of the following sections:
      b. Chemistry 1102, 2102A, 2102B, 2102C, 3102A, 3102B, 3102C
      c. Physics 1104, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C

   Applicants with Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. Mature Student Status

Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered...
The Computing Systems Engineering Technology (Co-op) program prepares learners for the field of scientific and engineering computing. A combination of programming theory and practice, networking, and electronics ensures the graduate will be prepared to work in the emerging fields of cloud computing and mobile device application development such as smart phones and tablets. Graduates will obtain theoretical foundations as well as practical hands on experience with analog electronics, digital systems, including logic, microprocessor interfacing, and embedded microcontrollers and applications. Learners will work with mobile devices, robotic systems, and wireless control. Specialized skills in the software stream include, but will not be limited to, object-oriented programming, databases, networking, and modern web technologies. Graduates of this three year program receive the Diploma of Computing Systems Engineering Technology (Co-op).

Graduates completing this program are automatically eligible for membership in the Association of Engineering Technicians and Technologists of Newfoundland and Labrador (AETTNL), as well as any similar association in Canada.

Upon completion of this program graduates may choose to further their education by completing a bachelor degree in technology or engineering at one of several institutions that have articulation agreements with College of the North Atlantic.

Graduates enrolled in this program will also complete courses in the Cisco Networking Academy program which will place them on the path to Cisco certification at the CCNA level.

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

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

This program is also CAFCE (Canadian Association for Cooperative Education) accredited.

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

**OBJECTIVES**
As engineering technologists, graduates of this program will have the knowledge and skills that will allow them to:
1. Analyze, build, implement, and maintain computing systems and applications.
2. Design, develop, and implement relational database management systems.
3. Develop applications using object-oriented programming methods and practices.
4. Design and develop applications for mobile devices such as smart phones and tablets.
5. Prepare a quality assurance plan for testing and evaluation of software.
6. Design and implement computing systems suitable for cloud computing applications.
7. Specify, select, design, build, and troubleshoot micro-processor or micro-controller based systems.

**CURRICULUM**

**General Education** consisting of Project Management Skills (theoretical and applied), Communication Skills (oral and written), Mathematics, Physics, Chemistry, Electrotechnology, Engineering Graphics, Technology Awareness and Learner Success.

**Specific education** in various aspects (theory and principles) of the computing engineering discipline including database design, Internet application development, embedded system development, graphical programming, and mobile application development, in addition to digital logic systems, microcontrollers, and IP networking.

**Practical education** in various aspects of the theory and principles of computing and programming.

**Work exposure** Laboratory and field experience, gained from compensated work terms, in the application embedded electronics and computing systems.

**CAREER OPPORTUNITIES**
The graduate from the program will be a technologist who specializes in integrating computing technology into consumer and industrial products, who finds employment with hi-tech companies utilizing computers in new and innovative ways.

Graduates with two years of progressive work experience may be eligible to receive the designation of Professional Technologist (P. Tech) upon completion of a Professional Practice and Ethics Exam.

**Note:** Learners will also be required to complete a number of non-credit co-op education seminars throughout the 3-year program (resume writing, job search skills and interview preparation).

**ENTRANCE REQUIREMENTS**
Eligibility for admission to an Engineering Technology program requires the applicant to meet one of the following four academic criteria:

1. **High School**
   - High School Graduation Certificate with a 60% overall average in the following (or equivalent):
     - i. English (2 credits) (minimum 60%) from: 3201 or 3202
     - ii. Mathematics (4 credits) chosen from: Advanced: 2200, 3200 (50% minimum in each course)
     - iii. Science (4 credits) two of which must be selected from:
       - Biology: 3201
       - Physics: 3204
     - Chemistry: 3202
   - Earth Systems: 3209
   - **Note:** The remaining two Science credits to be chosen from the highest Science mark in level 1, 2 or 3.

2. **Comprehensive Arts and Science (CAS) Transition**
   - Comprehensive Arts and Science (Transition) Certificate with the following courses:
     - i. Math (60% MINIMUM) MA1040, MA1041
     - ii. Two Science courses chosen from one of the following three combinations:
       - a. Introductory Biology: BL1020, BL1021
       - b. Introductory Chemistry: CH1030, CH1031
     - c. Introductory Physics: PH1050, PH1051
   - **Note:** It is strongly recommended that CAS learners who intend to enroll in Engineering Technology programs complete both of the Chemistry courses and both of the Physics courses.

3. **Adult Basic Education (ABE)**
   - Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses (or equivalent):
     - i. English (60% minimum) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
     - ii. Mathematics (60% minimum) 1104A, 1104B, 1104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
     - iii. Science from one of the following sections:
   - **Application** with Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.
**4. Mature Student Status**
Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

**ENGINEERING TECHNOLOGY**

**Electrical Engineering Technology (Power & Controls) Co-op**

**Diploma**
- Three Years
- September
- Ridge Road Campus

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<td>DC Machines</td>
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<td>DP3110</td>
<td>Introduction to Programmable Logic Controllers</td>
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<td>PE2500</td>
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<td>MP3225</td>
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</table>

**Safety Certifications**
In addition to the formal seminar courses included in the program of studies, learners in the Electrical Engineering Technology (Power & Controls) Co-op program are required to obtain a certificate of completion of Standard First Aid/Heart Start over their three-year period of studies.

**Electrical Engineering Technology (Power and Controls) Co-op** is a three-year cooperative education program providing a comprehensive coverage of the electrical power discipline with emphasis on power systems, control systems and electrical design. The theoretical aspects of this program are complemented by extensive practical components that allow learners to gain invaluable experience with installation, operation and maintenance practices. This is further supplemented with real-world experience provided by two work terms.

Graduates completing this program are automatically eligible for membership in the Association of Engineering Technicians and Technologists of Newfoundland and Labrador (AETNL), as well as any similar association in Canada.

Upon completion of this program graduates may choose to further their education by completing a bachelor degree in technology or engineering at one of several institutions that have articulation agreements with College of the North Atlantic.

**ACCRREDITATION**
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 colour perception.

**OBJECTIVES**
As an electrical engineering technologist, the graduating student will have the knowledge and skill that will allow him/her to:

1. **Evaluate, design and specify facility electrical systems such as power, lighting, heating, control and protection.**
2. **Design and specify electrical generation, transmission and distribution systems.**
3. **Design, test, analyze and commission industrial electrical power control systems.**
4. **Coordinate, plan, direct and interface with other electrical industry professionals as part of a technical support team.**
5. **Analyze, configure and assist in the electrical design of control systems in commercial and industrial applications employing Programmable Logic Controllers (PLC).**
6. **Design and specify electrical systems found in electrical utilities and industrial plants.**
7. **Maintain and troubleshoot electrical equipment such as motors, generators, transformers, protection and control devices.**
8. **Employ the use of power electronic circuits in the electrical design of commercial and industrial systems utilized by the electrical power industry.**
9. **Apply knowledge of current applicable codes, practices and safety standards.**

**Practical education** in various aspects of the electrical workshop including shop tools, electrical wiring, installation and maintenance of electrical equipment and correct application of the Canadian Electrical Code.

**Work experience** consisting of field experience, gained from compensated work terms, in the field of electrical engineering technology.

**CAREER OPPORTUNITIES**
A graduate of the Electrical Engineering Technology (Power and Controls) Co-op program can find employment with a wide variety of companies involved in the electrical industry. Typical employers include production plants, oil and gas exploration production companies, refineries, offshore servicing companies, power utilities, pulp and paper mills, electrical sales and service groups, shipyards, provincial and federal government departments and consulting engineering companies. Graduates with two years of progressive work experience may be eligible to receive the designation of Professional Technologist (P. Tech) upon completion of a Professional Practice and Ethics Exam.

**Note:** Learners will also be required to complete a number of non-credit co-op education seminars throughout the program (resume writing, job search skills and interview preparation).

**ENTRANCE REQUIREMENTS**
Eligibility for admission to an Engineering Technology program requires the applicant to meet one of the following four academic criteria:

1. **High School**
   - High School Graduation Certificate with a 60% overall average in the following (or equivalent):
     - English (2 credits) (minimum 60%) from: 3101 or 3202
     - Mathematics (4 credits) chosen from: 2200, 3200 (50% minimum in each course)
   - Academic: 2201 (50% minimum), 3201 (60% minimum)
   - Science (4 credits) two of which must be selected from:
     - Biology: 3201
     - Physics: 3204
     - Chemistry: 3202
   - Earth Systems: 3209

   **Note:** The remaining two Science credits to be chosen from the highest Science mark in level 1, 2 or 3.

2. **Comprehensive Arts and Science (CAS) Transition**
   - Comprehensive Arts and Science (Transition) Certificate with the following courses:
     - Math (60% Minimum) MA1040, MA1041
     - Two Science courses chosen from one of the following three combinations:
       - Introductory Biology: BI1020, BI1021
       - Introductory Chemistry: CH1030, CH1031
       - Introductory Physics: PH1050, PH1051
   - **Note:** It is strongly recommended that CAS learners who intend to enroll in Engineering Technology programs complete both of the Chemistry courses and both of the Physics courses.

3. **Adult Basic Education (ABE)**
   - Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses (or equivalent):
     - English (60% minimum) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
     - Mathematics (60% minimum) 3104A, 3104B, 3104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
   - Science from one of the following sections:
     - Biology 1101, 2101A, 2101B, 2101C, 3101A,
4. Mature Student Status
Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

ENGINEERING TECHNOLOGY
Electronics Engineering Technology (Biomedical)

DIPLOMA
• Three Years
• September
• Ridge Road Campus

COURSES

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<th>Cr</th>
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<tr>
<td>Semester 1 and 2 - Refer to Engineering Technology (First Year)</td>
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<tr>
<td>Semester 3 (Interession)</td>
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<td>Le</td>
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<tr>
<td>CI1110</td>
<td>Signals &amp; Measurements</td>
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<tr>
<td>CI1310</td>
<td>Electrical/Electronic Fabrication Techniques</td>
<td>3</td>
<td>2</td>
<td>2</td>
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<tr>
<td>CT2300</td>
<td>Applied Programming</td>
<td>4</td>
<td>2</td>
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</table>
| The Course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

| Semester 4 (Fall) | Cr | Le | La |
| CI2330 | Analog Electronics I                        | 6  | 3  | 3  |
| C2280 | Modulation and Encoding                     | 5  | 4  | 2  |
| DP1110 | Digital Systems I (Logic)                   | 4  | 3  | 2  |
| MA2100 | Mathematics                                  | 5  | 0  | 0  |
| MP2140 | Circuit Analysis I                           | 4  | 3  | 2  |

| Semester 5 (Winter) | Cr | Le | La |
| CI2331 | Analog Electronics II                       | 4  | 3  | 2  |
| BL1300 | Anatomy & Physiology                        | 3  | 3  | 0  |
| CG2000 | Health Care and Safety I                    | 2  | 1  | 2  |
| CP2000 | Embedded Linux                               | 3  | 2  | 2  |
| DP2110 | Digital Systems II-Interfacing              | 5  | 4  | 3  |
| ET2150 | Advanced Circuit Analysis                    | 5  | 5  | 0  |

| Semester 6 (Interession) | Cr | Le | La |
| CG1221 | BET Biomechanical Systems                    | 3  | 2  | 3  |
| MA1520 | Statistics                                   | 2  | 2  | 1  |
| TM1111 | Medical Technology                           | 2  | 2  | 0  |

| Semester 7 (Fall) | Cr | Le | La |
| AE1310 | Active Circuit Applications                  | 4  | 3  | 2  |
| GI2021 | Health Care and Safety II                    | 3  | 2  | 2  |
| GI3400 | Biomedical Instrumentation I                 | 4  | 3  | 4  |
| CM2800 | Oral/Written Communication Skills            | 3  | 3  | 0  |
| DP3200 | Embedded Controller Applications             | 4  | 3  | 2  |
| PR3230 | Capstone Project I (Seminar)                | P/F | 1  | 0  |
| PE3150 | Project Management and Financial Analysis    | 4  | 4  | 0  |

| Semester 8 (Winter) | Cr | Le | La |
| ET1210 | Basic Communications Networks                | 4  | 3  | 0  |
| CI3411 | Biomedical Instrumentation II                | 6  | 6  | 6  |
| CI3510 | Advanced Medical Systems                     | 4  | 3  | 2  |
| PR2831 | Capstone Project II                         | 4  | 3  | 0  |

| Semester 9 (Interession) | Cr | Le | La |
| WT1700 | Biomedical Practicum                         | P/F | 1  | 0  |

Note: The final semester of year 3 is a 7 week practicum. As well, in the third year of the program, there are regular site visits to health care facilities. While the requirements for all Health Boards are not the same, it is standard practice for any government position to provide a letter of conduct from local law enforcement (typically RNC or RCMP). Due to the nature of any work in Health care and its inherent risk, it is also required that health vaccination records be updated and any outstanding vaccinations be received prior to commencement of the practicum. As well any allergies or sensitivities should be identified at this time. These requirements are initiated and need to be completed during semester II. (Winter semester, year 3)

A letter of conduct will also be required for registration in some courses in Semesters 7 and 8.

Health-care environments have become more dependent on electronic medical diagnostic and therapeutic equipment which must be operated and maintained with great accuracy. Graduates of this program are part of an integrated health care team who install and maintain this equipment as well as supporting computer systems. Graduates also assist other health care professionals in the optimization of equipment usage. The coordinated use and maintenance of this equipment has to be done in accordance with applicable codes, statutes and associated regulations.

The Electronics Engineering Technology (Biomedical) Program is a biomedical engineering technology program with a strong foundation in electronics. Learners enrolled in this program also receive training in the areas of biomedical instrumentation, microprocessor applications in the health care setting, anatomy and physiology, chemistry, biochemistry, health care and safety. This comprehensive program concludes with a practicum where learners are provided with the opportunity to work in hospital-based biomedical departments or with medical equipment sales and service companies.

ACREDITATION
The graduates completing this program are automatically eligible for membership in the Association of Engineering Technicians and Technologists of Newfoundland and Labrador (AETTNL), as well as any similar association in Canada.

Upon completion of this program graduates may choose to further their education by completing a bachelor degree in technology or engineering at one of several institutions that have articulation agreements with College of the North Atlantic.

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

OBJECTIVES
As engineering technologists, graduates of this program will have the knowledge and skill that will allow him/her to:

1. Employ specialized biomedical test instrumentation including patient parameter simulators and analysers, pressure and flow measurement devices, electrosurgical analysers and electrical safety analysers.
2. Troubleshoot, maintain, and calibrate complex, electro-medical equipment utilizing industry recognized techniques and protocols.
3. Demonstrate proficiency in the safe operation of electro-medical devices including patient care monitoring systems, defibrillators, electrosurgery units, diagnostic medical imaging systems, clinical laboratory instrumentation, dialysis delivery systems, respiratory care devices and other diagnostic, therapeutic and patient care instruments.
4. Modify, design, and construct medical electronic devices through the application of electronic and patient data acquisition principles.
5. Apply an engineering based approach to problem solving with respect to medical equipment systems, to enable the graduate to readily upgrade their knowledge and skills.
6. Demonstrate an awareness of and concern for patient and staff safety in the health care environment.
7. Maintain and operate Linux-based instrumentation within a wireless networking environment.

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

Specific education in the theory and application of analog and digital electronics with a specialized emphasis on biomedical instruments, equipment and techniques and the interconnected computer systems associated with a modern healthcare environment.

Practical education in a Health Care environment through curriculum integrated labs.

Work exposure consisting of field experience, gained from the biomedical practicum.

CAREER OPPORTUNITIES
The graduates of this program may enter the work force in the employment of hospital biomedical engineering departments, with manufacturers and distributors of biomedical instrumentation, as well as independent sales and service organizations. Employment may include design and development of medical instrumentation, as well as purchase evaluation, acceptance testing, preventive and demand maintenance and operator training.

Graduates with two years of progressive work experience may be eligible to receive the designation of Professional Technologist (P. Tech) upon completion of a Professional Practice and Ethics Exam.

Upon recognition as a P. Tech and supplemental relevant experience in the field of biomedical engineering technology the graduate may be eligible to write certification examinations to be recognized as a Certified Biomedical Engineering Technologist (CBET). In many jurisdictions of Canada this certification is a requirement for advanced practice of the profession.

ENTRANCE REQUIREMENTS
Eligibility for admission to an Engineering Technology program requires the applicant to meet one of the following four academic criteria:

1. High School
High School Graduation Certificate with a 60% overall average in the following (or equivalent):

   i. English (2 credits) (minimum 60%): from 3201 or 3202
   ii. Mathematics (4 credits) chosen from:
      - Advanced: 2200, 3200 (50% minimum in each course)
      - Academic: 2201 (50% minimum), 3201 (50% minimum)
   iii. Science (4 credits) two of which must be selected from:
      - Biology: 3204
      - Physics: 3202
      - Chemistry: 3201
   iv. Earth Systems: 3209

2. Comprehensive Arts and Science (CAS) Transition
Comprehensive Arts and Science (Transition)
Certificate with the following courses:

   i. Math (60% MINIMUM): MA1400, MA1401
   ii. Two Science courses chosen from one of the following three combinations:
      - a. Introductory Biology: BL1020, BL1021
      - b. Introductory Chemistry: CH1030, CH1031
      - c. Introductory Physics: PH1050, PH1051

   Note: It is strongly recommended that CAS learners who intend to enroll in Engineering Technology pro-
3. Adult Basic Education (ABE)

Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses (or equivalent):

i. English (60% minimum) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C

ii. Mathematics (60% minimum) 1104A, 1104B, 1104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C

iii. Science from one of the following sections:

Applications for Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. Mature Student Status

Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

ENGINEERING TECHNOLOGY

Engineering Technology (First Year)

DIPLOMA

- Varies
- Corner Brook, Carbonear, Gander, and Ridge Road Campuses

COURSES

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<tr>
<td>CM1400</td>
<td>Technical Report Writing</td>
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<td>ET1100</td>
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<tr>
<td>MA1700</td>
<td>Mathematics*</td>
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<tr>
<td>PH1100</td>
<td>Physics</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>EG1110</td>
<td>Engineering Graphics</td>
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<td>CH1120</td>
<td>Chemistry</td>
<td>4</td>
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<tr>
<td>SD1170</td>
<td>Technology Awareness</td>
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<td>P/NP</td>
<td>1</td>
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</tbody>
</table>

- Admission into the appropriate Mathematics course will be decided by the grade in high school math.

EITHER

- Learners who received at least 70% in level III Math 3200 or a pass in Math 3201 can be exempted from MA1700

OR

- Learners who received a combined average of 70% in 2201 and 3201, or a pass in both 2200 and 3200 can be exempted from MA1700.

Note: Learners may apply for an exemption from MA1700 provided they meet the appropriate high school level in Mathematics as noted above.

SELECTION PROCESS

The college offers a common first year in the Engineering Technologies. This initiative allows learners to attend the first two semesters of an engineering technology program at the campus nearest their hometown. After completing the first two semesters, learners then enter the campus which offers the program of their choice to complete the seven week Intersession (May, June), and the subsequent years of their program.

Individuals must submit their application to the campus where they intend to complete the first two semesters of their program. This begins a first come, first served provincial process which reserves a seat at the designated campus for the appropriate Intersession, and subsequent years of program study.

After successful completion of the first two semesters, learners progress to the Intersession in the program for which a seat has already been reserved. Any learner who, after registration, wishes to change his/her original program choice MUST apply for a Program Transfer (see below).

TRANSFER PROCESS

If a learner wishes to change his/her original program choice, he/she must request a program transfer and complete the appropriate form (Request to Transfer Form) which is available through the Registrar’s Office.

Applicants cannot request a change in program prior to entry into the first year. A request to transfer does not guarantee entry into one’s alternate, “new” program choice. Program transfer will be granted only if sufficient space is available. The following conditions apply:

1. The Request to Transfer Form must be received at the Registrar’s Office by February 15.
2. Transfers are granted based on 1) space availability and 2) the learner’s weighted average at the end of semester one. In cases where the learner has been exempted from courses in the first semester, the mark(s) obtained by the learner at another postsecondary institution or high school will be used in calculating the weighted average.

ENTRANCE REQUIREMENTS

For eligibility admission to an Engineering Technology program requires the applicant to meet one of the following four academic criteria:

1. **High School**

   - High School Graduation Certificate with a 60% overall average in the following (or equivalent):
     - i. English (2 credits) (minimum 60%) from: 3201 or 3202
     - ii. Mathematics (4 credits) chosen from: Advanced 2200, 3200 (50% minimum in each course)

   **Academic:** 2201 (50% minimum), 3201 (60% minimum)

   **Note:** Students who received a combined average of 70% in high school Academic Mathematics 2201 and 3201, or a pass in both high school Advanced Mathematics 2200 and 3200 can be exempted from Math 1700. Students must apply for the exemption.

   **Science (4 credits)** two of which must be selected from:
     - Biology: 3201
     - Physics: 3204
     - Chemistry: 3202
     - Earth Systems: 3209

   **Note:** The remaining two Science credits to be chosen from the highest Science mark in level 1, 2 or 3.

2. **Comprehensive Arts and Science (CAS) Transition**

   Comprehensive Arts and Science (Transition) Certificate with the following courses:
     - i. Math (60% MINIMUM) MA1040, MA1041
     - ii. Two Science courses chosen from one of the following three combinations:
       - a. Introductory Biology: BL1020, BL1021
       - b. Introductory Chemistry: CH1030, CH1031
       - c. Introductory Physics: PH1050, PH1051

   **Note:** It is strongly recommended that CAS learners who intend to enroll in Engineering Technology programs complete both of the Chemistry courses and both of the Physics courses.

3. **Adult Basic Education (ABE)**

   Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses (or equivalent):
     - i. English (60% minimum) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
     - ii. Mathematics (60% minimum) 1104A, 1104B, 1104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
     - iii. Science from one of the following sections:

   Applicants with Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. **Mature Student Status**

   Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

TRANSFERABILITY

Currently there are a number of agreements in place with other colleges and universities where learners can obtain advanced standing into Engineering and Bachelor of Engineering Technology Programs.

- Memorial University – Bachelor of Engineering
- Lakehead University – Bachelor of Engineering in Engineering Technologies
- Memorial University – Bachelor of Engineering in Cape Breton University – Bachelor of Engineering Technology
- Athabasca University – Bachelor of Science (Post Diploma)
- Camosun College – Engineering Bridge Programs for:
  - University of Victoria – Bachelor of Engineering
  - University of British Colombia – Bachelor of Engineering
- College of the North Atlantic – Other engineering technology programs (on a course by course basis). Every effort has been made to ensure that the maximum numbers of transfer credits are attainable by articulating new and revised courses for common curriculum areas.

**Note:** Transfer and articulation agreements with other post-secondary institutes are continuing to evolve. To find out about the latest educational opportunities please contact the Registrar’s Office or any of the campus program administrators.

ENGINEERING TECHNOLOGY

Geomatics/Surveying Engineering Technology (Co-op)

DIPLOMA
- Three Years
- September
- Ridge Road Campus

**COURSES**

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<td>SU1320</td>
<td>Plane Surveying I</td>
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<tr>
<td>EN1100</td>
<td>Environmental Science</td>
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<tr>
<td>SU1500</td>
<td>Cartography</td>
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The Course and Lab hours per week are based on a 15-week semester. In instruction, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

**Semester 2 (Fall)**

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<td>CM2800</td>
<td>Oral/Written Communication Skills</td>
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<td>Plane Surveying II</td>
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<td>MA2100</td>
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<td>Graphics for Geomatics</td>
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<td>SU2500</td>
<td>Photogrammetry</td>
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**Semester 5 (Winter)**

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<tbody>
<tr>
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<td>SU1440</td>
<td>Geographic Information Systems (GIS)</td>
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<td>SU1540</td>
<td>Hydrography</td>
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<td>Geodetic Surveying</td>
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<td>GP1640</td>
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**Semester 6 (Spring)**

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<td>CA2900</td>
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<td>Geographic Information Systems (GIS) II</td>
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**Semester 8 (Winter)**

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<td>SU3500</td>
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**Semester 9 (Spring)**

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<tr>
<td>PR2271</td>
<td>Technical Thesis II</td>
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<td>SU1541</td>
<td>Hydrography II</td>
<td>4  3  3</td>
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<td>SU1570</td>
<td>Remote Sensing</td>
<td>3  2  2</td>
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<tr>
<td>SU3100</td>
<td>Geodesy and Map Projections</td>
<td>4  3  3</td>
</tr>
<tr>
<td>SU3500</td>
<td>Adjustments</td>
<td>4  3  3</td>
</tr>
<tr>
<td>SU2531</td>
<td>Cadastral Surveying II</td>
<td>2  2  0</td>
</tr>
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</table>

In addition to theoretical instruction, the learner obtains considerable field and office experience during labs, field camps, and work terms.

**ACREDITATION**

The graduates completing this program are automatically eligible for membership in the Association of Engineering Technicians and Technologists of Newfoundland and Labrador (AETNL), as well as any similar association in Canada.

Upon completion of this program graduates may choose to further their education by completing a bachelor degree in technology or engineering at one of several institutions that have articulation agreements with College of the North Atlantic.

For graduates who desire to further their careers in Geomatics, the University of New Brunswick awards a limited number of credits for this program toward a Bachelor's Degree in Surveying Engineering.

This program is also CACFE (Canadian Association for Cooperative Education) accredited.

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

**OBJECTIVES**

Upon successful completion of the Geomatics/Surveying Engineering Technology program the graduate will be able to:

1. Collect, analyze, manage and distribute spatial information as per standard industry practices.
2. Apply professional and quality assurance standards to execute Geomatics project activities for delivery in response to the need of the private and public industry.
3. Utilize industry standards and specifications to analyze the positional accuracy of measurement systems in preparing land records and engineering drawings.
4. Utilize an appropriate mastery of the knowledge, techniques, skills, and modern tools of Geomatics.
5. Adapt to the emerging applications and equipment within the Geomatics field.

**CURRICULUM**

General education consisting of Communications (oral or written), Mathematics, Physics, Chemistry, ElectroTechnology, Computers, and Engineering Graphics.

Specific education in all aspects of Geomatics.

Practical education employing extensive field training to provide experience with instrumentation and software, through Surveying Camps and practical lab sessions.

Work exposure consisting of field experience, gained from compensated work terms, in the field of geomatics/surveying.

**CAREER OPPORTUNITIES**

Graduates generally find employment with various departments of the federal and provincial government, crown corporations, utility companies, construction engineering, oil exploration and surveying companies both locally and internationally.

Graduates with two years of progressive work experience may be eligible to receive the designation of Professional Technologist (P. Tech) upon completion of a Professional Practice and Ethics Exam.

**Note:** Learners will also be required to complete a number of non-credit co-op education seminars throughout the program (resume writing, job search skills and interview preparation).

**ENTRANCE REQUIREMENTS**

Eligibility for admission to an Engineering Technology program requires the applicant to meet one of the following four academic criteria:

1. **High School**
   - High School Graduation Certificate with a 60% overall average in the following (or equivalent):
     - English (2 credits) (minimum 60%) from: 3201 or 3202
     - Mathematics (4 credits) chosen from:
       - Advanced: 2200, 3200 (50% minimum in each course)
       - Academic: 2201 (50% minimum), 3201 (60% minimum)
     - Science (4 credits) two of which must be selected from:
       - Biology: 3201
       - Physics: 3204
       - Chemistry: 3202
       - Earth Systems: 3209

2. **Comprehensive Arts and Science (CAS) Transition**
   - Comprehensive Arts and Science (Transition) Certificate with the following courses:
     - Math (60% minimum) MA1040, MA1041
     - Two Science courses chosen from one of the following three combinations:
       - Introductory Biology: BL1020, BL1021
       - Introductory Chemistry: CH1030, CH1031
       - Introductory Physics: PH1050, PH1051

3. **Adult Basic Education (ABE)**
   - Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses (or equivalent):
     - English (60% minimum) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
     - Mathematics (60% minimum) 1104A, 1104B, 1104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
     - Science from one of the following sections:
       - Biology 1101, 2101A, 2101B, 2101C, 3101A, 3101B, 3101C
       - Chemistry 1102, 2102A, 2102B, 2102C, 3102A, 3102B, 3102C
       - Physics 1104A, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
   - Applicants with Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. **Mature Student Status**
   - Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.
NEWFOUNDLAND AND LABRADOR TECHNICAL UNIVERSITY

ENGINEERING TECHNOLOGY

Industrial Engineering Technology (Co-op)

DIPLOMA
• 40 Months
• September
• Ridge Road Campus

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

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<td>EG1520</td>
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<td>Safety Engineering Technology</td>
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<td>Machine Shop Practice</td>
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The Course and Lab hours per week are based on a 15-week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

Semester 4 (fall)

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<td>MA1670</td>
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Semester 5 (Winter)

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Semester 6 (Spring)

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Semester 7 (Fall)

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Semester 9 (Spring)

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Semester 10(fall)

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Industrial Engineering Technologists rely on strong technical ability, good business judgment, and superior people skills to improve safety, quality, and productivity in the production and service sectors. This unique combination of skills makes graduates attractive to employers in a wide variety of industries including manufacturing, food processing, fabrication, construction, government, consulting, and health care.

ACCREDITATION

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

Graduates completing this program are automatically eligible for membership in the Association of Engineering Technicians and Technologists of Newfoundland and Labrador (AETNL), as well as any similar association in Canada.

Upon completion of this program graduates may choose to further their education by completing a bachelor degree in technology or engineering at one of several institutions that have articulation agreements with College of the North Atlantic.

This program is also a CAFCE (Canadian Association for Cooperative Education) accredited program.

OBJECTIVES

As an industrial engineering technologist, the graduate will have the knowledge and skill that will allow him/her to:

1. Analyse industrial operations, using industrial engineering principles, to improve productivity.
2. Optimize process designs that are both safe and productive while ensuring quality standards are met at minimal cost.
3. Employ problem solving and management strategies that are fundamental to success in various industry settings.
4. Create quality assurance and quality control procedures in an industrial environment, to improve the effectiveness of the business.
5. Formulate efficiency improvement plans using lean manufacturing techniques.

CURRICULUM


Specific education in generic engineering technology consisting of computer based analysis and design, materials science, strength of materials, hydraulics and pneumatics, and shop processes.

Practical education employing labs and shops focused on industrial engineering technology such as ergonomics, work measurement, plant layout, facility planning, production planning, and computer integrated manufacturing.

Work exposure containing field experience, gained from compensated work terms, in the field of industrial engineering.

CAREER OPPORTUNITIES

Graduates of this program may obtain employment in both the service and production sectors. Previous graduates have been successful in obtaining employment with oil and gas servicing, aerospace, fish processing, mining, ship building, manufacturing, and health services industries.

Graduates with two years of progressive work experience may be eligible to receive the designation of Professional Technologist (P. Tech) upon completion of a Professional Practice and Ethics Exam.

Note: Learners will also be required to complete a number of non-credit co-op education seminars throughout the program (resume writing, job search skills and interview preparation).

ENTRANCE REQUIREMENTS

Eligibility for admission to an Engineering Technology program requires the applicant to meet one of the following four academic criteria:

1. High School
   High School Graduation Certificate with a 60% overall average in the following (or equivalent):
   i. English (2 credits) (minimum 60%) from: 3201 or 3202
   ii. Mathematics (4 credits) chosen from: Advanced: 2200, 3200 (50% minimum in each course)
      Academic: 2201 (50% minimum), 3201 (60% minimum)
   iii. Science (4 credits) two of which must be selected from:
      Biology: 3201
      Physics: 3204
      Chemistry: 3202
      Earth Systems: 3209
   Note: The remaining two Science credits to be chosen from the highest Science mark in level 1, 2 or 3.

2. Comprehensive Arts and Science (CAS) Transition
   Comprehensive Arts and Science (Transition) Certificate with the following courses:
   i. Math (60% MINIMUM) MA1040, MA1041
   ii. Two Science courses chosen from one of the following three combinations:
      a. Introductory Biology: BL1020, BL1021
      b. Introductory Chemistry: CH1030, CH1031
      c. Introductory Physics: PH1050, PH1051
   Note: It is strongly recommended that CAS learners who intend to enroll in Engineering Technology programs complete both of the Chemistry courses and both of the Physics courses.

3. Adult Basic Education (ABE)
   Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses (or equivalent):
   i. English (60% MINIMUM) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
   ii. Mathematics (60% MINIMUM) 1104A, 1104B, 1104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
   iii. Science from one of the following sections:
   Applicants with Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. Mature Student Status
   Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

ENGINEERING TECHNOLOGY

Instrumentation and Controls Engineering Technology

DIPLOMA
• Three Years
• September
• Ridge Road Campus

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

<table>
<thead>
<tr>
<th>CODE</th>
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<tbody>
<tr>
<td>AE1260</td>
<td>Power Electronics</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>CI1310</td>
<td>Electrical/Electronic Fabrication Techniques</td>
<td>3</td>
<td>2</td>
<td>2</td>
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<tr>
<td>CI1350</td>
<td>Basic Process Automation</td>
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</table>
The Course and Lab hours per week are based on a 15 week semester. To interseason, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

Semester 4 (Fall)  
**Cr**  **Le**  **La**
- CE2100 Basic Communications Network I  4  3  3
- CI2000 Pressure Level Measurement and Control  4  3  3
- DP1110 Digital Systems I (Logic)  4  3  2
- MA2100 Mathematics  5  5  0
- MP2170 AC Circuits and Machines  4  3  3

Semester 5 (Winter)  
**Cr**  **Le**  **La**
- CE2810 Industrial Communication Systems  4  3  2
- CI2230 Flow and Temperature Measurement and Control  4  3  3
- DP2430 Digital Interfacing  4  3  2
- DP3110 PLC  4  3  3
- DR2350 Engineering Graphics for Instrumentation  2  1  2
- MP3170 Industrial Motor Controls  4  3  2

Semester 6 (Intersession)  
**Cr**  **Le**  **La**
- CE3940 HMI & SCADA  4  3  2
- CI2120 Final Control Elements and Instrument Air Systems  3  2  2
- PE2730 Industrial Instrumentation Practices  2  1  3

The Course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

Semester 7 (Fall)  
**Cr**  **Le**  **La**
- CI1250 Process Analyzers I  4  3  2
- CI2000 Advanced Control Strategies  4  3  3
- CI3600 DCS  4  3  3
- CI3820 Process Communication Skills  3  3  0
- PR2740 Capstone Project I (Seminar)  F/F  1  0
- PR3150 Project Management and Financial Analysis  4  0  0

Semester 8 (Winter)  
**Cr**  **Le**  **La**
- CI2250 Hydraulics for Instrumentation  1  1  1
- CI3110 Safety Shutdown and Machine Monitoring Systems  4  3  2
- CI3622 Process Analyzers II  4  3  3
- MA2101 Mathematics  5  5  0
- PE2140 Hazardous Areas  3  2  2
- PR2741 Capstone Project II  4  3  0

SAFETY CERTIFICATIONS
In addition to the formal semester courses listed in the program of studies, learners in the Instrumentation and Controls Engineering Technology program are required to obtain a Standard First Aid/Heart Start certificate over the three-year period of studies.

Graduates of the program will receive a "Hazardous Areas Training Certificate." This certification is industry recognized and is designed for personnel carrying out installations, inspection and maintenance of electrical apparatus in potentially hazardous explosive areas in the onshore and offshore oil and gas industries.

The International Society of Automation (ISA) defines instrumentation as "the art and science of measurement and control." It involves using and working with instruments to measure, record, and control process variables (such as level, flow, temperature, and pressure). Complex process control and measurement systems are found in the oil and gas industries, chemical processing industry, food processing operations, power generation, and the pulp and paper industry. Control systems are becoming increasingly used in automating industrial processes to improve productivity, conserve energy, and reduce pollution. This has created a strong demand for trained instrumentation professionals. As our provincial industrial sector grows, instrumentation and controls continue to be an extremely important field of technology.

Graduates completing this program are automatically eligible for membership in the Association of Engineering Technicians and Technologists of Newfoundland and Labrador (AETTNL), as well as any similar association in Canada.

Upon completion of this program graduates may choose to further their education by completing a bachelor degree in technology or engineering at one of several institutions that have articulation agreements with College of the North Atlantic.

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 colour perception.

**OBJECTIVES**
As engineering technologists, graduates of this program will have the knowledge and skills that will allow them to:

1. Design, install, troubleleshoot and maintain process automation field and control room devices and systems such as distributed control systems (DCS), programmable logic controllers (PLC), and emergency shutdown systems.
2. Design and program control system interfaces, human machine interfaces (HMI) and graphical interfaces.
3. Use basic engineering principles and knowledge of industrial control systems to help design the control and safety systems for an industrial process.
4. Apply principles of process control to analyze the performance of industrial processes.
5. Apply concepts of measurement and sensor selection to specify, install, configure, calibrate, troubleleshoot, and maintain various process instruments commonly used in industry, including electronic transmitters, pneumatic devices, and control valves.
6. Maintain, calibrate, and troubleshoot various analytical instruments and analyzer sampling systems found in industrial process.
7. Demonstrate an understanding of industry standards, best practices, and workplace procedures related to safety and professionalism.
8. Prepare technical reports and presentations for effective communications in the workplace.

**CURRICULUM**

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

**Specific education** focuses on various aspects of process measurement and control, including process control system design incorporating programmable control systems (PLC / DCS / ESD), human machine interfaces (HMI), and machine control and condition monitoring. Specific emphasis is also placed on industrial process analyzers and analyzer sampling systems.

**Practical education** through curriculum integrated labs employing industrial equipment, techniques and practices relating to the installation, operation and maintenance of transducers, transmitters, measurement and control instruments, and microprocessor-based instrumentation.

**CAREER OPPORTUNITIES**
Instrumentation and Controls Engineering Technologist is a very multifaceted career choice. It prepares graduating learners for opportunities in employment locally and internationally in industries such as oil and gas, chemical processing, pulp and paper, power generation, food processing, and manufacturing. Typical positions for a graduate are instrumentation technologist, technical sales/service representative, consultant, plant maintenance person, testing & commissioning technologist, instrument designer, or control systems technologist.

Graduates with two years of progressive work experience may be eligible to receive the designation of Professional Technologist (P. Tech) upon completion of a Professional Practice and Ethics Exam.

**ENTRANCE REQUIREMENTS**
Eligibility for admission to an Engineering Technology program requires the applicant to meet one of the following four academic criteria:

1. **High School**
   - High School Graduation Certificate with a 60% overall average in the following (or equivalent): i. English (2 credits) (minimum 60%) from: 3201 or 3202
   - Mathematics (4 credits) chosen from: Advanced: 2200, 3200 (50% minimum in each course) Academic: 2201 (50% minimum), 3201 (60% minimum)
   - Science (4 credits) two of which must be selected from: Biology: 3201, 3202
   - Physics: 3204, 3205: Chemistry: 3202
   - Earth Systems: 3209
   **Note:** The remaining two Science credits to be chosen from the highest Science mark in level 1, 2 or 3.

2. **Comprehensive Arts and Science (CAS) Transition**
   - Comprehensive Arts and Science (Transition) Certificate with the following courses:
     - i. Math (60% MINIMUM) MA1040, MA1041
     - ii. Two Science courses chosen from one of the following three combinations:
       - a. Introductory Biology: BL1020, BL1021
       - b. Introductory Chemistry: CH1030, CH1031
       - c. Introductory Physics: PH1050, PH1051
   **Note:** It is strongly recommended that CAS learners who intend to enroll in Engineering Technology programs complete both of the Chemistry courses and both of the Physics courses.

3. **Adult Basic Education (ABE)**
   - Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses or (equivalent):
     - i. English (60% minimum) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
     - ii. Mathematics (60% minimum) 1104A, 1104B, 1104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
     - iii. Science from one of the following sections:
   - Applicants with Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. ** Mature Student Status**
   - Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

**ENGINEERING TECHNOLOGY**

**Mechanical Engineering Technology**

**DIPLOMA**
- Three Years
- September
- Ridge Road Campus

**COURSES**

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The course and lab hours per week are based on a 15 week semester. In intersession, the course and lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

### Semester 4 (Fall)  
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<td>MA2100</td>
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<td>Power Plant Components</td>
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<td>SP1730</td>
<td>CNC Machining</td>
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<td>TD1100</td>
<td>Thermodynamics</td>
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### Semester 5 (Winter)  
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<tr>
<td>CF1100</td>
<td>Materials and Processes</td>
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<td>FM2100</td>
<td>Fluid Mechanics</td>
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<td>FM3101</td>
<td>Fluid Power (Hydraulics/Pneumatics)</td>
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<tr>
<td>MA2130</td>
<td>Applied Mathematics</td>
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<td>HM2820</td>
<td>Power Plant Systems</td>
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<tr>
<td>HM2801</td>
<td>HVAC Systems</td>
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<tr>
<td>SP1400</td>
<td>Facilities Engineering</td>
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### Semester 6 (Intersession)  
<table>
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<tr>
<td>WT1460</td>
<td>Work Placement</td>
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</table>

The course and lab hours per week are based on a 15 week semester. In intersession, the course and lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

## Through this program of study, graduates are equipped with the technical knowledge and “hands-on” skills required for:

1. The design, installation, implementation, operation, maintenance, and management of power generation systems, Heating Ventilation and Air Conditioning (HVAC) systems, and general mechanical support systems which are required for petroleum production systems, petroleum refineries, processing plants, office buildings and residences.
2. The development of mechanical working drawings and computer based models of mechanical systems using AutoCAD and related engineering analysis software.

### CURRICULUM

#### General education  

#### Specific education  

#### Work exposure  
Gained from a minimum seven week work placement which provides learners the opportunity to gain valuable related work experience.

#### CAREER OPPORTUNITIES  
The broad base of competencies acquired through this program of study prepares graduates for careers in a wide variety of industries including the petroleum sector, mining, electrical power generation, food processing, manufacturing, and engineering consulting.

Graduates with two years of progressive work experience may be eligible for the designation of Professional Technologist (P. Tech) upon completion of a Professional Practice and Ethics Exam.

## ENTRANCE REQUIREMENTS

Eligibility for admission to an Engineering Technology program requires the applicant to meet one of the following four academic criteria:

### 1. High School
High School Graduation Certificate with a 60% overall average in the following (or equivalent):

- **i.** English (2 credits) (minimum 60%) from: 3201 or 3202  
- **ii.** Mathematics (4 credits) chosen from:  
  - Advanced: 2200, 3200 (50% minimum in each course)  
  - Academic: 2201 (50% minimum), 3201 (60% minimum)

### 2. Comprehensive Arts and Science (CAS) Transition
Comprehensive Arts and Science (Transition) Certificate with the following courses:

- **i.** Math (60% minimum) MA1040, MA1041
- **ii.** Two Science courses chosen from one of the following three combinations:
  - a. Introductory Biology: BI1020, BI1021
  - b. Introductory Chemistry: CH1030, CH1031
  - c. Introductory Physics: PH1050, PH1051

Note: It is strongly recommended that CAS learners who intend to enroll in Engineering Technology programs complete both of the Chemistry courses and both of the Physics courses.

### 3. Adult Basic Education (ABE)
Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses (or equivalent):

- **i.** English (60% minimum) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
- **ii.** Mathematics (60% minimum) 3104A, 3104B, 3104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
- **iii.** Science from one of the following sections:

Note: Applicants with Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

### 4. Mature Student Status
Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

### ENGINEERING TECHNOLOGY

#### Mechanical Engineering Technology (Manufacturing) Co-op

**DIPLOMA**  
- **3 Years**  
- **September**  
- **Ridge Road Campus**

#### COURSES Semester 1 and 2 - Refer to Engineering Technology (First Year)

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<tr>
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<tr>
<td>CG1500</td>
<td>Work Methods and Measurement</td>
<td>4 3 2</td>
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<tr>
<td>EG1520</td>
<td>Engineering Graphics for Mechanical Engineering</td>
<td>2 1 2</td>
</tr>
<tr>
<td>SP1200</td>
<td>Machine Shop Practice</td>
<td>1 0 3</td>
</tr>
</tbody>
</table>

The Course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

### 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.

### OBJECTIVES

Mechanical Engineering Technologists develop a diverse technical background, good “hands-on” skills, and excellent people skills. These attributes make them well suited to employment in a wide variety of industries in both field and management related roles.

Graduates completing this program are automatically eligible for membership in the Association of Engineering Technicians and Technologists of Newfoundland and Labrador (AETNL), as well as any similar association in Canada.

Upon completion of this program graduates may choose to further their education by completing a bachelor degree in technology or engineering at one of several institutions that have articulation agreements with College of the North Atlantic.
1. Utilize Computer Aided Design and Computer Aided Manufacturing (CAD/CAM) software as per industry standards.
2. Design mechanical components/assemblies and create engineering drawings and specifications through the use of 2D and 3D CAD and Modeling software.
3. Develop electro-pneumatic and other automation systems, through hands-on practical experience with programming and operating Computer Numerical Control (CNC) equipment, Robotics, Programmable Logic Controllers (PLC's).
4. Operate Computer Integrated Manufacturing (CIM) systems drawing on the knowledge learned through core-engineering concepts of materials science, strength of materials, and machine design.
5. Apply quality assurance standards and practical quality control techniques in precision measurement.
6. Manage projects, resources and people in a supervisor role through the use of problem solving and related skills.

CURRICULUM

General education consisting of Project Management Skills (theoretical and applied), Communication Skills (oral and written), Mathematics, Physics, Chemistry, Electrotechnology, Computers, Engineering Graphics, Technology Awareness, and Learner Success.


Work exposure consisting of field experience, gained from compensated work terms, in the field of manufacturing.

CAREER OPPORTUNITIES

Career opportunities for graduates of this program exist with consulting firms, manufacturing firms, shipbuilding yards, oil & gas servicing industry, food processing plants, research institutions and government departments.

Graduates with two years of progressive work experience may be eligible to receive the designation of Professional Technologist (P. Tech) upon completion of a Professional Practice and Ethics Exam.

Note: Learners will also be required to complete a number of non-credit co-op education seminars throughout the program (resume writing, job search skills and interview preparation).

ENTRANCE REQUIREMENTS

Eligibility for admission to an Engineering Technology program requires the applicant to meet one of the following four academic criteria:

1. High School
   High School Graduation Certificate with a 60% overall average in the following (or equivalent):
   i. English (2 credits) (minimum 60% from: 3201 or 3202)
   ii. Mathematics (4 credits) chosen from: Advanced: 2200, 3200 (50% minimum in each course)
   Academic: 2201 (50% minimum), 3201 (60% minimum)
   iii. Science (4 credits) two of which must be selected from:

2. Comprehensive Arts and Science (CAS) Transition

Comprehensive Arts and Science (Transition) Certificate with the following courses:
   i. Math (60% MINIMUM) MA1040, MA1041
   ii. Two Science courses chosen from one of the following three combinations:
      a. Introductory Biology: BL1020, BL1021
      b. Introductory Chemistry: CH1030, CH1031
      c. Introductory Physics: PH1050, PH1051

Note: It is strongly recommended that CAS learners who intend to enroll in Engineering Technology programs complete both of the Chemistry courses and both of the Physics courses.

3. Adult Basic Education (ABE)

Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses (or equivalent):
   i. English (60% minimum) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
   ii. Mathematics (60% minimum) 1104A, 1104B, 1104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
   iii. Science from one of the following sections:
      b. Chemistry 1102, 2102A, 2102B, 2102C, 3102A, 3102B, 3102C
      c. Physics 1104, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C

Applicants with Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. Mature Student Status

Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

ENGINEERING TECHNOLOGY

Petroleum Engineering Technology (Co-op)

DIPLOMA

• Three Years
• September
• Ridge Road Campus

COURSES

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<tr>
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<td>CR2330</td>
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<td>3.3</td>
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<tr>
<td>EG1520</td>
<td>Engineering Graphics for Mechanical Engineering Technologies</td>
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</tr>
<tr>
<td>GE1500</td>
<td>Petroleum Geology I</td>
<td>2.1</td>
</tr>
<tr>
<td>SP2410</td>
<td>Safety Engineering Technology</td>
<td>2.0</td>
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</tbody>
</table>

The Course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

SAFETY CERTIFICATIONS

Learners in Petroleum Engineering Technology (co-op) will be required to complete the following safety certifications during the second year of studies: H2S, First Aid, WHMIS and Transportation of Dangerous Goods (TDG).

Semester 4 (Fall)

<table>
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<th>CODE</th>
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<tr>
<td>CR2331</td>
<td>Petroleum Chemistry II</td>
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<td>CM2300</td>
<td>Report Writing</td>
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<tr>
<td>MA1200</td>
<td>Mathematics</td>
<td>5</td>
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</table>
OBJECTIVES
As a petroleum engineering technologist, the graduate will have the knowledge and skill that will allow him/her to:
1. Construct and interpret maps and sections using surface geology, subsurface (drill hole) geology and geophysical data.
2. Interpret topographic maps & profiles, geologic maps & sections, and seismic data to assist in resource exploration and development.
3. Analyze drill cuttings, drill core, and data from open-hole & cased-hole logging tools in order to evaluate reservoir formations in terms of porosity, permeability, fluid saturation and netpay.
4. Assist in planning, designing, inspecting, supervising, and constructing oil and gas wells.
5. Estimating petroleum reserves and optimize productivity using petroleum engineering principles.
6. Select, operate, troubleshoot and maintain the equipment associated with the separation of the produced gas/oil/water fluids.

7. CURRICULUM
General education consisting of Project Management Skills (theoretical and applied), Communication Skills (oral and written), Mathematics, Physics, Chemistry, Electrotechnology, Computers, Engineering Graphics, Technology Awareness, and Learner Success.


Practical education employing labs and shops focused on Drilling, Production, Facilities, Reservoir and Geology.

Work exposure consisting of field experience, gained from a minimum twelve week work term which provides learners the opportunity to gain valuable related work experience.

CAREER OPPORTUNITIES
The graduates of this program may obtain employment in all aspects of the petroleum industry. These opportunities include but are not limited to oil and natural gas exploration, production and processing, refining, oil and gas pipeline construction, gas utilities, as well as a variety of related activities associated with refining and transportation.

Graduates with two years of progressive work experience may be eligible to receive the designation of Professional Technologist (P Tech) upon completion of a Professional Practice and Ethics Exam.

Note: Learners will also be required to complete a number of non-credit co-op education seminars throughout the program (resume writing, job search skills and interview preparation).

ENRANCE REQUIREMENTS
Eligibility for admission to an Engineering Technology program requires the applicant to meet one of the following academic criteria:

1. High School
High School Graduation Certificate with a 60% overall average in the following (or equivalent):
   i. English (2 credits) (minimum 60%) from: 3201 or 3202
   ii. Mathematics (4 credits) chosen from:

   Advanced: 2200, 3200 (50% minimum in each course)
   Academic: 2201 (50% minimum), 3201 (60% minimum)
   iii. Science (4 credits) two of which must be selected from:
       Biology: 2301
       Physics: 2304
       Chemistry: 2302
       Earth Systems: 3209

Note: The remaining two Science credits to be chosen from the highest Science mark in level 1, 2 or 3.

2. Comprehensive Arts and Science (CAS) Transition
Comprehensive Arts and Science (Transition) Certificate with the following courses:
   i. Math (60% Minimum) MA1040, MA1041
   ii. Two Science courses chosen from one of the following three combinations:
       a. Introductory Biology: BI1020, BI1021
       b. Introductory Chemistry: CH1030, CH1031
       c. Introductory Physics: PH1050, PH1051

Note: It is strongly recommended that CAS learners who intend to enroll in Engineering Technology programs complete both of the Chemistry courses and both of the Physics courses.

3. Adult Basic Education (ABE)
Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses (or equivalent):
   i. English (60% minimum) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
   ii. Mathematics (60% minimum) 1104A, 1104B, 1104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
   iii. Science from one of the following sections:
       b. Chemistry 1102, 2102A, 2102B, 2102C, 3102A, 3102B, 3102C
       c. Physics 1104, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C

Applicants with Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. Mature Student Status
Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

ENGINEERING TECHNOLOGY
Process Operations
Engineering Technology

DIPLOMA
• Three Years
• September
• Corner Brook Campus

COURSES

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<tr>
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<td>SE2500</td>
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<td>MH1330</td>
<td>Industrial Boiler Systems</td>
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The Course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

Semester 4 (Fall)

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<td>CI1440</td>
<td>Process Controls</td>
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<td>FM2320</td>
<td>Fluid Mechanics</td>
<td>4</td>
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SAFETY CERTIFICATIONS

Scanners in Process Operations Engineering Technology will be required to complete certifications in the following area: Transport First Aid/Heart Start prior to the commencement of Semester 5.

Semester 5 (Winter)

<table>
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<td>CD2700</td>
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<td>CI1210</td>
<td>Instrumentation Controls &amp; Automation</td>
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<tr>
<td>MT2421</td>
<td>Mineral Processing II</td>
<td>3</td>
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<td>PE2800</td>
<td>Industrial Mechanical Systems</td>
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<td>SI2300</td>
<td>Materials Science</td>
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Semester 6 (Intersession)

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The Course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

Semester 7 (Fall)

<table>
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<td>Industrial Controls</td>
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<td>CI2520</td>
<td>Process Control Operations</td>
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<tr>
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<td>Oral/Written Communication Skills</td>
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<td>Environmental Abatement-Water</td>
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<td>Project Management &amp; Financial Analysis</td>
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<td>SP3250</td>
<td>Quality Assurance &amp; Control</td>
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Semester 8 (Winter)

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<td>Process Optimization</td>
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<td>EN6240</td>
<td>Environmental Abatement-Air &amp; Solid Waste</td>
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<td>Petroleum Refining Support Systems</td>
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<td>MT2660</td>
<td>Chemical Processing of Oils</td>
<td>4</td>
<td>3</td>
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<td>PE2781</td>
<td>Capstone Project II</td>
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<td>PS2340</td>
<td>Organizational Behaviour</td>
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</table>

The Process Operations Engineering Technology program is designed to prepare graduates to work in the operation and optimization of modern industrial Process plants. The program focuses on the science involved in the process of converting raw materials into value added products in automated production lines. The curriculum focuses on processes associated with industrial processing, petroleum refining and pulp & paper related industries. They will graduate with the knowledge and skills needed to optimize manufacturing processes, improve product quality, and reduce costs.

Graduates completing this program are automatically eligible for membership in the Association of Engineering Technicians and Technologists of Newfoundland and Labrador (AETNL), as well as some similar associations in Canada.

Upon completion of this program graduates may choose to further their education by completing a bachelor degree in technology or engineering at one of several institutions that have articulation agreements with College of the North Atlantic.

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.

OBJECTIVES

As a process operations engineering technologist, the graduate will have the knowledge and skill that will allow him/her to:

1. Apply process principles, to achieve optimal performance of a wide range of industrial processes with special emphasis on mineral processing, oil & gas and pulp & paper industries.
2. Apply the principles of quality and process control for the identification of process problems and mitigation measures.
3. Perform relevant Quality Assurance and Quality Control and statistical analysis in accordance with appropriate standards.
4. Analyze and solve technological problems related to operation of industrial processes.
5. Apply basic principles of science and engineering to environmental processes.
6. Select, operate, maintain, and troubleshoot process equipment utilizing the application of engineering principles.

CURRICULUM

General education


Specific education in Process Optimization, Quality Management, and Environmental Abatement of industrial processes. This core curriculum is supported by courses which bring together technological concepts and competencies from the fields of process control, automation, chemical and environmental engineering, and associated technology.

Practical education

Employing labs and shops focused on manufacturing processes and associated systems.

CAREER OPPORTUNITIES

Career opportunities for graduates of this program exist with process industries including mineral processing plants, oil & gas refining, petrochemical plants, pulp and paper mills and specialty chemical companies. As all process industries have common unit operations, graduates possess the skills required to perform in many other processing facilities other than those identified here.

ENTRANCE REQUIREMENTS

Eligibility for admission to an Engineering Technology program requires the applicant to meet one of the following four academic criteria:

1. High School

High School Graduation Certificate with a 60% overall average in the following (or equivalent):

   i. English (2 credits) (minimum 60%): from 3201 or 3202

   ii. Mathematics (4 credits) chosen from:

      Advanced: 2200, 3200 (50% minimum in each course)

      Academic: 2201 (50% minimum), 3201 (60% minimum)

   iii. Science (4 credits) two of which must be selected from:

      Biology: 3201

      Physics: 3204

      Chemistry: 3202

      Earth Systems: 3209

   Note: The remaining two Science credits to be chosen from the highest Science mark in level 1, 2, or 3.

2. Comprehensive Arts and Science (CAS) Transition

   Certificate with the following courses:

   a. Math (60% MINIMUM) MA1040, MA1041

   b. Two Science courses chosen from one of the following three combinations:

      a. Introductory Biology: BI1020, BL1021

      b. Introductory Chemistry: CH1030, CH1031

      c. Introductory Physics: PH1050, PH1051

   Note: It is strongly recommended that CAS learners who intend to enroll in Engineering Technology programs complete both of the Chemistry courses and both of the Physics courses.

3. Adult Basic Education (ABE)

   Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses (or equivalent):

   a. English (60% minimum) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C

   b. Mathematics (60% minimum) 3104A, 3104B, 3104C, 3104D, 3104A, 3104B, 3104C

   iii. Science from one of the following sections:


      b. Chemistry 1102, 2102A, 2102B, 2102C, 3102A, 3102B, 3102C

      c. Physics 1104, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C

   Applicants with Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. Mature Student Status

   Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

   Graduates with two years of progressive work experience may be eligible to receive the designation of Professional Technologist (P. Tech).

ENGINEERING TECHNOLOGY

Safety Engineering Technology (Post Diploma) Co-op

POST DIPLOMA

- 1 Year
- Varies
- Ridge Road Campus

COURSES

<table>
<thead>
<tr>
<th>CODE</th>
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<th>Hrs/wk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 1</td>
<td></td>
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</tr>
<tr>
<td>SE1020</td>
<td>Occupational Health &amp; Safety - Loss Control</td>
<td>3</td>
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<td>Occupational Hygiene I (Chemical Agents)</td>
<td>4</td>
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<tr>
<td>SE1070</td>
<td>Human Factors Engineering</td>
<td>3</td>
</tr>
<tr>
<td>SE1060</td>
<td>Workplace Safety Legislation</td>
<td>4</td>
</tr>
<tr>
<td>SE2050</td>
<td>Emergency Preparedness Planning</td>
<td>2</td>
</tr>
<tr>
<td>SE1400</td>
<td>Auditing OH&amp;S Management Systems</td>
<td>3</td>
</tr>
<tr>
<td>SE1440</td>
<td>Business Side of Occupational Health &amp; Safety</td>
<td>4</td>
</tr>
<tr>
<td>SE1470</td>
<td>Workers’ Compensation &amp; Disability Management</td>
<td>3</td>
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<td>Semester 2</td>
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<td>WC1250</td>
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<tr>
<td>SE2020</td>
<td>Accident Prevention Engineering and Technology</td>
<td>3</td>
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<td>SE2010</td>
<td>Systematic Safety Management</td>
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<td>SE2010</td>
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<td>Environmental Protection</td>
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<td>SE2000</td>
<td>Occupational Hygiene II (Physical Agents)</td>
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<td>SE3300</td>
<td>Quality Management Systems</td>
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<tr>
<td>SE2310</td>
<td>Management of Computer</td>
<td>3</td>
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</table>
In the present economic climate, the human and financial costs of workplace accidents have increased to such an extent that they have become a negative factor in economic growth. Progressive companies and organizations are constantly looking for ways in which they can reduce costs and become more competitive. Due to recent changes in the Occupational Health & Safety Act and in the administration of Workers’ Compensation employer assessments, employers are becoming increasingly aware that an opportunity exists for them to significantly improve efficiency and profitability through a reduction of losses due to accidents and occupational disease. Employer due diligence requirements have been considerably expanded with the implementation of these recent legislative changes.

Safety Engineering Technology (Post Diploma) Co-op utilizes a combination of engineering, physical and behavioural sciences to reduce and eliminate losses. The program consists of two academic terms which may be completed either full-time or part-time on a course credit basis. Completion of the Diploma also requires a cooperative education work term during which the learner conducts a comprehensive on-the-job identification, analysis and evaluation of the various stages necessary to initiate or upgrade an existing safety program.

OBJECTIVES

A graduate of the Post Diploma in Safety Engineering Technology (Co-op), the graduate will have the knowledge and skill that will allow him/her to:

1. Understand the methods of recognition, evaluation and control of hazards to people, facilities, equipment and the environment.
2. Develop and implement programs, systems, procedures and techniques to reduce the losses associated with accidents and occupational disease in industry, government and the service sector.

ENTRANCE REQUIREMENTS

Applicants must have graduated with a three-year diploma from a recognized college or a degree from a recognized University or Polytechnical Institute. Applicants who have graduated with a two-year diploma may also be accepted if they have significant (5 year minimum) progressive industry experience as a safety professional.

CURRICULUM

The curriculum includes a series of theoretical and practical subjects oriented toward the technical and management aspects of Occupational Health and Safety. The subject matter consists of several fundamental courses in occupational health, safety and environment which are supplemented by in-depth specialized courses in such areas as Occupational Hygiene, Fire Protection, Risk Management and Systematic Safety Management.

CAREER OPPORTUNITIES

Graduates are prepared to take a proactive approach to occupational health and safety management. They may find employment as Safety Coordinators, Loss Prevention Specialists, Occupational Health and Safety Officers, Safety Auditors and Consultants. Potential employment opportunities include health care, construction, waste management, oil and gas, manufacturing and government.

TRANSFERABILITY

A number of courses in the Safety Engineering Technology (Post Diploma) Program can be used as credit toward other college programs.

Note: Learners will also be required to complete a number of non-credit co-op education seminars throughout the program (resume writing, job search skills and interview preparation).

ENGINEERING TECHNOLOGY

Welding Engineering Technician

DIPLOMA

• Two Years
• September
• Burin Campus

COURSES

<table>
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<tr>
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<tr>
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<tr>
<td>ET1100  Electrotechnology</td>
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<tr>
<td>MA1700  Mathematics</td>
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<tr>
<td>PH1100  Physics</td>
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<td>EG1110  Engineering Graphics</td>
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<tr>
<td>CH1120  Chemistry</td>
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<tr>
<td>SD1170  Technology Awareness I</td>
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*Admission into the appropriate Mathematics course will be decided by the grade in high school math.

EITHER

Leamers who received at least 70% in level III Math 3206 or a pass in Math 3205 can be exempted from MA1700

OR

Leamers who received a combined average of 70% in 2201 and 2301, or a pass in both 2201 and 3200 can be exempted from MA1700

SAFETY CERTIFICATIONS

Learners in Welding Engineering Technician will be required to complete certifications in the following areas: Standard First Aid/Heart Start and WHMIS prior to the commencement of Semester 3.

SD1070  Ethics & Law 1 1 0

The Course and Lab hours per week are based on a 15 week semester. In intersession, the Course and Lab hours will be adjusted to reflect the shorter semester length. Refer to course outline.

Welding engineering technicians create and manage quality control and quality assurance systems associated with welding processes and procedures that are governed by industry standards and codes. This program is designed to develop learners’ skills and knowledge associated with this profession.

Graduates will also acquire the skills to perform the visual and non-destructive testing quality control processes associated with a welding quality management system.

The program is supported by modern shop and laboratory facilities for instruction in Welding, Materials, Science, Non-destructive Testing and Computer Aided Design/Computer Aided Manufacturing (CAD/CAM).

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

NOTE: There are specific vision requirements that are required by the Canadian General Standards Board prior to completing final certification in each discipline. Please refer to the following link for the requirements: http://www.rncan-rncan.gc.ca/mms-smn/ndt-end/el-adm-vis-vis-eng.htm

OBJECTIVES

As a welding engineering technician, the graduate will have the knowledge and skill that will allow him/her to:

1. Manage welding quality management systems
2. Interpret and apply standards and codes
3. Determine welding inspection procedures
4. Execute welding inspection and non-destructive testing procedures as defined by standards, codes and related specifications
5. Interpret and evaluate test results
6. Verify procedures and welder or welding operator qualifications
7. Prepare and maintain inspection records and reports
8. Set up equipment, lay out work to specifications and weld to prescribed standards

CAREER OPPORTUNITIES

Students who graduate from the Welding Engineering Technician program will be prepared to pursue careers in the welding industry. Graduates may find employment as Welding Technicians, Quality Control Technicians, or as welders in various industries. They may also continue their education by pursuing a Bachelor of Engineering Technology (Co-op) degree at a university or polytechnic institute.

Specific education in the theory and application of welding processes, procedures, and weldments.

Practical education in the theory and application of welding processes, procedures, and weldments.
### ENTRANCE REQUIREMENTS

Eligibility for admission requires the applicant to meet at least one of the following four academic criteria:

1. **High School**
   - High School Graduation Certificate with a 60% overall average in the following (or equivalent):
     - English (2 credits) (minimum 60%) from: 3201 or 3202
     - Mathematics (4 credits) chosen from:
       - Advanced: 2200, 3200 (50% minimum in each course)
       - Academic: 2201 (50% minimum), 3201 (60% minimum)
     - Science (4 credits) two of which must be selected from:
       - Biology: 3201
       - Physics: 3204
       - Chemistry: 3202
       - Earth Systems: 3209
   - Note: the remaining two Science credits to be chosen from the highest Science mark in level 1, 2 or 3

2. **Comprehensive Arts and Science (CAS) Transition**
   - Comprehensive Arts and Science (Transition) Certificate with the following courses:
     - Math (60% minimum) MA1040, MA1041 from one of the following three combinations:
       - Introductory Biology: BL1020, BL1021
       - Introductory Chemistry: CH1030, CH1031
       - Introductory Physics: PH1050, PH1051
   - Note: It is strongly recommended that CAS teachers who intend to enroll in Engineering Technology programs complete both of the Chemistry courses and both of the Physics courses.

3. **Adult Basic Education (ABE)**
   - Adult Basic Education (Level III) Graduation with:
     - Degree and Technical Profile including the following courses (or equivalent):
       - English (60% minimum) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
       - Mathematics (60% minimum) 1104A, 1104B, 1104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
       - Science from one of the following sections:
         b. Chemistry 1102, 2102A, 2102B, 2102C, 3201A, 3201B, 3201C
   - Applicants with Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. **Mature Student Status**
   - Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

### NATURAL RESOURCES

#### Fish and Wildlife Technician

**DIPLOMA**
- **Two Years**
- **September**
- **Corner Brook Campus**

**COURSES**

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<td>EN2120</td>
<td>Environmental Citizenship</td>
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<td>MC1080</td>
<td>Introduction to Computers</td>
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<td>SU1150</td>
<td>Field Navigation</td>
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<td>GE1420</td>
<td>Physical Environments</td>
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<td>BL1400</td>
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<td>EV2110</td>
<td>Silvics/Dendrology I</td>
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<td>MA1670</td>
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<td>RM1400</td>
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<td>RM1500</td>
<td>Fisheries Techniques II</td>
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</table>

**CERTIFICATIONS**

In addition to the formal semester courses listed in the program of studies, students in the Fish and Wildlife Technician program are required to obtain certification in the following areas over the two-year period:

- Canadian Firearm Safety Course / Hunter Education
- Paddle Canada (Introduction to Lake Canoeing)
- Pleasure Craft Operators Card
- Standard First Aid & CPR/AED
- WHMIS/OHS
- ATV Safety Training
- Wilderness First Aid
- Trapper Education Certificate
- Snowmobile Safety

**NOTE:** Students should be aware that additional fees and expenses apply for most of these certifications and for field camps, tours, and On-the-Job Training. Students will be required to hold valid certifications for the above courses prior to graduation.

Students graduating from the Fish and Wildlife Technician program can complete the Forest Resources Technician program with one additional year. Interested students must begin their studies in the First Technical Intersession of the Forest Resources Technician program.

With increasing emphasis on sustainable development, integrated resource management policies and ecosystem based management across Canada and around the world, technicians in the natural resources sector must have a foundation in matters related to biodiversity in general and fish and wildlife management issues in particular. The two-year Fish and Wildlife Technician program, which shares many courses with the Forest Resources Technician program, is designed to enable students with a specific interest in fish and wildlife to participate in studies directed towards their career goals. The program reflects the trend towards integrating a wide range of natural resources technology within government departments at Federal and Provincial levels. The requirement for the forest industry to consider wildlife in its management practices and the increased monitoring and management of freshwater and marine resources highlights the need for this program. The program provides a balance of field and classroom experiences that include a significant computer based data collection and analysis component.

### OBJECTIVES

1. To provide students with the knowledge and skills that are required to actively participate in the solution of fish and wildlife management problems and challenges.

2. To provide the knowledge and attitudes that will enable students to identify forest ecosystem challenges and opportunities and to undertake such assessments, preventive measures and treatments as might be associated with fish and wildlife conservation and management.

3. To provide knowledge and experience with a wide range of field and office equipment and techniques associated with the assessment and analysis of fish and wildlife resources data.

4. To provide the foundation for continued learning experiences at the post graduate level.

### EMPLOYMENT OPPORTUNITIES

Graduates of this program may obtain employment throughout Canada in a variety of fish and wildlife related fields: protection and enforcement, resource inventory and site classification, habitat protection and improvement, environmental impact assessment and parks and interpretation programs. Graduates are employed with governmental and private agencies in fields ranging from forestry technicians to fisheries observers.
1. **High School**
   - High School Graduation Certificate with a 60% overall average in the following (or equivalent):
     - English (2 credits) (minimum 60%) from: 3201 or 3202
     - Mathematics (4 credits) chosen from:
       - Advanced: 2200, 3200 (50% minimum in each course)
       - Academic: 2201 (50% minimum), 3201 (60% minimum)
     - Note: Students who received a combined average of 70% in high school Academic Mathematics 2201 and 3201, or a pass in both high school Advanced Mathematics 2202 and 3202 can be exempted from Math 1100. Students must apply for the exemption.
     - Science – (4 credits) two of which must be chosen from:
       - Biology: 3201
       - Physics: 3204
       - Chemistry: 3202
   - Earth Systems: 3209
   - Environmental Science 3205

2. **Comprehensive Arts and Science (CAS) Transition**
   - Comprehensive Arts and Science (Transition) Certificate with the following courses:
     - i. Math: MA1040, MA1041
     - ii. Two Science courses chosen from two of the following three combinations:
       - a. Biology: BL1020, BL1021
       - b. Chemistry: CH1030, CH1031
       - c. Physics: PH1050, PH1051
   - Note: It is strongly recommended that CAS students who intend to enroll in the Fish and Wildlife, Forest Resources Technician, Natural Resources Technician or Northern Natural Resources Technician program complete BL1020 and BL1021.

3. **Adult Basic Education (ABE)**
   - Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses (or equivalent):
     - i. English 3101A, 3101B, 3101C or 3201A, 3102B, 3102C
     - iii. Science from one of the following sections:
   - Applicants with Adult Basic Education (Level III) Graduation with a different Profile (and appropriate grades) may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. **Mature Student Status**
   - Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

**NATURAL RESOURCES**

### Forest Resources Technician

**DIPLOMA**
- **Two Years**
- **September**
- **Corner Brook Campus**

**PROGRAM TRANSFERABILITY**

Graduates of this nationally accredited program may apply for employment throughout Canada in a variety of forestry related fields: protection and enforcement, forest inventory and site classification, logging and engineering, forest access road construction and maintenance, silviculture as well as parks, wildlife and environmental assessment. This program has an established reputation for supplying graduates to employers all across Canada.

**EMPLOYMENT OPPORTUNITIES**

Graduates of this program are eligible for employment in any of the following forestry related fields:
- Protection and enforcement
- Forest inventory and site classification
- Logging and engineering
- Forest access road construction and maintenance
- Silviculture

**PROGRAM TRANSFERABILITY**

Graduates of the Forest Resources Technician program, who wish to pursue post-secondary studies, can apply for entry with advanced standing at a
number of Canadian Universities that the College has established credit transfer agreements with. Please refer to the NL Department of Education's transfer guide (www.cna.nl.ca/transfer), or contact your intended university or college.

**ACCREDITATION AND RECOGNITION**

To ensure the benefits of a consistently high standard of education, the College of the North Atlantic's Forest Resources Technician program is nationally accredited by the Canadian Technology Accreditation Board (CTAB).

**ENTRANCE REQUIREMENTS**

Academic:
Eligibility for admission to the program requires the applicant to meet one of the following four academic criteria:

1. **High School**
   - High School Graduation Certificate with a 60% overall average in the following (or equivalent):
     - English (2 credits) (minimum 60%) from: 3201 or 3202
     - Mathematics (4 credits) chosen from:
       - Advanced: 2200, 3200 (50% minimum in each course)
       - Academic: 2201 (50% minimum), 3201 (60% minimum)
   - Note: Students who received a combined average of 70% in high school Academic Mathematics 2201 and 3201, or a pass in both high school Advanced Mathematics 2200 and 3200 can be exempted from Math 1100. Students must apply for the exemption.
   - Science – (4 credits) two of which must be chosen from:
     - Biology: 3201
     - Physics: 3204
     - Chemistry: 3202
     - Earth Systems: 3209
   - Environmental Science 3205

2. **Comprehensive Arts and Science (CAS) Transition**
   - Comprehensive Arts and Science (Transition) Certificate with the following courses:
     - Math : MA1040, MA1041
     - Two Science courses chosen from two of the following three combinations:
       - i. Biology: BL1020, BL1021
       - ii. Chemistry: CH1030, CH1031
       - iii. Physics: PH1050, PH1051
   - Note: It is strongly recommended that CAS students who intend to enrol in the Fish and Wildlife, Forest Resources Technician, Natural Resources Technician or Northern Natural Resources Technician program complete BL1020 and BL1021.

3. **Adult Basic Education (ABE)**
   - Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses (or equivalent):
     - i. English: 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
     - iii. Science from one of the following sections:
   - Applicants with Adult Basic Education (Level III) Graduation with a different Profile (and appropriate grades) may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. **Mature Student Status**

Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

**SPECIAL REQUIREMENTS**

Because of the extensive field exposure incorporated in this program, the student is required to acquire the following equipment and clothing: hard hat, compass, axe, snowshoes, logger boots, good quality rainwear, and other clothing appropriate for outdoor work.

**Note:** Because of the extensive field components incorporated in this program, participation in activities that are physically demanding will be required.

**NATURAL RESOURCES**

**GIS Applications Specialist (Post Diploma)**

**POST DIPLOMA**
- One Year
- September
- Corner Brook Campus

**COURSES**

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<td>Cartographic Concepts</td>
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<td>Semester 2</td>
<td>G51120</td>
<td>GIS Database Principles</td>
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<td>Semester 3 (Intersession)</td>
<td>G51130</td>
<td>Advanced Topics in Geomatics</td>
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<td>Customization of GIS Applications</td>
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<tr>
<td>Semester 5</td>
<td>G51150</td>
<td>Database Design and Development</td>
<td>2 1 2</td>
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<tr>
<td>Semester 6</td>
<td>G51160</td>
<td>Database Applications</td>
<td>3 2 2</td>
</tr>
<tr>
<td>Semester 7</td>
<td>G51170</td>
<td>Web Programming</td>
<td>2 2 2</td>
</tr>
<tr>
<td>Semester 8</td>
<td>G51180</td>
<td>Web GIS Development</td>
<td>3 2 2</td>
</tr>
<tr>
<td>Semester 9</td>
<td>G51190</td>
<td>Advanced Remote Sensing</td>
<td>3 2 2</td>
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<tr>
<td>Semester 10</td>
<td>G51200</td>
<td>Spatial Databases</td>
<td>3 2 2</td>
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<tr>
<td>Semester 11</td>
<td>G51210</td>
<td>Surveying and Mapping</td>
<td>3 2 3</td>
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<tr>
<td>Semester 12</td>
<td>G51220</td>
<td>Major GIS Project</td>
<td>5 3 6</td>
</tr>
</tbody>
</table>

The GIS Applications Specialist is the “expert” who provides technical expertise to produce and analyze spatial information for effective planning and reporting activities in a broad range of disciplines. Specifically, a GIS Applications Specialist will help various agencies and government to effectively apply Geographic Information Systems (GIS), remote sensing, Global Positioning Systems (GPS), internet mapping solutions and data visualization technologies to support information needs, workflows or business processes. GIS Applications Specialists can work in various Sectors; the current market for GIS Applications Specialists in Newfoundland and Labrador includes: various provincial and federal departments, crown corporations, municipalities, research agencies, post-secondary institutions and private corporations.

This post-graduate, intensive, three-semester GIS program utilizes current high-end technology tools to collect, store, manipulate, analyze, interpret, and communicate geographic information within a variety of disciplines. The students will be versed in several spatial computing technologies used in the industry today and have access to the latest in appropriate computer hardware, software, and field technology. Students will have considerable opportunities to practice their skills in a work-life setting by putting theory into practice.

**OBJECTIVES**

1. To provide the student with knowledge and generic skills needed to develop and implement solutions to computational problems. Students will be exposed to problem analysis techniques and solution development using top-down development methods, modular design approach, and object-oriented design concepts. To implement developed solutions, students will use Microsoft Visual Studio.
2. To allow the student to develop and apply skills for the effective presentation of geographic information using software typically encountered in a GIS working environment.
3. To enable the student to learn the techniques of gathering geographic related information from the field or existing maps or records and positioning them onto a framework of existing spatial data structures.
4. To provide the student the capabilities to understand fundamental principles of database processing with respect to GIS environments and develop skills in designing, implementing and managing databases.
5. To provide the student with a firm foundation of subsequent studies in GIS applications in various program areas. As well, the techniques learned will allow students to apply the knowledge and skills to develop simple to elaborate good practice applications with some theory related to Vector GIS technology.
6. To provide the student with the skills necessary to analyze geographic data using hypothesis testing, significance tests, descriptive and inferential statistics.
7. To allow the student, within a project team, to design and implement a GIS application that addresses predefined objectives. During this process, the student will apply their knowledge and skills and rely on each other, with guidance from faculty, to acquire new skills to solve GIS problems.
8. To allow the student to expand his/her GIS skills to include web-based GIS applications. The student will learn how to build web-based GIS applications to contribute to the world of Distributed Geographic Information.
9. To give the student the capability of designing efficient and user-friendly graphical interfaces and integrating Microsoft Windows-based software in the development of GIS applications.
10. To give the student the capability of designing GIS applications based on the integration of programming languages, database management systems and GIS software to achieve the most efficient data access, manipulation and presentation.

**ENTRANCE REQUIREMENTS**

Applicants must have graduated from a recognized college or university with a diploma and/or degree in a relevant program area. Related program areas include, but are not limited to forestry, natural resource sciences, engineering, environmental studies, geology, surveying, geography, business, municipal planning and law enforcement.

This post-graduate, intensive three-semester GIS program utilizes current high-end technology tools to collect, store, manipulate, analyze, interpret, and communicate geographic information within a variety of disciplines. The students will be versed in several operating systems used in the industry today and have access to the latest in appropriate computer hardware, software, and field technology.
EMPLOYMENT OPPORTUNITIES
Program graduates are prepared to work in positions as diverse as GIS programmers/analysts, applications specialists/consultants, ecosystem IT managers, utilities managers, database managers, GIS systems operators, and land information managers.

Special Requirements
The program incorporates a Major Geographic Information Systems Project establishing industry-student linkages. Students will have considerable opportunities to practice their skills in a work-life setting by putting theory into practice.
SCHOOL OF HEALTH SCIENCES
HEALTH SCIENCES
Diagnostic Ultrasoundography

POST DIPLOMA
• Thirteen Months
• September
• Prince Philip Drive Campus

COURSES

<table>
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<tr>
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<tr>
<td>UL4110</td>
<td>Basic Scanning I</td>
<td>F/F 14</td>
</tr>
<tr>
<td>UL4210</td>
<td>Abdomen</td>
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<tr>
<td>UL4300</td>
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Note: UL4310 has a Clinical Component of 2.5 hours per week for 9 weeks.

Semester 2

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<td>Gynecology</td>
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<td>UL4311</td>
<td>Basic Scanning II</td>
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<tr>
<td>UL4510</td>
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Semester 3 (32 weeks, May-October)

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<td>Ultrasonic Structures</td>
<td>2 2 0</td>
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<tr>
<td>UL4611</td>
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Course Lecture (Le) and Lab (La) hours per week are based on a 15 week semester. In semester 3, the lecture and lab hours will be adjusted to account for the clinical training component.

Students must possess valid First Aid / Cardiopulmonary Resuscitation (CPR) certification to be eligible for graduation from the college.

Ultrasoundography encompasses the medical use of sound waves to evaluate internal anatomy in real time and to produce diagnostic images. With the continuously expanding applications of ultrasound in today’s technologically advanced society, it has made an exciting and demanding career field.

Ultrasound images are used by Radiologists to retrieve critical information regarding the patient and their subsequent diagnosis and treatment. Ultrasound has grown to include applications in abdomen, obstetrics, gynecology, small parts, vascular and superficial structures.

OBJECTIVES
1. To provide the academic knowledge outlined in the National Competency Profile of Sonography Canada.
2. To apply the learned academic knowledge in clinical practice.
3. To prepare students in the ability to perform and complete the clinical competencies required by Sonography Canada.
4. To maintain a high level of professional conduct in the performance of all duties.

CURRICULUM
This is a thirteen month program, which includes training at the college and Eastern Regional Health Authority. Graduates of the program will be eligible to write the certification examinations set by the American Registry of Diagnostic Medical Sonographers (ARDMS) and the examinations set by Sonography Canada.

ACCREDITATION
The program at the Prince Philip Drive Campus is accredited by the Canadian Medical Association.

PROGRAM TRANSFERABILITY
Graduates may elect to further their studies and obtain a Bachelor of Technology degree from Memorial University of Newfoundland or a Bachelor of Science (Post Diploma, Human Science) from Athabasca University.

ENTRANCE REQUIREMENTS
To be accepted into the Diagnostic Ultrasonography program, an individual must have successfully completed an accredited program in Medical Radiation Technology (Medical Radiography, Radiation Therapy or Nuclear Medicine) and possess a certificate of registration with the Canadian Association of Medical Radiation Technologists (CAMRT).

Interested applicants should submit to the Registrar’s Office at the college an official application form along with a certified copy of: (1) high school marks (2) Medical Radiation Technology program marks (3) results of CAMRT examinations and (4) proof of current registration with the CAMRT.

Students meeting academic entrance requirements are accepted on a first come first served basis. Before final acceptance is granted, additional documentation must be submitted; see the “Health Sciences Programs Admission Requirements” section of the Calendar for details.

HEALTH SCIENCES
Home Support Worker / Personal Care Attendant

CERTIFICATE
• 30 Weeks
• September
• Corner Brook, Grand Falls-Windsor, and Prince Philip Drive Campuses

COURSES

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</tr>
<tr>
<td>CM1110</td>
<td>Communication &amp; Documentaci</td>
<td>3 3 0</td>
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<tr>
<td>HW1010</td>
<td>Personal Care</td>
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<tr>
<td>HW1020</td>
<td>Home Support Basics</td>
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<tr>
<td>HW1030</td>
<td>Practicum I</td>
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Semester 2

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<tr>
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<tr>
<td>HW1050</td>
<td>Growth &amp; Development</td>
<td>2 2 0</td>
</tr>
<tr>
<td>HW1060</td>
<td>Mental Health &amp; Social Issues</td>
<td>3 3 0</td>
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<tr>
<td>HW1070</td>
<td>Nutrition &amp; Pharmacology</td>
<td>3 2 2</td>
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<td>HW1080</td>
<td>Special Populations</td>
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<td>HW1090</td>
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<tr>
<td>HW1100</td>
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Course Lecture (Le) and Lab (La) hours per week are based on a 15 week semester. The actual lecture and lab hours during both semesters will be adjusted to account for the clinical training component.

Note: In order to graduate from the HSW/PCA program, students must also successfully complete two external certifications:
1. HCP Standard First Aid/CPR Level C (16 hours)
2. Canadian Restaurant & Foodservices Association, National Food Safety Training Program (8 hours)

As integral members of the interdisciplinary healthcare team, Home Support Workers / Personal Care Attendants are responsible for providing support to clients in all aspects of daily living through companionship, physical, spiritual and psychosocial care. Through the use of classroom instruction, skills development laboratories and supervised practicums, the HSW/PCA program provides learners with the necessary skills to work with clients of all age groups across a variety of settings.

OBJECTIVES
1. Utilize a problem solving approach to provide assistance and support that promotes the physical, emotional, psychosocial and spiritual health and well-being of residents, clients and families.
2. Communicate effectively with clients, residents, families and other members of the health care team.
3. Contribute to promoting and maintaining a safe environment for self, clients, residents, family and others.
4. Work in an ethical, responsible and accountable manner, maintaining safe, competent practice.
5. Support the dignity, uniqueness and fair treatment of residents, clients, family and others.

ENTRANCE REQUIREMENTS
Eligibility for admission to the Home Support Worker / Personal Care Attendant program requires the applicant to meet one of the following criteria:

1. High School
   Provincial High School Graduation Certificate
2. Adult Basic Education (ABE)
   Adult Basic Education (Level III)
3. Mature Student Status
   Applicants who do not meet the educational prerequisites for this program, are 21 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause

Applicants must also:
1. Provide an acceptable certificate of conduct, including vulnerable sector check (Canada wide police check current within six months of being accepted into the program).
2. Submit a prediagnosis medical report signed by a qualified medical doctor verifying fitness (physical and other) to undertake the program. This includes verification that the applicant has met immunization requirements and TB screening as required for the industry.

In addition to the above, please note:
1. Computer skills are required to be successful in the HSW/PCA program. Therefore, it is recommended that applicants possess basic computer skills including keyboarding, use of word processing software programs, data base software programs, utility soft-ware programs, e-mail and internet. Applicants not possessing these skills will be provided assistance through the College as needed.
2. Students may be expected to incur costs associated with completion of external certification courses (HCP Standard First Aid/CPR Level C and Canadian Restaurant & Foodservices Association, National Food Safety Training Program).

HEALTH SCIENCES
Medical Laboratory Assistant

CERTIFICATE
• One Year
• September
• Grand Falls-Windsor Campus

COURSES

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<tr>
<th>CODE</th>
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<tr>
<td>ML1000</td>
<td>General Laboratory Knowledge</td>
<td>3 2 2</td>
</tr>
<tr>
<td>ML1010</td>
<td>Orientation &amp; Med Lab Skills</td>
<td>3 2 2</td>
</tr>
<tr>
<td>ML1020</td>
<td>Basic Laboratory Calculations</td>
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<td>MC1130</td>
<td>Computer Studies</td>
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<tr>
<td>TM1130</td>
<td>Medical Terminology</td>
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<tr>
<td>RL1600</td>
<td>Human Biology</td>
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<tr>
<td>Q51530</td>
<td>Change in the Workplace</td>
<td>3 3 0</td>
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Semester 2

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<tr>
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<tbody>
<tr>
<td>ML1030</td>
<td>Practical Clinical Chemistry</td>
<td>3 2 2</td>
</tr>
<tr>
<td>ML1040</td>
<td>Practical Hematology</td>
<td>3 2 2</td>
</tr>
</tbody>
</table>
1. English (minimum 60%): CM1060, CM1061
2. Math (minimum 60%): MA1040, MA1041
3. Four Science courses chosen from two of the following three combinations:
   a. Biology: BL1020, BL1021
   b. Chemistry: CH1030, CH1031
   c. Physics: PH1050, PH1051
   Note: It is strongly recommended that CAS students who intend to enroll in the Medical Laboratory Assistant program complete the Biology and Chemistry courses.

3. Adult Basic Education (ABE)
   Adult Basic Education (Level III) Graduation with Degree and Technical Profile (overall 60% average) including the following courses (or equivalent):
   1. English (minimum of 60%) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
   3. Science from two of the following sections:
      b. Chemistry 1102, 2102A, 2102B, 2102C, 3102A, 3102B, 3102C
      c. Physics 1104, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
   Applicants with Adult Basic Education (Level III) Graduation with a different Profile (and appropriate grades) may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. Mature Student Status
   Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

Students meeting academic entrance requirements are accepted on a first come first served basis. Final acceptance is granted, additional documentation must be submitted; see the 'Health Sciences Programs Admission Requirements' section of the calendar for details.

HEALTH SCIENCES

Medical Laboratory Sciences

DIPLOMA
• Three Years
• September
• Prince Philip Drive Campus

Students must possess valid First Aid / Cardiopulmonary Resuscitation (CPR) certification to be eligible for graduation from the college.

Medical Laboratory Assistants are medical laboratory professionals who collect patient specimens, perform pre-analytical procedures to prepare them for analysis, and do data entry, clerical and reception duties. As an integral member of the health care team, the medical laboratory assistant is part of the front line laboratory staff and is often the first person with whom patients and clients interact. The profession therefore requires strong communication and organizational/time management skills as well as professional conduct.

OBJECTIVES
1. To provide the academic knowledge outlined in the Canadian Society for Medical Laboratory Science (CSMLS) competency profile, and to apply the learned knowledge in practical classes.
2. To provide the knowledge and skills necessary to perform pre-analytical clinical laboratory procedures.
3. To develop the ability to communicate effectively with the patient and other members of the health care team.
4. To maintain a high level of professional conduct in the performance of duty.

CURRICULUM
This is a 36 week program, which includes training at the College as well as clinical placements at various hospitals/clinics throughout Newfoundland and Labrador. Semesters 1 and 2 (15 weeks each in duration) take place at the college whereas Semester 3 consists of a 6-week clinical placement. Graduates of the program will be eligible to write the certification examination set by the Canadian Society for Medical Laboratory Science.

ACCREDITATION
The program at the Grand Falls-Windsor Campus is accredited by the Canadian Medical Association.

ENTRANCE REQUIREMENTS
Eligibility for admission to the Medical Laboratory Assistant program requires the applicant to meet one of the following four academic criteria:

1. High School
   High School Graduation Certificate with a 60% overall average in the following (or equivalent):
   1. English 3201 or 3202 (minimum 60%)
   2. Mathematics (4 credits) chosen from:
      a. Advanced: 2200, 3200 (50% minimum in each course)
      b. Academic: 2201 (50% minimum), 3201 (60% minimum)
   3. Science (4 credits) chosen from two of:
      a. Biology: 3201
      b. Physics: 3204
      c. Chemistry: 3202
   4. Electives (2 additional credits) chosen from any of the remaining 3000 level courses offered in the Senior High School Program.

2. Comprehensive Arts and Science (CAS) Transition
   Comprehensive Arts and Science (Transition) Course with the following courses:
   • English (minimum 60%): CM1060, CM1061
   • Math (minimum 60%): MA1040, MA1041
   • Four Science courses chosen from two of the following three combinations:
     a. Biology: BL1020, BL1021
     b. Chemistry: CH1030, CH1031
     c. Physics: PH1050, PH1051
est group of health care professionals they play an essential role in the health care system.

This profession requires manual dexterity, visual color discrimination, a keen eye for detail, organizational/time management skills and judgment/decision-making ability.

OBJECTIVES
1. To provide the academic knowledge outlined in the Canadian Society for Medical Laboratory Science (CSMLS) competency profile, and to apply the learned knowledge in clinical practice.
2. To provide the basic knowledge and skills necessary to perform clinical laboratory procedures.
3. To develop the ability to communicate effectively with the patient and with other members of the health team.
4. To maintain a high level of professional conduct in the performance of duty.

CURRICULUM
The curriculum for this program is designed to encompass three years of training. The first two years are spent at the college and the emphasis is placed on academic and theoretical training.

During the sixth, seventh, eighth and ninth semesters, emphasis is placed upon practical training with clinical experience being conducted in health care institutions and a simulated hospital laboratory environment.

Graduates of the program at the Prince Philip Drive Campus will be eligible to sit the certification examination set by the Canadian Society for Medical Laboratory Science (CSMLS). The CSMLS is the national professional body for medical laboratory technologists.

ACCREDITATION
The program at the Prince Philip Drive Campus is accredited by the Canadian Medical Association.

PROGRAM TRANSFERABILITY
Graduates may elect to further their studies and obtain a Bachelor of Technology degree from Memorial University of Newfoundland or a Bachelor of Sciences (Post Diploma, Human Science) from Athabasca University.

ENTRANCE REQUIREMENTS
Eligibility for admission to the Medical Laboratory Sciences program requires the applicant to meet one of the following four academic criteria:

1. High School
High School Graduation Certificate with a 60% overall average in the following (or equivalent):
   a. English (minimum 60%) 3101A, 3101B, 3101C
   b. Mathematics (4 credits) chosen from:
      - Physics: PH1050, PH1051
      - Note: It is strongly recommended that CAS students who intend to enroll in the Medical Laboratory Sciences program complete the Biology and Chemistry courses.
   c. Chemistry: CH1030, CH1031

2. Comprehensive Arts and Science (CAS) Transition
   Comprehensive Arts and Science (Transition) Certificate with the following courses:
   a. Biology: BL1020, BL1021
   b. Chemistry: CH1136, Introductory Chemistry II
   c. Physics: PH1150, PH1151

3. Adult Basic Education (ABE)
   Adult Basic Education (Level III) Graduation with Degree and Technical Profile (overall 60% average) including the following courses (or equivalent):
   a. English (minimum of 60%) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
   b. Mathematics (minimum of 60%) 3104A, 3104B, 3104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
   c. Science from two of the following sections:
      - Biology 1101, 2101A, 2101B, 2101C, 3101A, 3101B, 3101C
      - Biology 1102, 2102A, 2102B, 2102C, 3102A, 3102B, 3102C
      - Physics 1104, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C

   Applicants with Adult Basic Education (Level III) Graduation with a different Profile (and appropriate grades) may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. Mature Student Status
   Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

   Students meeting academic entrance requirements are accepted on a first come first served basis. Before final acceptance is granted, additional documentation must be submitted; see the Health Sciences Programs Admission Requirements’ section of the calendar for details.

   Note: To be employed in the Medical Laboratory Science field, one must have sufficiently strong eyesight to permit extended microscopic work, and normal colour perception.

HEALTH SCIENCES
Medical Radiography

DIPLOMA
- Three Years
- September
- Prince Philip Drive Campus

<table>
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<td>Technical Report Writing I</td>
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<td>CM1120</td>
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<tr>
<td>or</td>
<td>MA1700</td>
<td>Mathematics</td>
<td>4 3 2</td>
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<td>or</td>
<td>MA1100</td>
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<td>or</td>
<td>PH1120</td>
<td>Introductory Physics I</td>
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<td>or</td>
<td>CH1200</td>
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<td>or</td>
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<td>or</td>
<td>BL1500</td>
<td>Biology</td>
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<td>or</td>
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<td>Principles of Biology</td>
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<td>or</td>
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<td>or</td>
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<td>PH1121</td>
<td>Physics</td>
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Course Lecture (Le) and Lab (La) hours per week are based on a 15 week semester. In intersession the Lecture and Lab hours will be adjusted to reflect the shorter semester length.

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Students rotate through the sites of Eastern Regional Health Authority.

Students must possess valid First Aid / Cardiopulmonary Resuscitation (CPR) certification to be eligible for graduation from the college.

Medical Radiological Technologists play a vital role in the diagnosis and treatment of many injuries and illnesses. At a physician’s request, Radiological Technologists use equipment that emits x-rays to produce images of a body part or system. Their work involves a broad variety of procedures and specialties including: routine general radiography, mammography, angiography, fluoroscopy and computerized tomography.

OBJECTIVES
1. To provide the academic knowledge outlined in the Canadian Association of Medical Radiation Technologists (CAMRT) Competency Profile.
2. To apply the learned academic knowledge in clinical practice.
3. To develop a sense of professionalism and responsibility.
4. To provide comprehensive knowledge of the hazards involved and appropriate protection methods.
5. To provide the community with trained personnel who can serve their employers and patients with the highest degree of competence.

CURRICULUM
The curriculum for this program emphasizes theory and practice of medical radiography. Second year classroom and laboratory sessions are supplemented by weekly assignments at Eastern Regional Health Authority.

The clinical phase of the program is designed to train the student in practical aspects of medical radiography and to discipline the student to the working conditions of the radiology department. This portion of the course is a clinical training period during which the student will apply, under supervision, the theo-
ries and principles learned during the previous years of training.

The aim of this portion of the program is:
1. To ensure that the student can accurately and confidently perform the varied examinations that are carried out on a daily basis in a radiology department.
2. To ensure that the student has performed the number and variety of examinations required to complete the course.

The clinical phase will consist of 48 weeks of training. The program is conducted at sites of Eastern Regional Health Authority. Students will follow a rotation schedule designed to provide broad clinical exposure to the different radiographic specialties.

Graduates of the program will be eligible to write Canadian Association of Medical Radiation Technologists (CAMRT) certification examinations. The CAMRT is the national professional body for medical radiation technologists.

ACCREDITATION
The program at the Prince Philip Drive Campus is accredited by the Canadian Medical Association.

PROGRAM TRANSFERABILITY
Graduates may elect to further their studies and obtain a Bachelor of Technology degree from Memorial University of Newfoundland or a Bachelor of Sciences (Post Diploma, Human Science) from Athabasca University.

ENTRANCE REQUIREMENTS
Eligibility for admission to the Medical Radiography program requires the applicant to meet one of the following four academic criteria:

1. High School
High School Graduation Certificate with a 60% overall average in the following (or equivalent):
   i. English 3201 or 3202 (minimum 60%)
   ii. Mathematics (4 credits) chosen from:
      Advanced: 2200, 3200 (50% minimum in each course)
      Academic: 2201 (50% minimum), 3201 (60% minimum)
   iii. Science – (4 credits) chosen from two of:
      Biology: 3201
      Physics: 3204
      Chemistry: 3202
      Earth Systems: 3209

2. Comprehensive Arts and Science (CAS) Transition
Comprehensive Arts and Science (Transition) Certificate with the following courses:
   1. English (minimum 60%): CM1060, CM1061
   2. Math (minimum 60%): MA1040, MA1041
   3. Four Science courses chosen from two of the following three combinations:
      a. Biology: BL1020, BL1021
      b. Chemistry: CH1030, CH1031
      c. Physics: PH1030, PH1031
   Note: It is strongly recommended that CAS students who intend to enroll in the Medical Radiography program complete the Biology and Physics courses.

3. Adult Basic Education (ABE)
Adult Basic Education (Level III) Graduation with Degree and Technical Profile (overall 60% average) including the following courses (or equivalent):
   1. English (minimum of 60%) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
   3. Science from two of the following sections:
      b. Chemistry 1102, 2102A, 2102B, 2102C, 3102A, 3102B, 3102C
      c. Physics 1104, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
   Applicants with Adult Basic Education (Level III) Graduation with a different Profile (and appropriate grades) may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. Mature Student Status
Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

Students meeting academic entrance requirements are accepted on a first come first served basis. Before final acceptance is granted, additional documentation must be submitted; see the ‘Health Sciences Programs Admission Requirements’ section of the calendar for details.

Students must possess valid First Aid / Cardiopulmonary Resuscitation (CPR) certification to be eligible for graduation from the college.

HEALTH SCIENCES

Practical Nursing

DIPLOMA
• Program brokered from Center for Nursing Studies
• 16 Months
• September
• Corner Brook, Clarenville, Grand Falls-Windsor, and Happy Valley-Goose Bay Campuses

College of the North Atlantic brokers the Practical Nursing program from the Center for Nursing Studies, delivering it in regions, outside St. John’s, with a demonstrated labor market need. To access information for the offering in St. John’s please refer to www.cnass.nl.ca.

This program is designed to prepare graduates to provide nursing services for clients across the lifespan in institutional and community based settings within the approved scope of practice for licensed practical nurses in Newfoundland and Labrador.

It introduces the learner to the role of practical nurse in promoting, protecting, restoring, maintaining and supporting the health status of individuals across the health and developmental continuum.

The program encompasses classroom work supplemented with skills lab and nursing practice components.

Application Package: To receive an application package by mail, please contact the appropriate campus:
Corner Brook Campus
Phone: (709) 637-8530
Fax: (709) 634-2126
Grand Falls-Windsor Campus
Phone: (709) 292-5600
Fax: (709) 489-5765
Get a PDF application package from this campus’s page

Clarenville Campus
Contact Person: Louise Carpenter
Phone: (709) 466-6901

Happy Valley-Goose Bay Campus
Contact Person: Catherine Morgan
Phone: (709) 896-6304

Application Process:
This program is designed to prepare graduates to provide nursing services for clients across the lifespan in institutional and community based settings within the approved scope of practice for licensed practical nurses in Newfoundland and Labrador.

Applicants are asked to complete all documentation contained in the Practical Nurse Application package available by contacting Learner Services.

Only completed application packages will be considered.

Curriculum Description:

Semester 1: 15 weeks
• N101 - Introduction to Nursing Concepts
• CN101 - Nursing Practice for Introduction to Nursing Concepts
• N102 - Anatomy and Physiology I
• N103 - Therapeutic Relationships
• N104 - Medication Administration
• N106 - Medical Surgical Nursing Concepts I

Semester 2: 15 weeks
• N201 - Mental Health Nursing Concepts
• CN201 - Nursing Practice for Mental Health Nursing Concepts
• N202 - Anatomy and Physiology II
• N204 - Health Assessment
• N205 - Long Term Care Nursing Concepts
• CN205 - Nursing Practice for Long Term Care Nursing Concepts
• N206 - Medical-Surgical Nursing Concepts II
• CN206 - Nursing Practice for Medical-Surgical Nursing Concepts II

Semester 3: 12 weeks
• N301 - Community Health Nursing Concepts
• CN301 - Nursing Practice for Community Health Nursing Concepts
• N302 - Maternal-Child Health Nursing Concepts
• CN302A - Nursing Practice for Maternal Health Nursing Concepts
• CN302B - Nursing Practice for Child Health Nursing Concepts
• N307 - Professional Development

Semester 4: 15 weeks
• CN401 - Nursing Practice for Professional Development
• CN402 - Preceptorship

HEALTH SCIENCES

Primary Care Paramedicine

DIPLOMA
• NOTE:
• Applications to this program will be considered for entry beginning with September 2016 Fall intake.
• Intake: Prince Philip Drive Campus - September; Bay St. George Campus - January
• 68 Weeks
• Varies
• Bay St. George, and Prince Philip
Drive Campuses

COURSES

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Course Lecture (Le) and Lab (La) hours per week are based on a 15 week semester.

Semester 4

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Semester 5

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Provision of emergency medical services (EMS) is a unique and vital community service. Paramedics are highly skilled members of a health care team who function in the realm of EMS, initiating medical treatment for individuals in urgent and non-urgent situations. Based on sound knowledge, paramedics demonstrate rational problem solving abilities and excellent decision-making skills. This program addresses not only the operational/procedural skills of the primary care paramedic, but also ethical and professional behaviors such as effective communication. Mental/physical fitness and healthy lifestyles are emphasized throughout the program, as paramedics must be fit to perform the requirements of the occupation.

This is a challenging program that provides the student with extensive classroom and clinical/practicum experiences. Graduates of this program will be prepared to work in a competent and skillful manner providing pre-hospital care in accordance with the national standards for paramedics.

OBJECTIVES

Upon successful completion of the Primary Care Paramedic program, students will be able to:

1. Demonstrate required skills, knowledge, and abilities, as prescribed by the Paramedic Association of Canada National Occupational Competency Profile with consistency, independence, timeliness, accuracy, and appropriateness.
2. Integrate assessment, diagnostic, and treatment procedures into the holistic management of patients in the out-of-hospital setting.
3. Use critical thinking and problem-solving skills that promote logical and independent decision-making in the provision of paramedic care.
4. Maintain a level of physical and mental health necessary to perform the bona fide occupational requirements.
5. Communicate effectively and work collaboratively with other members of the health care team to serve patients and employers with the highest degree of competence.
6. Reflect professionalism through personal deportment and public interactions.
7. Demonstrate ethical behaviour, empathy and respect for individuals.

ACCREDITATION

This program is accredited by the Canadian Medical Association.

ENTRANCE REQUIREMENTS

PLEASE NOTE: Effective for the 2015-2016 academic year, admission to the Primary Care Paramedicine program will change from the current ‘first-come-first-served’ model to a competitive entry process.

Eligibility for admission to the Primary Care Paramedic program requires the applicant to meet one of the following four academic criteria:

1. High School
   High School Graduation Certificate with a 60% overall average in the following (or equivalent):
   - English: 3201 or 3202 (minimum 60%)
   - Mathematics (4 credits) chosen from:
     Advanced: 2200, 3200 (50% minimum in each course)
   - Academic: 2201, 3201 (50% minimum)
   - II. Two Science courses:
     Biology: 3201
     Chemistry: 3202

2. Comprehensive Arts and Science (CAS) Transition
   Comprehensive Arts and Science (Transition) Certificate with the following courses:
   - English (minimum 60%): CM1060, CM1061
   - Math (minimum 60%): MA1040, MA1041
   - III. Four Science courses:
     Biology: BL1020, BL1021
     Chemistry: CH1030, CH1031

3. Adult Basic Education (ABE)
   Adult Basic Education (Level III) Graduation with Degree and Technical Profile (overall 60% average) including the following courses (or equivalent):
   - English (minimum of 60%): 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
   - Mathematics (minimum of 60%): 1104A, 1104B, 1104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
   - III. Science:
     Biology 1101, 2101A, 2101B, 2101C, 3101A, 3101B, 3101C
     Chemistry 1102, 2102A, 2102B, 2102C, 3102A, 3102B, 3102C

Applicants with Adult Basic Education (Level III) Graduation with a different Profile (and appropriate grades) may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. Mature Student Status
   Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered if the student meets the following criteria:

   Additional Entrance Requirements
   - Current CPR (Level HCP)
   - Current First Aid Certificate (Standard)
   - Grade 11 Learner (Level 1) Driver’s License (minimum)
   - Current Certificate of Conduct
   - Immunization Record
   - Health Assessment Form (including a pre-physical fitness activity check)

(See the “Health Sciences Program Admission Requirements” section of the calendar for details).

Note: Employers in land ambulance may require that Paramedics have a class 04 driver’s license which can be obtained through a Provincial Motor Vehicle Registration Office.

Additional Information

Students will be expected to travel and incur costs associated with clinical/practicum placements. Placement sites are limited and students will be assigned based on availability.

HEALTH SCIENCES

Rehabilitation Assistant (OTA & PTA) (DL)

DIPLOMA

- 2 Years
- September
- Distributed Campus

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Course Lecture (Le) and Lab (La) hours per week are based on a 15 week semester. In semester 5 the Lecture and Lab hours will be adjusted to account for the clinical training component.
with individuals, families, or groups, helping clients achieve optimal levels of physical, psychosocial and/or cognitive abilities.

**OBJECTIVES**

1. To provide the academic knowledge and skills outlined in the competency profiles for Physiotherapist Assistants (Canadian Physiotherapy Association) and Occupational Therapy Assistants (Canadian Association of Occupational Therapists).
2. To apply the learned academic knowledge and skills in clinical practice.
3. To develop effective communication skills and professional behaviors.
4. To perform delegated therapeutic skills safely and effectively under the supervision of an Occupational Therapist or Physiotherapist.
5. To provide the community with skilled Rehabilitation Assistants who can serve their employers and clients with the highest degree of competence.

**CURRICULUM**

The curriculum for this program encompasses six (6) semesters. Students may enroll on a full or part-time basis. The program is offered through the College’s Distributed Learning Service. The Distributed Learning format enables learners to take part in education without the restraints of geography and structured time. Technology-enabled learning offers flexibility, collaboration, and interaction without the isolation normally associated with traditional distance education. It also improves access for independent, disciplined learners. Web based courses are enhanced by hands-on laboratory sessions and structured clinical placements. These activities take place as close as possible to the student’s home location; however, in some cases travel may be necessary. Clinical placements are limited and students will be notified of available locations in their area. Program Transferability

Graduates of College of the North Atlantic’s Occupational Therapist Assistant or Physiotherapist Assistant Certificate program may apply to enter Semester 4 of the Rehabilitation Assistant (O&PA) program to receive dual certification. Graduates with one certification (O&PA or PTA) from another institution are also eligible for advanced standing into the Rehabilitation Assistant program; entry point will be determined on a case-by-case basis.

**ENTRANCE REQUIREMENTS**

Eligibility for admission to the Rehabilitation Assistant program requires the applicant to meet one of the following four academic criteria:

1. **High School**
   - Graduation Certificate with a 60% average in the following (or equivalent):
     - English (minimum 60%)
     - Math (minimum 60%)
     - Science (minimum 60%)
   - Science courses from one of the following sections:
     - Biology: BL1020, BL1021
     - Chemistry: CH1030, CH1031
     - Physics: PH1050, PH1051
   - Note: It is strongly recommended that CAS students who intend to enroll in the Rehabilitation Assistant (O&PA) program complete both of the introductory Biology courses.

2. **Comprehensive Arts and Science (CAS)**
   - Comprehensive Arts and Science (Transition) Certificate with the following courses:
     - English (minimum 60%): CM1060, CM1061
     - Math (minimum 60%): MA1040, MA1041
     - Two Science courses chosen from one of the following three combinations:
       - Biology: BL1020, BL1021
       - Chemistry: CH1030, CH1031
       - Physics: PH1050, PH1051

3. **Adult Basic Education (ABE)**
   - Graduation Certificate with a 60% average including the following courses (or equivalent):
     - English (minimum of 60%): 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
     - Mathematics (minimum of 60%): 1104A, 1104B, 1104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
     - Science from one of the following sections:
       - Biology: 1101, 2101A, 2101B, 2101C, 3101A, 3101B, 3101C
       - Chemistry: 1102, 2102A, 2102B, 2102C, 3102A, 3102B, 3102C
       - Physics: 1104, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C

4. **Mature Student Status**
   - Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

Students meeting academic entrance requirements are accepted on a first come first served basis. Before final acceptance is granted, additional documentation must be submitted; see the ‘Health Sciences Programs’ Admission Requirements’ section of the calendar for details.

**HEALTH SCIENCES**

**Respiratory Therapy**

**DIPLoma**

- **Three Years**
- **September**
- **Prince Philip Drive Campus**

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| Semester 3 (Intersession I) | Cr | Le | La |
| SL2100 | Biology | 2 | 1 | 2 |
| PS1420 | Health Care Organization and Structure | 3 | 3 | 0 |
| PS1700 | Psychology I | 2 | 2 | 0 |
| or | | | |
| PS1510 | Introduction to Psychology I | 4 | 4 | 0 |
| CH2200 | Chemistry | 2 | 3 | 3 |
| or | | | |
| CH1150 | Introductory Chemistry III | 6 | 5 | 3 |

Course Lecture (Le) and Lab (La) hours per week are based on a 15 week semester. In intersession the Lecture and Lab hours will be adjusted to reflect the shorter semester length.

| Semester 4 | Cr | Le | La |
| SL2330 | Cardiopulmonary Physiology | 4 | 4 | 0 |
| SL2340 | Cardiopulmonary Pathophysiology | 4 | 4 | 0 |
| BL2410 | Microbiology | 3 | 3 | 0 |
| RT2200 | Gas Supply & Control | 5 | 4 | 3 |
| RT2300 | Pharmacology | 3 | 3 | 0 |
| RT2450 | Respiratory Therapy Procedures | 4 | 4 | 3 |
| SD1610 | Clinical Skills I | 0 | 0 | 3 |

| Semester 5 | Cr | Le | La |
| RT2230 | Mechanical Ventilators | 4 | 3 | 3 |
| RT2220 | Mechanical Ventilation | 4 | 3 | 3 |
| RT2310 | Anesthesia | 3 | 3 | 0 |
| RT2451 | Neonatal/Pediatric Respiratory Care I | 3 | 2 | 2 |
| RT2500 | Cardiopulmonary Diagnostics | 4 | 3 | 4 |
| SD1611 | Clinical Skills II | 0 | 0 | 3 |

| Semester 6(Intersession II) | Cr | Le | La |
| RT3401 | Comprehensive Respiratory Care | 2 | 2 | 0 |
| SD1680 | Ethics in Health Care | 3 | 3 | 0 |
| RT2452 | Neonatal/Pediatric Respiratory Care II | 3 | 2 | 2 |
| RT3450 | Clinical Skills III | 3 | 0 | 8 |

Course Lecture (Le) and Lab (La) hours per week are based on a 15 week semester. In intersession the Lecture and Lab hours will be adjusted to reflect the shorter semester length.

| Clinical Year (August-June) | Cr | Le | La |
| Semester 7 | Cr | Le | La |
| RT610 | Clinical Orientation | 1 | wk |
| RT510 | Clinical Practicum I | 15 | 15 | wks |

| Semester 8 | Cr | Le | La |
| RT520 | Clinical Practicum II | 15 | 15 | wks |

| Semester 9 | Cr | Le | La |
| RT530 | Clinical Elective | 7 | 7 | wks |

During the third year of the program students will rotate through various training sites of the Eastern Regional Health Authority (ERHA). For the clinical elective course, students may have the opportunity to avail of training placements with other RMs within the Province of Newfoundland and Labrador.

Students must possess valid First Aid / Cardiopulmonary Resuscitation (CPR) certification to be eligible for graduation from the college.

The field of Respiratory Therapy is diverse. Respiratory Therapists (RT’s) are healthcare professionals involved in the assessment, diagnosis, and treatment of many cardiopulmonary disorders. RT’s are integral members of the health care team, working in hospital Intensive Care Units, Operating Rooms, Emergency Departments, Delivery Rooms, Pulmonary Function Laboratories, and Medical and Surgical wards. RT’s may also work in the community setting as homecare therapists, educators, or medical/pharmaceutical representatives. Respiratory Therapists must be able to communicate effectively, possess excellent interpersonal and critical thinking skills, and have the ability to exercise good judgement in critical medical situations.

**OBJECTIVES**

1. To provide the academic knowledge outlined in the National Alliance of Respiratory Therapy Regulatory Bodies National Competency Profile (NCP).
2. To apply the learned academic knowledge in clinical practice.
3. To develop a sense of professionalism and responsibility.
4. To demonstrate an adequate understanding of the Registered Respiratory Therapists’ role and responsibilities within the health care team.
5. To provide the community with trained personnel who can serve their employers and clients with the highest degree of competence.

CURRICULUM
The three year Respiratory Therapy program combines lectures and laboratories with supervised clinical experience. Program topics include: anatomy, physiology, microbiology, chemistry, physics, pharmacology, pathophysiology, respiratory therapy procedures, respiratory therapy equipment, mechanical ventilation, cardiopulmonary diagnostics, pediatric and neonatal care.

Graduates of the program will be eligible to write the National Certification Examination administered by the Canadian Board for Respiratory Care (CBRC). Successful candidates earn the Canadian Society of Respiratory Therapists (CSRT) Registered Respiratory Therapist (RRT) credential. The CSRT is the national professional organization for respiratory therapists.

ACCREDITATION
The Respiratory Therapy program at the Prince Philip Drive campus is accredited by the Council on Accreditation for Respiratory Therapy Education (CoARTE).

PROGRAM TRANSFERABILITY
Graduates may elect to further their studies and obtain a Bachelor of Technology degree from Memorial University of Newfoundland or a Bachelor of Sciences (Post Diploma, Human Science) from Athabasca University.

Graduates may also pursue further studies in the areas of Anaesthesia Assistant, Cardiovascular Perfusion, or Sleep Medicine.

ENTRANCE REQUIREMENTS
Eligibility for admission to the Respiratory Therapy program requires the applicant to meet one of the following four academic criteria:

1. High School
   High School Graduation Certificate with a 60% overall average in the following (or equivalent):
   1. English 3201 or 3202 (minimum 60%)
   2. Mathematics (4 credits) chosen from:
      Advanced: 2200, 3200 (50% minimum in each course)
      Academic: 2201 (50% minimum), 3201 (60% minimum)
   3. Science (4 credits) chosen from two of:
      Biology: 3201
      Physics: 3204
      Chemistry: 3202
      Earth Systems: 3209

2. Comprehensive Arts and Science (CAS) Transition
   Comprehensive Arts and Science (Transition) Certificate with the following courses:
   1. English (minimum 60%): CM1060, CM1061
   2. Math (minimum 60%): MA1040, MA1041
   3. Four Science courses chosen from two of the following three combinations:
      a. Biology: BL1020, BL1021
      b. Chemistry: CH1030, CH1031
      c. Physics: PH1050, PH1051
   Note: It is strongly recommended that CAS students who intend to enroll in the Respiratory Therapy program complete the Biology and Chemistry courses.

3. Adult Basic Education (ABE)
   Adult Basic Education (Level III) Graduation with Degree and Technical Profile (overall 60% average) including the following courses (or equivalent):
   1. English (minimum of 60%) 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
   3. Science from two of the following sections:
      b. Chemistry 1102, 2102A, 2102B, 2102C, 3102A, 3102B, 3102C
      c. Physics 1104, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
   Applicants with Adult Basic Education (Level III) Graduation with a different Profile (and appropriate grades) may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

4. Mature Student Status
   Applicants who do not meet the entrance requirements, are 19 years of age or older, and have been out of school for at least one year may be considered on an individual basis under the Mature Student Clause.

Students meeting academic entrance requirements are accepted on a first come first served basis. Before final acceptance is granted, additional documentation must be submitted; see the ‘Health Sciences Programs Admission Requirements’ section of the calendar for details.
### INDUSTRIAL TRADES

#### Aircraft Maintenance Engineering Technician

**DIPLOMA**

- **Two Years**
- **September**
- **Gander Campus**

**COURSES**

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<td>MA1072</td>
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**PROGRAM DESCRIPTION**

This two-year Aircraft Maintenance Engineering Technician program offers training in the inspection, maintenance, and repair of aircraft and aircraft components. Some of the duties include:

- Perform aviation safety and airworthiness inspections
- Troubleshoot and repair fixed wing aircraft and helicopters
- Safely perform ground handling and routine inspections
- Perform power plant and structural repairs
- Troubleshoot and repair aircraft systems and avionics

**ACCREDITATION**

This program is accredited by Transport Canada as meeting the basic training requirements for the Aircraft Maintenance Engineer's license categories “M1”, “M2” and “E”. Transport Canada also grants qualified graduates a 21-month experience credit towards the 48 months required and credit for having completed the required knowledge exams. After successful completion of this program and the required work experience, apprentices qualify to write an exam in Aircraft Maintenance Regulations to acquire an Aircraft Maintenance Engineer’s license.

**OUTCOMES**

1. Demonstrate safety practices in the aviation industry.
2. Demonstrate skills and knowledge required to work in the aircraft maintenance field.
3. Develop and strengthen the related knowledge and skill in subjects which complement and support the technical training.
4. Demonstrate positive attitudes and behavior that will enable me to become successful in the industry.
5. Meet the requirements for three Aircraft Maintenance Engineer licenses: M1-Small aircraft, M2-Large aircraft and E-Avionics.

**ENTRANCE REQUIREMENTS**

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. **High School**
   - High School Graduation Certificate with a 60% average in nine level 3000 credits, or equivalent, including Mathematics (4 credits) chosen from:
     - i. Advanced: 2200, 3200 (50% minimum in each course)
     - ii. Academic: 2201 (50% minimum), 3201 (60% minimum)

2. **Comprehensive Arts and Science (CAS) Transition**
   - Comprehensive Arts and Science (Transition) Certificate with MA1040 (Math Fundamentals 1) and MA1041 (Math Fundamentals 2).

3. **Adult Basic Education**
   - Adult Basic Education (Level III) Graduation with a Degree and Technical Profile (or Business Related College Profile), including the following courses (or equivalent):
   - Applicants with Adult Basic Education (Level III) Graduation with a Degree and Technical Profile (or Business Related College Profile), including the following courses (or equivalent):

4. **Mature Student Status**
   - Applicants who do not meet the educational prerequisites, are 19 years of age or older, and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

**EMPLOYMENT OPPORTUNITIES**

Graduates may find employment in the following areas:
- Fixed wing airlines
- Helicopter operators
- Rotary commercial airlines
- Aircraft manufacturers
- Repair and overhaul companies
- Private operators
- Flying schools
- Government departments

### INDUSTRIAL TRADES

#### Aircraft Structural Repair Technician

**CERTIFICATE**

- **One Year**
- **September**
- **Gander Campus**

**COURSES**

<table>
<thead>
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<th>Code</th>
<th>Title</th>
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<td>MA1070</td>
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<td>Maintenance Regulations (M, E, S)</td>
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<td>GM1120</td>
<td>General Maintenance Procedures (M, E, S)</td>
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<td>GM1105</td>
<td>Aircraft Plumbing (S)</td>
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<td>GM1140</td>
<td>Standard Workshop Practices (M, E, S)</td>
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<td>Aircraft Structures, Wood, Fabric, Tubular (E)</td>
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<td>Specialized Processes and Futures (S)</td>
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**PROGRAM DESCRIPTION**

The Aircraft Structural Repair Technician is responsible for the assessment of damage, control of corrosion, repairs, modifications, and replacement of aircraft structures and structural components. Some of the duties include:

- Use specialized tools and equipment
- Employ recognized techniques for maintenance repair and fabrication
- Perform repairs using wood, fabric, sheet metal and composite materials

**OUTCOMES**

Demonstrate positive attitudes and behaviors that will enable me to become successful in the industry.

1. Develop techniques, standards and practices of structural repair that conforms to Transport Canada guidelines for the occupation.
2. Provide a broad overview of aircraft maintenance and repair functions with specific emphasis on safety practices in the industry.
3. Demonstrate safe work practices and personal protection.
4. Meet the requirements to become an Aircraft Maintenance Engineer category “S” - Structural Repair.

**ENTRANCE REQUIREMENTS**

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. **High School**
High School Graduation

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

- Mathematics MA3107A, MA3107B, MA3107C
- Science 3101, 3102, 3103

3. Comprehensive Arts and Science (CAS) Trades
Comprehensive Arts and Science (Trades) Certificate

4. Mature Student Status
Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

EMPLOYMENT OPPORTUNITIES
Graduates may find employment in the following areas:

- Aircraft repair stations
- Aircraft manufacturing facilities
- Composite fabricators
- Composite repair stations
- Helicopter service centers
- Helicopter overhaul facilities
- Regional and national airlines

INDUSTRIAL TRADES

Automotive Service Technician

CERTIFICATE

• Nine Months
• September
• Bay St. George, Gander, and Prince Philip Drive Campuses

COURSES

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<td>SV1150</td>
<td>Occupational Health and Safety</td>
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<td>WHMIs</td>
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<td>SV1105</td>
<td>Safety in the Shop</td>
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<td>Gaskets, Seals and Bearings</td>
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<td>Electrical and Electronic Principles</td>
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<td>SV1256</td>
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<td>Cooling Systems</td>
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<td>Body Components and Trim</td>
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<td>SV1600</td>
<td>Ignition Systems</td>
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<td>Brake Systems I (Non-ABS)</td>
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<td>Preventative Maintenance Inspections (PMI)</td>
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<td>Oxy-Fuel Welding/Cutting</td>
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<td>Mechanical Math Fundamentals</td>
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<td>Introduction to Apprenticeship</td>
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A certificate from College of the North Atlantic will be awarded upon successful completion of entry level courses.

APPRENTICESHIP
Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an “Apprentice” and completing the following Advanced Level training and required work experience. The apprenticeship may take 4-5 years and would lead to journeyperson status in the trade. For more information regarding apprenticeship refer to www.aes.gov.nl.ca

PROGRAM DESCRIPTION
Automotive Service Technicians adjust, test and repair engines, steering systems, braking systems, drive trains, vehicle suspensions, electrical systems and air conditioning systems, and do wheel alignments. Some of the duties include:

1. Diagnose and repair engine systems.
2. Diagnose and repair engine support systems.
3. Diagnose and repair vehicle management systems.
4. Diagnose and repair drive line systems.
5. Diagnose and repair electrical systems and components.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
   High School Graduation

2. Adult Basic Education
   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:
   - Mathematics MA3107A, MA3107B, MA3107C
   - Science 3101, 3102, 3103

3. Comprehensive Arts and Science (CAS) Trades
   Comprehensive Arts and Science (Trades) Certificate

4. Mature Student Status
   Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

EMPLOYMENT OPPORTUNITIES
Graduates may find employment in the following areas:

- Garages
- Service Stations

INDUSTRIAL TRADES

Baker

CERTIFICATE

• Eight Months
• Varies
• Bay St. George Campus

COURSES

<table>
<thead>
<tr>
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<td>TS1510</td>
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<td>WHMIs</td>
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<td>Standard First Aid</td>
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<td>CK1000</td>
<td>The Professional Cook</td>
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<td>CK1100</td>
<td>Kitchen Safety</td>
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<td>CK1106</td>
<td>Hygiene and Sanitation Awareness</td>
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<td>CK1115</td>
<td>Kitchen Tools and Equipment</td>
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<td>CK1120</td>
<td>Weights and Measures</td>
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<td>CK1126</td>
<td>Basic Cooking Methods and Principles</td>
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<td>CK1130</td>
<td>Receiving and Storage</td>
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<td>CK1231</td>
<td>Introduction to Baking</td>
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<td>CK1236</td>
<td>Yeast Products</td>
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<td>CK1241</td>
<td>Pies, Tarts, Flans and Fillings</td>
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<td>CK1245</td>
<td>Quick Breads</td>
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<td>CK1253</td>
<td>Basic Cakes</td>
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<td>Cookies and Squares</td>
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<td>Specialty Cakes</td>
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<td>Specialty Pastries and Fillings</td>
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<td>CK1890</td>
<td>Specialty Cookies, Squares and Quick Breads</td>
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<td>CK1900</td>
<td>Specialty Yeast Raised Products</td>
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<td>Specialty Cold Desserts</td>
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<td>CK1920</td>
<td>Specialty Hot Desserts</td>
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</tbody>
</table>

For learners who have successfully completed the Cook certificate (Plan of Training as of March 2011) these courses will enable the learner to receive a Baker certificate.

PROGRAM DESCRIPTION
The Baker program offers training in how to prepare and bake breads, cakes, cookies, pastries, pies and other baked goods. Some of the duties include:

- Weigh, measure and mix ingredients according to recipes
- Cut and form dough, prepare fillings
- Use ovens to bake products
- Decorate baked goods
- Purchase stock and rotate ingredients and supplies
- Maintain public health standards are met

OUTCOMES
1. Demonstrate safe work practices and personal protection.
2. Diagnose and repair engine systems.
3. Diagnose and repair engine support systems.
4. Diagnose and repair vehicle management systems.
5. Diagnose and repair drive line systems.
6. Diagnose and repair electrical systems and components.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
   High School Graduation

2. Adult Basic Education
   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:
   - Mathematics MA3107A, MA3107B, MA3107C
   - Science 3101, 3102, 3103

3. Comprehensive Arts and Science (CAS) Trades
   Comprehensive Arts and Science (Trades) Certificate

4. Mature Student Status
   Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.
A certificate from College of the North Atlantic will be awarded upon successful completion of entry level courses.

APPRENTICESHIP

Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an "Apprentice" and completing the following Advanced Level training and required work experience. The apprenticeship may take 4-5 years and would lead to Journeyperson status in the trade. For more information regarding apprenticeship refer to www.aes.gov.nl.ca

OUTCOMES

1. Demonstrate safe work practices and personal protection.
2. Use tools and equipment safely.
3. Interpret engineering drawings.
5. Plan sequence of operations.
6. Prepare layout operations.

ENTRANCE REQUIREMENTS

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
   - High School Graduation

2. Adult Basic Education
   - 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:
     - Mathematics MA3107A, MA3107B, MA3107C
     - Science 3101, 3102, 3103

3. Comprehensive Arts and Science (CAS) Trades Certificate

4. Mature Student Status
   - Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

EMPLOYMENT OPPORTUNITIES

Graduates may find employment in the following areas:
- Specialty shops
- Hotels
- Restaurants
- Bakery manufacturing
- Self-employed

INDUSTRIAL TRADES

Cabinetmaker

CERTIFICATE

- Nine Months
- September
- Port aux Basques Campus

COURSES

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<td>AK2801</td>
<td>Cabinetmaking</td>
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<tr>
<td>AK2802</td>
<td>Advanced Cabinetmaking</td>
<td>120</td>
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</table>

PROGRAM DESCRIPTION

Cabinetmakers build and repair custom or production-type fixtures and furniture made of wood or wood substitutes. Some of the duties include:
- Read specifications and drawings
- Create layouts and patterns
- Set up and operate woodworking equipment
- Cut, shape, mould and assemble components made of wood or wood substitutes
- Sand, stain, polish and apply veneers

OUTCOMES

1. Demonstrate safe work practices and personal protection.
2. Use tools and equipment safely.
3. Interpret engineering drawings.
5. Plan sequence of operations.
6. Prepare layout operations.

A certificate from College of the North Atlantic will be awarded upon successful completion of entry level courses.

APPRENTICESHIP

Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an "Apprentice" and completing the following Advanced Level training and required work experience. The apprenticeship may take 4-5 years and would lead to Journeyperson status in the trade. For more information regarding apprenticeship refer to www.aes.gov.nl.ca

OUTCOMES

1. Demonstrate safe work practices and personal protection.
2. Use tools and equipment safely.
3. Interpret drawings and specifications.
4. Solve problems and keep a construction project on schedule.
5. Use various types of scaffolding.
6. Apply National Building Code standards and energy efficient concepts

ENTRANCE REQUIREMENTS

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
   - High School Graduation

2. Adult Basic Education
   - 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:
     - Mathematics MA3107A, MA3107B, MA3107C
     - Science 3101, 3102, 3103
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:

i. Mathematics MA3107A, MA3107B, MA3107C
ii. Science 3101, 3102, 3103

3. Comprehensive Arts and Science (CAS) Trades

Comprehensive Arts and Science (Trades) Certificate

4. Mature Student Status

Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

EMPLOYMENT OPPORTUNITIES

Graduates may find employment on the following areas:

- General contractor
- Custom woodworking shops
- Building suppliers
- Residential and commercial construction
- Industrial Maintenance

INDUSTRIAL TRADES

Commercial Driver

CERTIFICATE

- Four Months
- Varies
- Bay St. George Campus

COURSES

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<td>DV1110</td>
<td>Commercial Driver Essential Skills</td>
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<td>HE1630</td>
<td>Transportation of Dangerous Goods</td>
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</table>

PROGRAM DESCRIPTION

This program offers training in the safe and effective operation of Tandem trucks and Tractor Trailer units. Some of the duties include:

- Perform preventive maintenance, defensive driving, and fuel conservation
- Deliver cargo and materials
- Interpret and communicate instructions through dispatch
- Maintain a truck log and keep records of transported materials
- Clean, inspect and service vehicle
- Perform trailer operations and demonstrate defensive driving skills
- Perform pre, post and on route inspections

The program also offers certification in the Transportation of Dangerous Goods (TDG), Air Brakes (9A), WHMIS, First Aid, Powerline Hazards and Professional Driver Improvement Course (PDIC). There will be classroom, yard, off and on highway training with low learner to instructor ratios. This program offers a three week (90 hour) work placement.

Students successfully completing the program qualify for a Class 1 license with Class 3 and 9A endorsements.

OUTCOMES

- Demonstrate defensive driving techniques, proper economical vehicle operation, and emergency procedures.
- Demonstrate knowledge of types of trucks, power trains, engines, drive lines, brake systems, tires and trailers.
- Demonstrate techniques to drive on course roads, through town and on the Trans Canada Highway.
- Demonstrate knowledge of proper freight handling procedures and methods of preparing and handling documentation connected with transfers of cargo and monies.
- Demonstrate safe work practices and personal protection.

ENTRANCE REQUIREMENTS

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
   - High School Graduation
2. Adult Basic Education
   - 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:
     i. Mathematics MA3107A, MA3107B, MA3107C
     ii. Science 3101, 3102, 3103
3. Comprehensive Arts and Science (CAS) Trades
   - Comprehensive Arts and Science (Trades) Certificate
4. Mature Student Status
   - Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

5. Driver’s License and Medical
   - Hold a valid Newfoundland and Labrador Class 5 driver’s licence.
   - Minimum of 2 years driving experience.
   - Provide a current Driving Abstract record showing no more than 4 demerit points.
   - Class 1 driver’s permit.
   - Provide a satisfactory medical certificate in accordance with the Highway Traffic Act and meet the required vision standards. Certificate cannot be more than 6 months old.

6. Age Requirement
   - Must be 18 years of age on or before course completion.

INDUSTRIAL TRADES

Construction / Industrial Electrician

CERTIFICATE

- One Year (1107 hours)

- September
- Baie Verte, Bay St. George, Bonavista, Burin, Corner Brook, Carbonear, Happy Valley-Goose Bay, Labrador West, Seal Cove, and St. Anthony Campuses

COURSES

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A certificate from College of the North Atlantic will be awarded upon successful completion of entry level courses.

APPRENTICESHIP

Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an “Apprentice” and completing the following Advanced Level training and required work experience. The apprenticeship may take 4-5 years and would lead to Journeyperson status in the trade. For more information regarding apprenticeship refer to www.aes.gov.nl.ca

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</table>
The Construction/Industrial Electrician program trains you to install, alter and maintain electrical systems that are designed to provide heat, light, power, control, signals or fire alarms for all types of buildings and structures. Some of the duties include:

- Read and interpret electrical, mechanical and architectural drawings
- Determine code specifications for wiring layouts
- Cut, thread, bend, assemble and install conduits
- Position, maintain and install distribution and control equipment
- Safely test circuits to ensure integrity

**OUTCOMES**

1. Demonstrate safe work practices and personal protection.
2. Use and maintain tools and equipment.
3. Analyze electrical theory and its application to lighting, power and control equipment.
4. Interpret instructions given in plans and specifications pertaining to electrical installations.
5. Demonstrate problem solving skills involving electrical systems.
6. Conduct trouble shooting to maintain electrical systems and equipment.

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

**ENTRANCE REQUIREMENTS**

Eligibility for admission requires the applicant to meet one of the following academic criteria:

**1. High School**

High School Graduation

**2. Adult Basic Education**

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:

- Mathematics MA3107A, MA3107B, MA3107C
- English 3101, 3102, 3103

**3. Comprehensive Arts and Science (CAS) Trades**

Comprehensive Arts and Science (Trades) Certificate

**4. Mature Student Status**

Applicants who do not meet the educational prerequisites are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

**EMPLOYMENT OPPORTUNITIES**

Graduates may find employment in the following areas:

- Residential electrical companies
- Industrial electrical companies
- Mining
- Pulp and Paper
- Oil and gas

**INDUSTRIAL TRADES**

**Cook**

**CERTIFICATE**

- Nine Months
- Various
- Bay St. George, Bonavista, Burin, Happy Valley-Goose Bay, Prince Philip Drive, and Seal Cove Campuses

**PROGRAM DESCRIPTION**

This program provides training in the preparation and presentation of a variety of food for a variety of groups. Some of the duties include:

- Estimate food requirements using menus
- Retrieve food from storage and suppliers
- Wash, peel and cut vegetables
- Prepare, season and cook foods
- Evaluate nutritional values and sanitation standards

**OUTCOMES**

1. Demonstrate safe work practices and personal protection.
2. Develop menus.
3. Practice and maintain sanitary standards.
4. Develop production procedures.

**ENTRANCE REQUIREMENTS**

Eligibility for admission requires the applicant to meet one of the following academic criteria:

**1. High School**

High School Graduation

**2. Adult Basic Education**

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:

- Mathematics MA3107A, MA3107B, MA3107C
- Science 3101, 3102, 3103

**3. Comprehensive Arts and Science (CAS) Trades**

Comprehensive Arts and Science (Trades) Certificate

**4. Mature Student Status**

Applicants who do not meet the educational prerequisites are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

**EMPLOYMENT OPPORTUNITIES**

Graduates may find employment in the following areas:

- Hotels
- Restaurants
- Catering firms
- Cafeterias
- Health care institutions
- Specialty food outlets
- Work camps

**INDUSTRIAL TRADES**

**Hairstylist**

**CERTIFICATE**

- Ten Months
- Various
- Baie Verte, Bay St. George, and Gander Campuses

**COURSES**

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A certificate from college of the North Atlantic will be awarded upon successful completion of entry level courses.

**APPRENTICESHIP**

Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an “Apprentice” and completing the following Advanced Level training and required work experience. The apprenticeship may take 3-4 years and would lead to Journeyperson status in the trade. For more information regarding apprenticeship refer to www.aes.gov.nl.ca
A certificate from College of the North Atlantic will be awarded upon successful completion of entry level courses.

APPROTECHSHIP
Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an “Apprentice” and completing the following Advanced Level training and required work experience. The apprenticeship may take 2-3 years and would lead to Journeyperson status in the trade. For more information regarding apprenticeship refer to www.aes.gov.nl.ca

PROGRAM DESCRIPTION
Male and female hairstylists cut and style hair to suit their clients face and lifestyle. Some of the duties include:

1. Cut, trim, color, wave and style hair, wigs and hairpieces
2. Shave, trim and shape beards and moustaches
3. Suggest appropriate hairstyles
4. Maintain supplies and equipment
5. Self-educate on new hairstyles and fashions

Note: This program may not be suitable for persons with allergies and/or respiratory problems. Anyone with either of these conditions should check with a doctor to determine medical suitability.

OUTCOMES
1. Demonstrate safe work practices and personal protection.
2. Use and maintain tools and equipment.
3. Demonstrate the skills required to style, cut and color hair.
4. Prepare clients for services.
5. Perform reception duties.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
   High School Graduation
2. Adult Basic Education
   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:
   i. Mathematics MA3107A, MA3107B, MA3107C
   ii. Science 3101, 3102, 3103
3. Comprehensive Arts and Science (CAS) Trades
   Comprehensive Arts and Science (Trades) Certificate
4. Mature Student Status
   Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

EMPLOYMENT OPPORTUNITIES

Grades may find employment in the following areas:

- Hair salons
- Hair shows
- Sales representative

INDUSTRIAL TRades

Heavy Duty Equipment Technician

CERTIFICATE
- Nine Months
- Varies
- Bay St. George, Happy Valley-Goose Bay, and Placentia Campuses

COURSES

Block 1 Entry Level

<table>
<thead>
<tr>
<th>Code</th>
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<tr>
<td>TS1500</td>
<td>Occupational Health and Safety</td>
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<tr>
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<td>Standard First Aid</td>
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<td>SY1101</td>
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<td>SY1121</td>
<td>Gaskets and Seals</td>
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<tr>
<td>SY1131</td>
<td>Electrical and Electronic Principles</td>
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<tr>
<td>SY1141</td>
<td>Introduction to Hydraulics</td>
<td>30</td>
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<tr>
<td>SY1151</td>
<td>Service Information Systems</td>
<td>25</td>
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<tr>
<td>SY1166</td>
<td>Tools and Equipment</td>
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<tr>
<td>SY1181</td>
<td>Fasteners, Tubings, Hoses and Fittings</td>
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<tr>
<td>SY1190</td>
<td>Lubrication and Fluid Servicing</td>
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<td>SY1201</td>
<td>Start, Move and Park Vehicle</td>
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<td>SY1211</td>
<td>Tires, Rims and Wheels</td>
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<td>SY1261</td>
<td>Vehicle-Hydraulic Brake Systems</td>
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<td>SY1271</td>
<td>Basic Air Brake Systems</td>
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<td>SY1281</td>
<td>Drive Lines</td>
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<td>SY1301</td>
<td>Cutting, Heating and Welding</td>
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<td>SY1303</td>
<td>Engine Principles</td>
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<td>SY1310</td>
<td>Cooling Systems</td>
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<td>Intake and Exhaust Systems</td>
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<td>Diesel Fuel Supply Systems</td>
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<td>Non-Diesel Fuel Systems</td>
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<td>SY1800</td>
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<tr>
<td>AP1101</td>
<td>Introduction to Apprenticeship</td>
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</table>

A certificate from College of the North Atlantic will be awarded upon successful completion of entry level courses.

APPROTECHSHIP
Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an “Apprentice” and completing the following Advanced Level training and required work experience. The apprenticeship may take 2-3 years and would lead to Journeyperson status in the trade. For more information regarding apprenticeship refer to www.aes.gov.nl.ca

Block 2 Advanced Level

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<td>Starting Aids</td>
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<td>Charging Systems</td>
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<td>Heating and Ventilation Systems</td>
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<td>SV2400</td>
<td>Hydraulic Pumps and Motors</td>
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<td>SV2661</td>
<td>Electric Ignition Systems</td>
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<td>SV2670</td>
<td>Air Conditioning Systems</td>
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Block 3 Advanced Level

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<td>Front and Rear Suspensions</td>
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<td>SV2291</td>
<td>Tracked Steering Systems</td>
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<td>Truck Type Undercarriage</td>
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<td>Final Drives</td>
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<td>SV2411</td>
<td>Control Valves</td>
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<td>SV2420</td>
<td>Hydraulic Cylinders</td>
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<td>Accumulators</td>
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<td>Hydrostatic Drives</td>
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<td>Hydraulic Systems Diagnostics and Testing</td>
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<td>Blades, Buckets and Cutting Edges</td>
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Block 4 Advanced Level

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<td>SV2350</td>
<td>Torque Converters</td>
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<td>SV2365</td>
<td>Automatic Power Shift</td>
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<td>Engine Brakes and Belts</td>
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<td>SV2651</td>
<td>Electronically-Controlled Diesel Fuel</td>
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<td>Emission Control Systems</td>
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Block 5 Advanced Level

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<td>SV2266</td>
<td>Diesel Fuel Injection Systems</td>
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<td>SV2560</td>
<td>Preventative Maintenance Inspections</td>
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<td>SV2591</td>
<td>Turbo Charges, Blowers and Intercoolers</td>
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<td>SV2605</td>
<td>Diesel Engine Overhaul</td>
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Block 6 Advanced Level

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<td>Fire Suppression Units</td>
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<td>SV2341</td>
<td>Manual Transmissions and Power Take-offs</td>
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<td>SV2441</td>
<td>Articulated Steering Systems</td>
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<tr>
<td>SV2471</td>
<td>Drives, Wire Ropes and Accessories</td>
<td>25</td>
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<td>SV2481</td>
<td>Cabs and Protective Structures</td>
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<td>SV2491</td>
<td>Pneumatic Systems</td>
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<td>SV2555</td>
<td>Material Handling Equipment</td>
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<td>SV2729</td>
<td>Engine Clutches</td>
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<tr>
<td>SV2741</td>
<td>Transfer Cases</td>
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</table>

PROGRAM DESCRIPTION
This program is designed to provide you with the skills and knowledge required for employment in the field of Heavy Duty Equipment Technician. Some of the duties include:

1. Interpret work orders and technical manuals
2. Maintain, clean and lubricate equipment
3. Diagnose faults and malfunctions
4. Adjust, repair or replace defective parts
5. Performance test repaired equipment
6. Follow manufacturers specifications and legislated regulations

OUTCOMES
1. Demonstrate safe work practices and personal protection.
2. Use hand tools and equipment.
3. Analyze and process information.
4. Diagnose and repair engines and engine support systems.
5. Diagnose and repair steering, suspension and brake systems.
6. Diagnose and repair hydraulic and pneumatic systems.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
   High School Graduation
2. Adult Basic Education
   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:
   i. Mathematics MA3107A, MA3107B, MA3107C
   ii. Science 3101, 3102, 3103
3. Comprehensive Arts and Science (CAS) Trades
   Comprehensive Arts and Science (Trades) Certificate
4. Mature Student Status
   Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.
INDUSTRIAL TRADES

Heavy Equipment Operator

CERTIFICATE
• Six Months
• Varies
• Bay St. George, and Placentia Campuses

courses

<table>
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<tr>
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<th>Hrs</th>
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<td>Standard First Aid</td>
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<td>Equipment Operation Safety</td>
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<td>HE1120</td>
<td>Grades &amp; Stakes</td>
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<td>HE1201</td>
<td>Equipment Maintenance</td>
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<td>HE1301</td>
<td>Regulation/Emergency Procedures</td>
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<td>HE1600</td>
<td>Air Brakes</td>
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<td>HE1610</td>
<td>Professional Driver Improvement Course (PDIC)</td>
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<td>Transportation of Dangerous Goods</td>
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<td>Trenching Safety</td>
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<td>AM1100</td>
<td>Math Essentials</td>
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<td>AM1170</td>
<td>Heavy Equipment Operator Math Fundamentals</td>
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<td>CM2160</td>
<td>Communication Essentials</td>
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<td>Workplace Essentials</td>
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<td>AP1101</td>
<td>Introduction to Apprenticeship</td>
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Three Courses from the following:

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<td>Graders</td>
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<td>HE1521</td>
<td>Backhoes</td>
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<td>HE1531</td>
<td>Front End Loader</td>
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<tr>
<td>HE1541</td>
<td>Tandem Dump Trucks</td>
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<tr>
<td>HE1551</td>
<td>Off Highway Trucks</td>
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<tr>
<td>HE1561</td>
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PROGRAM DESCRIPTION

This program provides training in the safe and effective operation of Heavy Duty Earth Moving Equipment. Some of the duties include:
• Explore the operation of heavy equipment
• Perform preventative maintenance
• Develop skills necessary to become proficient in the use of the following heavy equipment

OUTCOMES

• Demonstrate knowledge of machine capabilities and industry expectations.
• Develop servicing procedures and techniques to maximize the life span of construction equipment.
• Demonstrate skills in basic machine maneuvering, control and operation in work simulated projects.
• Demonstrate knowledge of standards for road construction as well as other municipal projects.
• Demonstrate safe work practices and personal protection.

ENTRANCE REQUIREMENTS

Eligibility for admission requires the applicant to meet one of the following academic criteria:
1. High School
   High School Graduation
2. Adult Basic Education
   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:
   i. Mathematics MA3107A, MA3107B, MA3107C
   ii. Science 3101, 3102, 3103

3. Comprehensive Arts and Science (CAS) Trades

   Comprehensive Arts and Science (Trades) Certificate

4. Mature Student Status

   Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

AND

5. Driver’s License and Medical

   i. Students selecting the Equipment Category – Dump Truck (Tandem), must have a valid Newfoundland and Labrador Class 5 driver’s license for one year prior to the commencement of the program.
   ii. Satisfactory medical report for Class 03 is required by the Department of Works, Services and Transportation.

Note: Learners must provide a valid medical certificate in accordance with the Highway Traffic Act and meet the vision standards. Certificate cannot be more than six months old.

EMPLOYMENT OPPORTUNITIES

Graduates may find employment in the following areas:
• General contractors
• Paving companies
• Pipeline companies
• Logging companies
• General contractors
• Flooring companies
• Landscaping services

INDUSTRIAL TRADES

Heritage Carpenter

CERTIFICATE
• 1.5 Years
• Varies
• Carbonear Campus

courses

<table>
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<tr>
<th>CODE</th>
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*Indicates Heritage Carpentry courses

PROGRAM DESCRIPTION

The Heritage Carpentry program was developed to train carpenters to work on heritage restoration projects. Some of the duties include:
• Perform contemporary construction technique
• Revitalize traditional skills for wood framed buildings
• Explore architectural styles for Atlantic Canada and Quebec
• Read and interpret blueprints, drawings and sketches
• Calculate requirements and specifications
• Prepare layouts on construction to building codes
• Use measuring tools
• Cut, shape and assemble and join materials
• Build and install foundations, floor beams, subfloors, walls and roof systems
• Install doors, stairs, moldings and hardware trims

Although the program has a heritage orientation, it is fully articulated with the Red Seal Carpenter program and learners may continue on to complete their apprenticeship and become a journeyperson Carpenter.

OUTCOMES

1. Demonstrate safe work practices and personal protection.
2. Use and maintain tools and equipment.
3. Interpret drawings and specifications.
4. Solve problems and keep a construction project on schedule
5. Use various types of scaffolding.
6. Apply architectural styles of Atlantic Canada and Quebec in construction.

ENTRANCE REQUIREMENTS

Eligibility for admission requires the applicant to meet one of the following academic criteria:
1. High School
   High School Graduation
2. Adult Basic Education
   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:
   i. Mathematics MA3107A, MA3107B, MA3107C
   ii. Science 3101, 3102, 3103
3. Comprehensive Arts and Science (CAS) Trades

   Comprehensive Arts and Science (Trades) Certificate

4. Mature Student Status

   Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

EMPLOYMENT OPPORTUNITIES

Graduates may find employment in the following areas:
• General contracting
• Custom woodworking shops
• Contractors specializing in heritage carpentry
Industrial Mechanic (Millwright)

The Industrial Mechanic (Millwright) program offers the training required to become a mechanic for stationary industrial machinery. Some of the duties include:

- Read and interpret diagram, schematics and service manuals
- Operate rigging equipment and dollies to move equipment
- Fit, align, attach and connect: bearings, gears, shafts, motors, couplings and belts
- Test, align and adjust equipment
- Perform predictive and operational maintenance
- Employ vibration analysis
- Service and repair hydraulic, pneumatic and programmable logic controls
- Perform tack welds

OUTCOMES

1. Demonstrate safe work practices and personal protection.
2. Use and maintain tools and equipment.
3. Interpret drawings, plans, and be able to layout and develop projects according to specifications.
4. Perform assigned tasks following quality and production standards required in industry.
5. Plan for installation and maintenance of components and systems.

ENTRANCE REQUIREMENTS

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
   - High School Graduation
2. Adult Basic Education
   - General College Profile (or Business Related College Profile or Degree and Technical Profile). It is strongly recommended that courses include the following:
     - Science 3101, 3102, 3103
     - Mathematics MA3107A, MA3107B, MA3107C
3. Comprehensive Arts and Science (CAS) Graduation
   - General College Profile (or Business Related College Profile or Degree and Technical Profile). It is strongly recommended that courses include the following:
     - Mathematics MA3107A, MA3107B, MA3107C
     - Science 3101, 3102, 3103
4. Mature Student Status
   - Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

EMPLOYMENT OPPORTUNITIES

Graduates may find employment in the following areas:

- Mining
- Forestry
- Oil and gas
- Private companies
- Manufacturing
- Government maintenance departments

PROGRAM DESCRIPTION

A certificate from College of the North Atlantic will be awarded upon successful completion of entry level courses.

APPRENTICESHIP

Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an "Apprentice" and completing the following Advanced Level training and required work experience. The apprentice may take 4-5 years and would lead to journeyperson status in the trade. For more information regarding apprenticeship refer to www.aes.gov.nl.ca

APPROVALS

The Industrial Mechanic (Millwright) program is approved by the Canadian Council of Vocational Education and Training (CCVET) and is accredited by the Department of Education, Culture and Employment (ECE) in the Province of Newfoundland and Labrador.

PROGRAM DESCRIPTION

Instrumentation and Control Technician

The Instrumentation and Control Technician program offers the training required to become an instrumentation technician. Some of the duties include:

- Repair, maintain, calibrate, adjust and install industrial measuring and controlling instruments
- Ensure plant machinery is safe and operating correctly
- Regulate water flow and air quality
- Monitor and calibrate instruments
- Read and interpret circuit diagrams, blueprints and schematics
- Inspect, test, diagnose faults
• Write maintenance reports
• Repair, calibrate components and instruments
• Perform schedule preventative maintenance
• Observe safe repair procedures according to regulated standards

OUTCOMES
1. Demonstrate safe work practices and personal protection.
2. Interpret drawings, codes, standards and government regulations.
3. Use tools and measuring equipment.
5. Use and maintain analyzers
6. Use and maintain various types of field mounted equipment.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
   High School Graduation
2. Adult Basic Education
   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:
   i. Mathematics MA3107A, MA3107B, MA3107C
   ii. Science 3101, 3102, 3103
3. Comprehensive Arts and Science (CAS) Trades
   Comprehensive Arts and Science (Trades) Certificate
4. Mature Student Status
   Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

EMPLOYMENT OPPORTUNITIES
Graduates may find employment in the following areas:
- Hydro Power Generation
- Mining, Petrochemical, and Natural Gas
- Industrial and Commercial Manufacturing
- Industrial Construction
- Industrial Instrument Servicing
- Pulp and Paper Processing

INDUSTRIAL TRADES
Machinist

CERTIFICATE
• This program is offered through a dual campus delivery model (Prince Philip Drive Campus in St. John’s and Placentia Campus). Transportation to and from Placentia from St. John’s will be provided.
• Nine Months
• September
• Prince Philip Drive Campus

PROGRAM DESCRIPTION
The Machinist program is designed to train individuals in the knowledge, skills, and experience necessary to set up and operate precision metal cutting and grinding machines such as lathes, milling machines, drills, shapers, boring mills and grinders. A variety of equipment is used to manufacture, install, operate, adjust and repair machine tools and other machines in common use. Duties of a machinist include: study specifications, charts, drawing or samples to determine the machining operation to be performed, calculate dimensions and tolerances, and prepare working sketches if necessary, set up and operate tools, which may be computer numerically controlled, to perform precision machining operations. Work could either be in job shops or production jobs. In job shops, you will make a wide variety of repair parts for different types of machinery and industrial equipment in different situations. In production shops, you will produce parts using mass production methods including CNC machining and other tools.

OUTCOMES
1. Demonstrate safe work practices and personal protection.
2. Interpret specifications, charts, drawings or sample parts to determine the machining operation required.
3. Select workplace materials.
4. Calculate dimensions and tolerances, and prepare sketches if necessary.
5. Set up and operate tools.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
   High School Graduation
2. Comprehensive Arts and Science (CAS) Transition
   Comprehensive Arts and Science (Transition) Certificate
3. Adult Basic Education
   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:
   i. Mathematics MA3107A, MA3107B, MA3107C
   ii. Science 3101, 3102, 3103
4. Comprehensive Arts and Science (CAS) Trades
   Comprehensive Arts and Science (Trades) Certificate
5. Mature Student Status
   Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

EMPLOYMENT OPPORTUNITIES
Graduates may find employment in the following areas:
- Manufacturing
- Mining
- Aviation
- Machine shops
- Pulp and Paper
- Private shops

INDUSTRIAL TRADES
Metal Fabricator (Fitter)

CERTIFICATE
• Nine Months
• September
• Burin Campus

COURSES

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<thead>
<tr>
<th>CODE</th>
<th>TITLE</th>
<th>Block 1</th>
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<td>WHMIS</td>
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<td>MW1370</td>
<td>Basic Layout</td>
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<td>MW1761</td>
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<td>Cutting Fluids, Coolants, Lubricants and Solvent</td>
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A certificate from College of the North Atlantic will be awarded upon successful completion of entry level courses.

APPRENTICESHIP
Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an "Apprentice" and completing the following Advanced Level training and required work experience. The apprenticeship may take 4-5 years and would lead to Journeyperson status in the trade. For more information regarding apprenticeship refer to www.aes.gov.nl.ca

OUTCOMES

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<thead>
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<td>MW2360</td>
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Block 3 Advanced Level

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<td>MW2041</td>
<td>Cutter and Tool Grinder</td>
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Block 4 Advanced Level

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Block 1 Entry Level

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<td>WHMIS</td>
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<tr>
<td>TS1530</td>
<td>Standard First Aid</td>
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<td>WD1165</td>
<td>Hand, Measuring and Layout Tools</td>
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<td>WD1170</td>
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<td>WD1175</td>
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<td>WD1180</td>
<td>Grinding and Finishing</td>
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<td>Gas Metal Arc Welding (GMAW) (Fillet Weld)</td>
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<td>WD1660</td>
<td>Oxy-Fuel Cutting, Welding, Heating and Gouging</td>
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<td>SMAW (Sheet Metal Arc Welding) (GMAW)</td>
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<td>WD1620</td>
<td>SMAW II – Fillet Weld all Positions</td>
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<td>WD1680</td>
<td>Metalurgy, Expansion and Contaction Control</td>
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<td>WD1730</td>
<td>Fabrication Fundamentals</td>
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</table>
A certificate from College of the North Atlantic will be awarded upon successful completion of entry level courses.

**APPRENTICESHIP**
Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an “Apprentice” and completing the following Advanced Level training and required work experience. The apprenticeship may take 3-4 years and would lead to journeyperson status in the trade. For more information regarding apprenticeship refer to www.aes.gov.nl.ca

**INDUSTRIAL TRADES**

### Mining Technician

**DIPLOMA**
- **Two Years**
- **September**
- **Labrador West Campus**

**COURSES**

<table>
<thead>
<tr>
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<tr>
<td>MW1281</td>
<td>Schematics Advanced</td>
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<td>MW1730</td>
<td>Electrical Fundamentals</td>
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<td>MW1479</td>
<td>Piping Components</td>
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<td>WP1350</td>
<td>Oxy-Fuel Welding</td>
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<td>MW1555</td>
<td>Metalurgy</td>
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<td>Shafts and Shaft Alignment</td>
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Semester 5

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<td>MW1560</td>
<td>Coupling Alignment</td>
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<tr>
<td>MW1665</td>
<td>Material Handling Systems</td>
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<tr>
<td>MW2160</td>
<td>Hydraulics II</td>
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<td>MW2170</td>
<td>Pneumatics</td>
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<td>WD1380</td>
<td>Electric Arc Welding</td>
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<td>MT3440</td>
<td>Industrial Processing III</td>
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<tr>
<td>MT2140</td>
<td>Surface Mining</td>
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<td>MT2150</td>
<td>Ethical Mining</td>
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<tr>
<td>OT1190</td>
<td>Workplace Exposure</td>
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**PROGRAM DESCRIPTION**

Mining is a growing, ever changing industry that requires individuals to be trained in safely operating and maintaining mine/mill equipment. The Mining Technician functions as part of a mining team. Some of the duties include:
- Operate and maintain production equipment
- Read and interpret diagram, schematics and service manuals
- Operate rigging equipment and dollies to move equipment
- Fit, align, attach and connect: bearings, gears, shafts, motors, couplings and belts
- Test, align and adjust equipment
- Perform predictive and operational maintenance
- Employ vibration analysis
- Service and repair hydraulic, pneumatic and programmable logic controls
- Perform tack welds
- Apply mineral processing and mining processes

Mining Technician graduates will receive an Industrial Mechanic (Millwright) certificate, a Mining Technician diploma, and credit for the completion of Block II of IM-Millwright. Graduates will be eligible to receive a Certificate for Entry Level Industrial Mechanic-Millwright after semester four, and a Mining Technician Diploma for completion of semester five.

**OUTCOMES**

1. Demonstrate safe work practices and personal protection.
2. Use and maintain tools and equipment.
3. Interpret drawings, plans, and be able to layout and develop projects according to specifications.
4. Perform assigned tasks following quality and production standards required in industry.
5. Plan for installation and maintenance of components and systems.
6. Apply technical skills learned in an industrial environment during a work term.
7. Evaluate Mining and Mineral processes.
8. Perform heavy equipment operations in a mine environment through simulation.

**ENTRANCE REQUIREMENTS**
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. **High School**
High School Graduation

2. Adult Basic Education
   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:
   i. Mathematics MA3107A, MA3107B, MA3107C
   ii. Science 3101, 3102, 3103

3. Comprehensive Arts and Science (CAS) Trades
   Comprehensive Arts and Science (Trades) Certificate

4. Mature Student Status
   Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

EMPLOYMENT OPPORTUNITIES
   You may find employment as part of the Operations and Maintenance Teams in a mining environment or as an Industrial Mechanic (Millwright) apprentice. Employment rates for Mining Technician graduates have been strong with 80-90% of current graduates finding employment in the local area. This demand for workers is expected to continue.

The current market for Mining Technicians in Newfoundland and Labrador includes the following:
   • Mineral Processing Plants
   • Mines underground and above ground
   • Come By Chance Oil Refinery
   • Hebron Project
   • Long Harbor Processing Plant
   • Lower Churchill Project

INDUSTRIAL TRADES

Mobile Crane Operator

CERTIFICATE
   • Seven Months
   • Varies
   • Bay St. George Campus

COURSES

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<tr>
<th>CODE</th>
<th>TITLE</th>
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<tr>
<td>TS1510</td>
<td>Occupational Health and Safety</td>
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<td>Mobile Crane Operation Safety</td>
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<td>Mobile Hydraulic Boom Cranes</td>
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<td>MB1200</td>
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<td>MB1221</td>
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<td>MC1060</td>
<td>Computer Essentials</td>
<td>15</td>
</tr>
</tbody>
</table>

APPRENTICESHIP

Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an “Apprentice” and completing the following Advanced Level training and required work experience. The apprenticeship may take 4-5 years and would lead to journeyperson status in the trade.

For more information regarding apprenticeship refer to www.aes.gov.nl.ca

A certificate from College of the North Atlantic will be awarded upon successful completion of entry level courses.

APPRENTICESHIP

Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an “Apprentice” and completing the following Advanced Level training and required work experience. The apprenticeship may take 4-5 years and would lead to journeyperson status in the trade.

For more information regarding apprenticeship refer to www.aes.gov.nl.ca

A certificate from College of the North Atlantic will be awarded upon successful completion of entry level courses.

PROGRAM DESCRIPTION

This program is designed to assist you in develop sufficient basic skills and knowledge to enter the labor force as an apprentice Mechanic in Motor Vehicle Body Repairer (Metal and Paint). Some of the duties include:
   • Repair and replace vehicle structures and body parts
   • Remove and install interior and exterior finishes
   • Hammer out dents, buckles and other defects
   • Operate soldering equipment and plastic filler
   • Remove damaged fenders, panels and grills
   • Weld replacement parts
   • Straighten frames and underbodies
   • File, grind, mask and tape body surfaces in preparation for painting

OUTCOMES

1. Demonstrate safe work practices and personal protection.
2. Use tools and equipment.
3. Determine the type of paint; plan refinishing system; remove, prepare, seal and mask; apply

AB1610 Safety | 12
AB1620 Tools and Equipment | 12
AB1630 Fasteners and Adhesives | 12
AB1641 Vehicle Construction | 16
AB1651 Pre/Post Repair Vehicle Inspection | 12
AB1660 Metalurgy | 30
AB1671 Cutting and Heating | 30
AB1680 Gas Metal Arc Welding (GMAW [MIG]) | 45
AB1690 Resistance Spot Welding | 15
AB1701 Metal Working (Mild Steel) | 55
AB1711 Body Fillers and Abrasives | 40
AB1721 Corrosion Protection | 40
AB1732 Surface Preparation (Cleaning, Stipping and Starching) | 85
AB1750 Stationary Glass | 30
AB1760 Moveable Glass and Hardware | 30
AB1780 Cleaning and Detailing | 30
AB1790 Upholstery, Trim and Hardware | 30
AB1801 Refurbishing | 75
AB1811 Batteries | 10
AB1820 Primers, Surfaces and Sealers | 40
AB2811 Non-Structural Components | 60
AM1100 Math Essentials | 30
AM1240 MV Body Repair Math Fundamentals | 30
CM2160 Communication Essentials | 45
SD1760 Workplace Essentials | 45
MC1060 Computer Essentials | 15
AP1101 Introduction to Apprenticeship | 15
OT1220 Workplace Exposure | 60
coatings to vehicle.

4. Demonstrate correct use of chemicals within the shop environment.
5. Compute cost estimates for completing repairs.
6. Manage customer needs, complaints, questions and special challenges.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
   High School Graduation
2. Adult Basic Education
   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:
   - Mathematics MA3107A, MA3107B, MA3107C
   - Science 3101, 3102, 3103
3. Comprehensive Arts and Science (CAS) Trades
   Comprehensive Arts and Science (Trades) Certificate
4. Mature Student Status
   Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

EMPLOYMENT OPPORTUNITIES
Graduates may find employment in the following areas:
- Garages
- Service Stations

INDUSTRIAL TRADES
Non-Destructive Testing Technician

CERTIFICATE
- One Year
- September
- Port aux Basques Campus

PROGRAM DESCRIPTION
Non-Destructive Testing Technician graduates are employed to accurately test items for potential flaws/failures using the following NDT test methods: Liquid Penetrant Inspection, Magnetic Particle Inspection, Ultrasonic Testing and Radiography Testing. The program will prepare you to write the National Exams that are required by the Canadian General Standards Board.

Some of the duties include:
- Employ accurate testing inspection methods on materials and equipment
- Test using magnetic particle inspection, liquid penetrant inspection, ultrasonic testing and radiography testing

Note:
There are specific vision requirements that are required by the Canadian General Standards Board prior to completing final certification in each discipline. Please refer to the following link for the requirements: http://www.nrcan.gc.ca/mining-materials/non-destructive-testing/8576
The Canadian General Standards Board exam fees are not included in tuition/supply fees.

SUBJECT DESCRIPTIONS:
Magnetic Particle Inspection (MPI) trains students to use small magnetic particles (i.e. iron fillings) to detect flaws in components. For this method to be used the component must be made of ferromagnetic material such as iron, nickel, cobalt, or some of their alloys.

Liquid Penetrant Inspection (LPI) trains students to recognize surface flaws in components that appear as a result of capillary action. Flaws become apparent when a colored or fluorescent dye bleeds out of the component to reveal a crack in its surface.

Ultrasonic Testing (UT) trains students to use high frequency sound energy to conduct examinations and make measurements in materials to determine surface or internal cracks or flaws in the materials.

Radiography Testing (RT) trains students to send radioactive energy through a material enabling a negative (Photo) to be produced for that material illustrating internal flaws or cracks.

OUTCOMES
1. Perform Liquid Penetrant Inspection.
2. Perform Magnetic Particle Inspection.
3. Carry out Ultrasonic Inspection.
4. Carry out Radiographic Inspection.
5. Demonstrate knowledge of Quality Assurance, Control Documentation and Reporting Systems for various industrial sectors.
6. Develop attitudes conducive to the successful application of skills on the job.
7. Develop an awareness and concern for good safety practices in the work place.
8. Develop academic skills and knowledge in mathematics, communications and science.
9. Distinguish among various properties of materials with respect to their impact on NDT methods.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
   High School Graduation
2. Adult Basic Education
   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:
   - Mathematics MA3107A, MA3107B, MA3107C
   - Science 3101, 3102, 3103
3. Comprehensive Arts and Science (CAS) Trades
   Comprehensive Arts and Science (Trades) Certificate
4. Mature Student Status
   Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

LABORATORY
Time will be split between practical applications and the classroom throughout the program to assist the trainees in developing self-confidence/skills to carry out Non-Destructive Testing certification exams.

EMPLOYMENT OPPORTUNITIES
Graduates may find employment in the following areas:
- Oil and Gas
- Construction
- Aerospace
- Nuclear
- Automotive
- Welding and Steel Production

INDUSTRIAL TRADES
Plumber

CERTIFICATE
- Nine Months
- September
- Bonavista, and Grand Falls-Windsor Campuses

PROGRAM DESCRIPTION
Non-Destructive Testing Technician graduates are employed to accurately test items for potential flaws/failures using the following NDT test methods: Liquid Penetrant Inspection, Magnetic Particle Inspection, Ultrasonic Testing and Radiography Testing. The program will prepare you to write the National Exams that are required by the Canadian General Standards Board.

Some of the duties include:
- Employ accurate testing inspection methods on materials and equipment
- Test using magnetic particle inspection, liquid penetrant inspection, ultrasonic testing and radiography testing

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Radiography Testing (RT) trains students to send radioactive energy through a material enabling a negative (Photo) to be produced for that material illustrating internal flaws or cracks.

OUTCOMES
1. Perform Liquid Penetrant Inspection.
2. Perform Magnetic Particle Inspection.
3. Carry out Ultrasonic Inspection.
4. Carry out Radiographic Inspection.
5. Demonstrate knowledge of Quality Assurance, Control Documentation and Reporting Systems for various industrial sectors.
6. Develop attitudes conducive to the successful application of skills on the job.
7. Develop an awareness and concern for good safety practices in the work place.
8. Develop academic skills and knowledge in mathematics, communications and science.
9. Distinguish among various properties of materials with respect to their impact on NDT methods.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
   High School Graduation
2. Adult Basic Education
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3. Comprehensive Arts and Science (CAS) Trades
   Comprehensive Arts and Science (Trades) Certificate
4. Mature Student Status
   Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

LABORATORY
Time will be split between practical applications and the classroom throughout the program to assist the trainees in developing self-confidence/skills to carry out Non-Destructive Testing certification exams.

EMPLOYMENT OPPORTUNITIES
Graduates may find employment in the following areas:
- Oil and Gas
- Construction
- Aerospace
- Nuclear
- Automotive
- Welding and Steel Production

INDUSTRIAL TRADES
Plumber
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tr>
<td>PW1101</td>
<td>Applied Mathematics</td>
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<tr>
<td>PW1111</td>
<td>Applied Science</td>
<td>50</td>
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<tr>
<td>PW1121</td>
<td>Industrial Drawings and Legislation</td>
<td>25</td>
</tr>
<tr>
<td>PW1150</td>
<td>Work Safety &amp; Environment I</td>
<td>40</td>
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<tr>
<td>PW1160</td>
<td>Work Safety &amp; Environment II</td>
<td>40</td>
</tr>
<tr>
<td>PW1230</td>
<td>Power Engineering Maintenance I</td>
<td>20</td>
</tr>
<tr>
<td>PW1235</td>
<td>Power Engineering Operations I</td>
<td>40</td>
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<tr>
<td>PW1240</td>
<td>Power Engineering Operations II</td>
<td>40</td>
</tr>
<tr>
<td>CN1210</td>
<td>Communication Essentials</td>
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<tr>
<td>MC1060</td>
<td>Computer Essentials</td>
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<tr>
<td>AM1100</td>
<td>Math Essentials</td>
<td>30</td>
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<tr>
<td>OL1650</td>
<td>Work Job Placement - 4 weeks</td>
<td>120</td>
</tr>
<tr>
<td>PW1441</td>
<td>Power Engineering and Industrial Applications</td>
<td>40</td>
</tr>
</tbody>
</table>

### PROGRAM DESCRIPTION
This program prepares you to install and repair pipes, fixtures and other plumbing equipment for water distribution and waste water disposal in residential, commercial and industrial buildings. Some of your duties include:

- Read blueprints, drawings and specifications for plumbing systems
- Examine water supply networks, waste and drainage systems
- Install, repair and maintain domestic, commercial or industrial fixtures and systems
- Connect, bend, thread and joint pipes
- Leak test utilizing air and water

### OUTCOMES
1. Demonstrate safe work practices and personal protection.
2. Plan work activity.
3. Use and maintain hand and portable power tools and equipment.
4. Interpret plans and specifications and prepare layouts and working drawings.
5. Prepare components and fixtures according to specifications and assume responsibility for the end product.

### ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. **High School**
   - High School Graduation

2. **Adult Basic Education**
   - 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:
     - Mathematics MA3107A, MA3107B, MA3107C
     - Science 3101, 3102, 3103

3. **Comprehensive Arts and Science (CAS) Trades**
   - Comprehensive Arts and Science (Trades) Certificate

4. **Mature Student Status**
   - Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

### EMPLOYMENT OPPORTUNITIES
Graduates may find employment in the following areas:

- Municipal buildings
- Provincial buildings
- Federal buildings
- Health care institutions
- Educational institutions
- Manufacturing
- Mining
- Fishery
- Pulp and Paper
- Oil and Gas

### INDUSTRIAL TRADES

#### Powerline Technician (Operating)

**CERTIFICATE**

- Nine Months
- September
- Bay St. George, Happy Valley-Goose Bay, Seal Cove, and St. Anthony Campuses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>TS1510</td>
<td>Occupational Health and Safety</td>
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</tr>
<tr>
<td>TS1520</td>
<td>WHIMS</td>
<td>6</td>
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<tr>
<td>TS1530</td>
<td>Standard First Aid</td>
<td>14</td>
</tr>
<tr>
<td>PW1101</td>
<td>Applied Mathematics</td>
<td>30</td>
</tr>
<tr>
<td>PW1111</td>
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</tr>
<tr>
<td>PW1441</td>
<td>Power Engineering and Industrial Applications</td>
<td>40</td>
</tr>
</tbody>
</table>

**Program Description**
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 may be responsible for the safe operation and maintenance of equipment such as pumps, gas compressors, generation, motors, boilers, steam turbines, air conditioning systems, heat exchangers and refrigeration equipment.

This program is intended to prepare the learner for entrance into the Power Engineering field at the 4th class level. Upon successful completion of the program requirements a learner is eligible to write an Inter Provincial Certification Exam for Power Engineer 4th Class that is conducted by the Department of Advanced Education and Skills (DAES). Graduates of the program will receive a 6 month credit from the Department of Advanced Education and Skills towards the 4th Class level. Graduates of the program will receive a 6 month credit from the Department of Advanced Education and Skills towards the 4th Class level. Graduates of the program will receive a 6 month credit from the Department of Advanced Education and Skills towards the 4th Class level.
A certificate from College of the North Atlantic will be awarded upon successful completion of entry level courses.

**APPRENTICESHIP**

Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an "Apprentice" and completing the following Advanced Level training and required work experience. The apprenticeship may take 4-5 years and would lead to journeyperson status in the trade. For more information regarding apprenticeship refer to www.aes.gov.nl.ca

**ENTRANCE REQUIREMENTS**

1. High School
   - High School Graduation with one of the following academic criteria:
     - 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:
   - Science 3101, 3102, 3103

   2. Adult Basic Education
   - 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:
   - Science 3101, 3102, 3103

**OBJECTIVES**

1. Demonstrate positive attitudes and behaviors.
2. Evaluate and control plant operations.
3. Create and maintain adequate records as required.
4. Demonstrate safe work practices and personal protection.

**EMPLOYMENT OPPORTUNITIES**

Graduates may find employment in the following areas:
- Utility companies
- Private contractors

**INDUSTRIAL TRADES**

**Process Operator**

**CERTIFICATE**

- Eight Months
- September
- Placentia Campus

**COURSES**

<table>
<thead>
<tr>
<th>Block 1</th>
<th>Entry Level</th>
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<tbody>
<tr>
<td>TS1510</td>
<td>Occupational Health &amp; Safety 6</td>
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<tr>
<td>TS1520</td>
<td>WHMIS 6</td>
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<tr>
<td>TS1530</td>
<td>Standard First Aid 14</td>
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<tr>
<td>OR1100</td>
<td>Safety 18</td>
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<tr>
<td>OR1110</td>
<td>Environmental Awareness 12</td>
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<tr>
<td>OR1150</td>
<td>Hosting, Lifting and Rigging 30</td>
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<td>OR1160</td>
<td>Tools and Equipment 12</td>
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<tr>
<td>OR1170</td>
<td>Piping and Instrumentation Drawings 24</td>
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<td>OR1200</td>
<td>Electrical Fundamentals 30</td>
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<td>OR1210</td>
<td>Process Measurement 90</td>
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<td>OR1220</td>
<td>Process Analyzers 60</td>
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<td>Final Control Elements 60</td>
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<td>OR1300</td>
<td>Basic Process Control 150</td>
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<td>OR1311</td>
<td>HM and Process Control Systems 12</td>
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<td>OR1320</td>
<td>Pumps 18</td>
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<td>OR1330</td>
<td>Introduction to Process Operations 30</td>
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<td>LA1100</td>
<td>Confined Space Awareness 6</td>
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<td>PH1020</td>
<td>Physics 72</td>
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<td>Chemistry 72</td>
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<td>Computer Essentials 15</td>
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<td>AP1101</td>
<td>Introduction to Apprenticeship 15</td>
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</tbody>
</table>

**Block 2**

**Hydrometallurgical Refining**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hrs</th>
<th>Title</th>
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<tbody>
<tr>
<td>OR2100</td>
<td>30</td>
<td>Introduction to the Hydrometallurgical Process</td>
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<tr>
<td>OR2110</td>
<td>12</td>
<td>Feed Preparation and Handling</td>
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<tr>
<td>OR2120</td>
<td>30</td>
<td>Neutralization</td>
</tr>
<tr>
<td>OR2200</td>
<td>18</td>
<td>Pressure Oxidative Leaching</td>
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<tr>
<td>OR2210</td>
<td>30</td>
<td>Solvent Extraction and Calcium Removal</td>
</tr>
<tr>
<td>OR2220</td>
<td>18</td>
<td>Electrowinning</td>
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<tr>
<td>OR2230</td>
<td>12</td>
<td>Water Efficient and Residue Treatment</td>
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</table>

**Block 2**

**Mineral Processing**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hrs</th>
<th>Title</th>
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<tbody>
<tr>
<td>OR2300</td>
<td>62</td>
<td>Mineral Processing I</td>
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<tr>
<td>OR2310</td>
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<td>Mineral Processing II</td>
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<tr>
<td>OR2320</td>
<td>70</td>
<td>Mineral Processing III</td>
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</tbody>
</table>

An apprentice is required to complete one of the two blocks listed. (Subject to the industry (s)he is employed.)

**PROGRAM DESCRIPTION**

Process Operator training is essential for safe, incident-free start-up and operation of plant facilities. The process operator emphasizes the safety requirements and hazards associated with material being processed. The operator will also deal with environmental issues. The program will focus on consistent and efficient plant operation and the importance of meeting both production requirements and product quality specifications while operating the process as efficiently as possible. Some of the duties include:
- Monitor, review and control plant operations
- Maintain production record variables for volume, yield and consumption
- Sample and test chemicals
- Respond to corrective production procedures

**ENTRANCE REQUIREMENTS**

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
   - High School Graduation
2. Adult Basic Education
   - 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:
   - Mathematics MA3107A, MA3107B, MA3107C
   - Science 3101, 3102, 3103

**OBJECTIVES**

1. Demonstrate positive attitudes and behaviors.
2. Evaluate and control plant operations.
3. Create and maintain adequate records as required.
4. Demonstrate safe work practices and personal protection.

**EMPLOYMENT OPPORTUNITIES**

Graduates may find employment in the following areas:
- Mineral Processing
- Oil and Gas
- Pulp and Paper
- Food and Beverage Production
- Natural Gas Processing

**INDUSTRIAL TRADES**

**Refrigeration & Air Conditioning Mechanic**

**CERTIFICATE**

- Nine Months
- September
- Ridge Road Campus

**COURSES**

<table>
<thead>
<tr>
<th>Block 1</th>
<th>Entry Level</th>
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<tbody>
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<td>TS1510</td>
<td>Occupational Health &amp; Safety 6</td>
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<td>Standard First Aid 14</td>
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<td>RF1160</td>
<td>Safety Orientation 12</td>
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<td>RF1170</td>
<td>Hand/Power Tools and Fasteners 20</td>
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<td>Tube, Pipe, Fittings, Slauling and Brazing 40</td>
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<td>Refrigeration Fundamentals 80</td>
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<td>RF1230</td>
<td>Refrigeration Tools and Instruments 35</td>
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<td>RF1240</td>
<td>Refrigerants, Oils and Refrigerant Management 35</td>
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<td>RF1250</td>
<td>Refrigeration Systems, Valves and Accessories 35</td>
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<tr>
<td>RF1260</td>
<td>Leak Testing, Evacuation and Charging 30</td>
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<td>RF1270</td>
<td>Electrical Fundamentals 40</td>
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<td>RF1280</td>
<td>Single and Three Phase Motor Fundamentals 30</td>
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<td>RF1310</td>
<td>Electrical Components 20</td>
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RF1320  Control Fundamentals  30
RF1330  Air Conditioning Fundamentals  15
RF1340  Rigging Techniques  20
RF1350  System Analysis with Pressure Enthalpy Diagrams  30
RF1360  Compression  30
RF1370  Condensers  20
RF1380  Evaporators  25
RF1390  Metering Devices  30
RF1400  Automatic Flow Controls and Application  30
RF1410  System Ancillary Components  25
RF1440  Refrigerant Recovery and Recycling Procedures  10
RF1450  Refrigeration and A/C Installation I  30
RF1460  Troubleshooting Techniques  20
RF1470  Industry and Relevant Codes  15
RF1480  Control Circuits and Wiring Diagrams  30
RF1490  Motor Controls, Relays and Transformers  30
RF1510  Air Conditioning Equipment  20
RF1520  Refrigeration Load Calculations  30
AM1300  Math Essentials  30
AM1390  Refrigeration Math Fundamentals  30
CM2360  Communication Essentials  45
SD1760  Workplace Essentials  45
MC1060  Computer Essentials  15
AP1101  Introduction to Apprenticeship  15

A certificate from College of the North Atlantic will be awarded upon successful completion of entry level courses.

APPRENTICESHIP
Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an “Apprentice” and completing the following Advanced Level training and required work experience. The apprenticeship may take 4-5 years and would lead to Journeyperson status in the trade. For more information regarding apprenticeship refer to www.aes.gov.nl.ca

PROGRAM DESCRIPTION
Refrigeration and air conditioning mechanics plan, prepare and lay out any cooling systems or heat-cooling system that is used in a residential, commercial, institutional or industrial refrigeration setting. Some of the duties include:

- Install and start up refrigeration and air conditioning systems
- Service, repair and replace refrigeration and air conditioning piping and components
- Interpret blueprints and verbal instruction
- Assemble and install refrigeration and air conditioning components
- Install and calibrate controls

- Perform leak detection, record keeping and performance test

OUTCOMES
1. Demonstrate safe work practices and personal protection.
2. Interpret mechanical and architectural drawings, acts, codes, standards, legislation, and service and operating manuals.
3. Use and maintain tools and equipment.
4. Arrange for refrigeration and air conditioning installation and maintenance.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
2. Adult Basic Education

OUTCOMES
1. Practice safety work procedures.
2. Manage a renovation project as it relates to core and sub trade practices.
3. Demonstrate problem solving skills, good work practices, strong communication skills, and utilize practical hands on experience gained directly from job placements in industry.
4. Solve problems with associated trades in the areas of electrical, HVAC, plumbing, painting, plastering, masonry and drafting.

PROGRAM DESCRIPTION
This two year diploma program will provide students with hands on experience and knowledge pertaining to the world of home and light commercial building renovation. Building systems, efficient building techniques, energy conserving systems, sustainable building approaches, estimating and project management are some of the topics students of the Renovation Technician program will cover.

Graduates will have the skills required to work in a variety of residential and commercial building construction settings focusing on renovation projects. Students will learn to recognize hazardous materials and the need for proper waste disposal strategies, as well as proper use of both non-renewable and renewable energy sources.

Graduates of the Renovation Technician program will also receive a Certificate for Carpenter, providing an opportunity to register as a first-year carpenter apprentice.

OUTCOMES
1. Practice safety work procedures.
2. Manage a renovation project as it relates to core and sub trade practices.
3. Demonstrate problem solving skills, good work practices, strong communication skills, and utilize practical hands on experience gained directly from job placements in industry.
4. Solve problems with associated trades in the areas of electrical, HVAC, plumbing, painting, plastering, masonry and drafting.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
2. Adult Basic Education (ABE)
3. Comprehensive Arts and Science (CAS) Trades

OUTCOMES
1. Practice safety work procedures.
2. Manage a renovation project as it relates to core and sub trade practices.
3. Demonstrate problem solving skills, good work practices, strong communication skills, and utilize practical hands on experience gained directly from job placements in industry.
4. Solve problems with associated trades in the areas of electrical, HVAC, plumbing, painting, plastering, masonry and drafting.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
2. Adult Basic Education (ABE)
3. Comprehensive Arts and Science (CAS) Trades

OUTCOMES
1. Practice safety work procedures.
2. Manage a renovation project as it relates to core and sub trade practices.
3. Demonstrate problem solving skills, good work practices, strong communication skills, and utilize practical hands on experience gained directly from job placements in industry.
4. Solve problems with associated trades in the areas of electrical, HVAC, plumbing, painting, plastering, masonry and drafting.
INDUSTRIAL TRADES
Sheet Metal Worker

CERTIFICATE
• Seal Cove - Start Date Varies
• Nine Months
• September
• Burin, and Seal Cove Campuses

CODE TITLE
Block 1 Entry Level Hrs
T5310 Occupational Health and Safety 60
T51520 WHIMS 6
T51530 Standard First Aid 14
SL1101 Safety 6
SL1111 Tools and Equipment 60
SL1121 Hoisting, Lifting and Rigging 18
SL1131 Fabrication Fundamentals 30
SL1141 Metallurgy 10
SL1151 Drafting, Pattern Development and Layout 30
SL1161 Blueprint Reading 30
SL1180 Sheet Metal Fundamentals 30
SL1241 Layout and Fabrication Parallel Lines 90
SL1251 Layout and Fabrication Radial Lines I 90
SL1261 Layout and Fabrication Triangulation I 60
SL1280 Plasma Arc Cutting 12
SL1330 Oxy-Acetylene Welding and Cutting 30
SL1430 Shielded Metal Arc Welding (SMAW) 45
SL1440 Introduction to Gas Metall Arc Welding (GMAW) 30
SL1450 Introduction to gas tungsten Arc Welding (GTAW) 60
SL1630 Layout and Fabrication Triangulation II 60
SL1741 Air Quality Management 45
SL1770 Soldering 30
SL1191 Work Term 60
AM1001 Math Essentials 30
AM1300 Sheet Metal Fundamentals 30
CM2360 Communication Essentials 45
SD1760 Workplace Essentials 45
MC1060 Computer Essentials 15
AP1101 Introduction to Apprenticeship 15

A certificate from College of the North Atlantic will be awarded upon successful completion of entry level courses.

APPRENTICESHIP
Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an “Apprentice” and completing the following Advanced Level training and required work experience. The apprenticeship may take 4-5 years and would lead to journeyperson status in the trade. For more information regarding apprenticeship refer to www.aes.gov.nl.ca

OUTCOMES
1. Demonstrate safe work practices and personal protection.
2. Use and maintain tools, machines and equipment.
3. Use scaffolds, hoists, slings and ladders.
4. Determine project requirements.
5. Develop patterns using various methods.
6. Fabricate parts using hand tools, power tools, and power operated equipment.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
   High School Graduation

2. Adult Basic Education
   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:
   i. Mathematics MA1107A, MA1107B, MA1307C
   ii. Science 3101, 3102, 3103

3. Comprehensive Arts and Science (CAS) Trades
   Comprehensive Arts and Science (Trades) Certificate

4. Mature Student Status
   Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

EMPLOYMENT OPPORTUNITIES
Graduates may find employment in the following areas:
• Plumbing, Heating and Air Conditioning Companies
• Steel Producers
• Metal Producers
• Exterior Construction firms

INDUSTRIAL TRADES
Small Equipment Service Technician

CERTIFICATE
• Ten Months
• Bay St. George Campus

PROGRAM DESCRIPTION
Sheet Metal Workers fabricate, assemble, install and repair sheet metal products. You will use various types of metal including black and galvanized steel, copper, brass, nickel, stainless steel, aluminum and tin plate to make products such as: pollution control systems, dust collection and control systems, solar heating and cooling systems, metal showcases, metal cabinets, flashing, coping, troughing and roof drainage systems. Some of the duties include:
• Lay out, measure and mark dimensions and reference lines
• Utilize drawings and templates
• Use laser and plasma cutting equipment, numerical controlled and computerized equipment
• Cut, drill, punch, bend and shape sheet metal using hand and power shears and snips
• Fasten components using bolts, screws, cement, rivets, adhesives, solder, or welding
• Install and repair sheet metal products in accordance with building code requirements

OUTCOMES
1. Demonstrate safe work practices and personal protection.
2. Use and maintain tools, machines and equipment.
3. Use scaffolds, hoists, slings and ladders.
4. Determine project requirements.
5. Develop patterns using various methods.
6. Fabricate parts using hand tools, power tools, and power operated equipment.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
   High School Graduation
INDUSTRIAL TRADES

Steamfitter / Pipefitter

CERTIFICATE
- Nine Months
- September
- Clarencille Campus

COURSES

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<thead>
<tr>
<th>CODE</th>
<th>TITLE</th>
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<td>Varies</td>
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A certificate from College of the North Atlantic will be awarded upon successful completion of entry level courses.

APPRENTICESHIP

Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an "Apprentice" and completing the following Advanced Level training and required work experience. The apprenticeship may take 5-6 years and would lead to journeyperson status in the trade. For more information regarding apprenticeship refer to www.aes.gov.nl.ca

Block 2 Advanced Level

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Block 3 Advanced Level

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<td>BF161</td>
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<td>BF272</td>
<td>Specialty Steamfitting / Pipefitting Systems</td>
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Block 4 Advanced Level

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<td>BF2960</td>
<td>Hydraulic Systems</td>
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</table>

PROGRAM DESCRIPTION
Steamfitters/pipefitters repair and maintain pipe and steam systems. Some of the duties include:

- Determine required pipe and tools necessary to perform a layout and sequence of tasks
- Create detail sketches for pipe and equipment fabrication and installation
- Measure, cut, thread, groove, bend, assemble and install metal, plastic and fiberglass pipes, valves and fittings and join sections
- Perform pressure leak tests and pipe securcement
- Perform maintenance and replacement of worn components
- Perform pipeline construction
- Safely layout, assemble, fabricate, maintain and repair piping systems
- Perform blueprint reading for piping and tubing
- Perform maintenance on low pressure steam and heating and cooling systems

OUTCOMES
1. Demonstrate safe work practices and personal protection
2. Use and maintain tools and equipment.
3. Perform common installation processes.
4. Plan lifts.
5. Hoist loads.
6. Install high and low pressure steam system process steam systems.

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School
High School Graduation
2. Adult Basic Education
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:
   i. Mathematics MA3107A, MA3107B, MA3107C
   ii. Science 3101, 3102, 3103
3. Comprehensive Arts and Science (CAS) Trades
Comprehensive Arts and Science (Trades) Certificate
4. Mature Student Status
Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

EMPLOYMENT OPPORTUNITIES
Graduates may find employment in the following areas:
- Construction contractors
- Manufacturing Plants
- Utility Companies
- Oil and Gas Refineries
- Industrial Plants
- Pulp and Paper Mills
- Thermal and Steam Generating Plants
- Chemical Plants
### EMPLOYMENT OPPORTUNITIES

Graduates may find employment in the following areas:

- Repair shops
- Maintenance companies

### INDUSTRIAL TRADES

#### Welder

**CERTIFICATE**
- Nine Months
- Varieties
  - Baie Verte, Burin, Corner Brook, Happy Valley-Goose Bay, Labrador West, Placentia, and Prince Philip Drive Campuses

**OUTCOMES**

- Demonstrate safe work practices and personal protection.
- Interpret drawings and develop layout patterns for projects.
- Use and maintain tools and equipment.
- Follow required codes, specifications and standards.
- Employ various welding methods using SMAW, GMAW, FCAW and GIW.

**ENTRANCE REQUIREMENTS**

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. **High School**
   - High School Graduation
2. **Adult Basic Education**
   - 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:
     - Mathematics MA3107A, MA3107B, MA3107C
     - ii. Science 3101, 3102, 3103
     - iii. Technical Profile.

3. **Comprehensive Arts and Science (CAS) Trades**
   - Comprehensive Arts and Science (Trades) Certificate

4. **Mature Student Status**
   - Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

**EMPLOYMENT OPPORTUNITIES**

Graduates may find employment in the following areas:

- Machine shops
- Fabrication plants
- Garages
- Production plants
- Shipyards
- Oil and Gas

## PROGRAM DESCRIPTION

Welders join and sever metals in beams, girders, vessels, piping and other metal components make metal parts used in construction and manufacturing plants, and weld parts, tools, machines and equipment. Some of the duties are:

- Develop patterns in given layouts, blueprints and work orders
- Clean and check for defects and shape component parts
- Examine blueprints and work orders
- Perform welding of various metals

### OUTCOMES

1. Demonstrate safe work practices and personal protection.
2. Interpret drawings and develop layout patterns for projects.
3. Use and maintain tools and equipment.
4. Follow required codes, specifications and standards.
5. Employ various welding methods using SMAW, GMAW, FCAW and GIW.

#### 1. High School Graduation

- **Program Description**
- **Course Content**

#### 2. Adult Basic Education

- **Program Description**
- **Course Content**

#### 3. Comprehensive Arts and Science (CAS) Trades

- **Program Description**
- **Course Content**

#### 4. Mature Student Status

- **Program Description**
- **Course Content**

#### A Certificate from College of the North Atlantic will be awarded upon successful completion of entry level courses.

**APPRENTICESHIP**

Upon completion of the entry level certificate program, a graduate may pursue Red Seal Certification by finding employment, registering as an "Apprentice" and completing the following Advanced Level training and required work experience. The apprenticeship may take 3-4 years and would lead to Journeyman status in the trade. For more information regarding apprenticeship refer to www.aes.gov.nl.ca

### PROGRAM DESCRIPTION

Welders join and sever metals in beams, girders, vessels, piping and other metal components make metal parts used in construction and manufacturing plants, and weld parts, tools, machines and equipment. Some of the duties are:

- Develop patterns in given layouts, blueprints and work orders
- Clean and check for defects and shape component parts
- Examine blueprints and work orders
- Perform welding of various metals

#### OUTCOMES

1. Demonstrate safe work practices and personal protection.
2. Interpret drawings and develop layout patterns for projects.
3. Use and maintain tools and equipment.
4. Follow required codes, specifications and standards.
5. Employ various welding methods using SMAW, GMAW, FCAW and GIW.

#### ENTRANCE REQUIREMENTS

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. **High School**
   - High School Graduation
2. **Adult Basic Education**
   - 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:
     - Mathematics MA3107A, MA3107B, MA3107C
     - ii. Science 3101, 3102, 3103
3. **Comprehensive Arts and Science (CAS) Trades**
   - Comprehensive Arts and Science (Trades) Certificate
4. **Mature Student Status**
   - Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

**EMPLOYMENT OPPORTUNITIES**

Graduates may find employment in the following areas:

- Machine shops
- Fabrication plants
- Garages
- Production plants
- Shipyards
- Oil and Gas

### INDUSTRIAL TRADES

#### Welder / Metal Fabricator (Fitter)

**DIPLOMA**
- **Two Years**
- **September**
- **Port aux Basques Campus**

**COURSES**

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<td>TS1510</td>
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<td>TS1520</td>
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<td>TS1530</td>
<td>Standard First Aid</td>
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<td>WS1360</td>
<td>Wire (Metal Arc Welding)</td>
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<td>Safety</td>
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<td>Heisting, Rigging and Access Equipment</td>
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<td>Oxygen Cutting, Heating and Gouging</td>
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<td>Air Carbon Arc Cutting and Gouging</td>
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### PROGRAM DESCRIPTION

Welders join and sever metals in beams, girders, vessels, piping and other metal components make metal parts used in construction and manufacturing plants, and weld parts, tools, machines and equipment. Some of the duties are:

- Develop patterns in given layouts, blueprints and work orders
- Clean and check for defects and shape component parts
- Examine blueprints and work orders
- Perform welding of various metals

#### OUTCOMES

1. Demonstrate safe work practices and personal protection.
2. Interpret drawings and develop layout patterns for projects.
3. Use and maintain tools and equipment.
4. Follow required codes, specifications and standards.
5. Employ various welding methods using SMAW, GMAW, FCAW and GIW.
PROGRAM DESCRIPTION
Welder/Metal Fabricator contains components of the Welder, Metal Fabricator and Non-Destructive Testing Technician programs. At the end of the two years you will have two entry level certificates. Some of the duties include:

- Develop patterns or follow directions in given layouts, blueprints and work orders
- Clean and check for defects and shape component parts
- Examine blueprints and work orders
- Perform weld of various metals using different processes in accordance to codes and standards
- Layout, cut and fabricate structural steel
- Study engineering drawings and blueprints
- Plan the sequence of tasks required to efficiently cut metal
- Rig, hoist and move materials
- Tack weld, bolt and rivet components
- Install fabricated components in the final product
- Assemble and fit metal sections and plates to form complete units or sub units
- Test using magnetic particle inspection, liquid penetrant inspection
- Employ accurate testing inspection methods on materials and equipment
- Plan the sequence of tasks required to efficiently cut metal
- Rig, hoist and move materials
- Tack weld, bolt and rivet components
- Install fabricated components in the final product
- Assemble and fit metal sections and plates to form complete units or sub units
- Test using magnetic particle inspection, liquid penetrant inspection

ENTRANCE REQUIREMENTS
Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School Graduation
2. Adult Basic Education
3. Comprehensive Arts and Science (CAS) Trades Certificate
4. Mature Student Status

EMPLOYMENT OPPORTUNITIES
Graduates may find employment in the following areas:
- Machine shops
- Fabrication plants
- Production plants
- Oil and Gas
- Mining
- Ship Yards

non-destructive testing inspections.