

## DIPLOMA

- Two years
- September 2011 start
- Bonavista Campus

## COURSES

CODE	TITLE	Hrs/wk		
		Cr	Le	La
<b>Semester 1</b>				
BL1120	Biology I	3	2	2
CM1400	Technical Report Writing I	3	3	0
CS1600	Leadership I – Wilderness Travel	4	4	0
GE1120	Geology	3	2	3
MA1100	Mathematics	5	4	2
MC1080	Introduction to Computers	2	2	0

\*Admission into the appropriate Mathematics course will be decided by the grade in High School math.

### EITHER

Students who received at least 70% in Level III Math 3200 or a pass in Math 3201 can be exempted from MA1100

### OR

Students who received a combined average of 70% in 2004 and 3204, or a pass in both of 2205 and 3205 can be exempted from MA1100.

**Students must apply for the exemption.**

CODE	TITLE	Hrs/wk		
		Cr	Le	La
<b>Semester 2</b>				
BL1400	Fish and Wildlife Biology I	4	3	3
CM1401	Technical Report Writing II	3	3	0
CP2310	Electronic Spreadsheet Applications	3	2	2
MA1670	Statistics	4	4	1
RM1100	Introduction to Natural Resources Management	4	4	0
RM1300	Fish and Wildlife Management Methods I	3	2	2
CS2610	Wilderness Survival	2	1	2

### Semester 3 (Intersession)

CODE	TITLE	Cr	Le	La
RM1200	Natural Resources Management Methods I	3	2	3
EY2110	Basic Ecology	4	3	2
AT1520	Canoeing	2	0	8

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.

CODE	TITLE	Hrs/wk		
		Cr	Le	La
<b>Semester 4</b>				
LW2210	Natural Resources Policy and Law	4	4	0
CP2320	Micro Database Applications	2	1	2
FR1230	Forest Fire Management	3	2	3
RM2400	Habitat Management	3	2	2
RM1201	Natural Resources Management Methods II	3	2	3
RM1301	Fish & Wildlife Management Methods II	5	4	2

CODE	TITLE	Hrs/wk		
		Cr	Le	La
<b>Semester 5</b>				
BL1401	Fish & Wildlife Biology II	3	3	0
CM2200	Oral Communications	2	2	0
LW2211	Law Enforcement	4	3	2
LW2300	Officer Safety	2	1	3
RM2300	Fish & Wildlife Management Methods III	4	3	3
SE2100	Safety & Maintenance of Field Equipment	2	1	3

CODE	TITLE	Hrs/wk		
		Cr	Le	La
<b>Semester 6</b>				
OJ1160	On the Job Training	6		wks

## CERTIFICATIONS

In addition to the formal semester courses listed in the program of studies, students in the Natural Resources Technician program are required to obtain certification in the following areas over the two-year period:

Canadian Firearm Safety Course /Hunter Education  
Coastal Navigation  
Electro-Fishing Certification

## TOURISM & NATURAL RESOURCES

# Natural Resources Technician

The Natural Resources Technician program integrates content from the study of both the terrestrial and aquatic environments to produce competent technicians and enforcement officers for various natural resource management agencies. 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 natural resources industry to consider its management practices within the context of monitoring and managing terrestrial, freshwater and marine resources highlights the need for this program.

## OBJECTIVES

1. To provide the knowledge and attitudes that will enable students to identify natural resource challenges and opportunities and to undertake such assessments, preventive measures and treatments as might be associated with resource protection, management and utilization.
2. To provide students with the knowledge and skills that are required to actively participate in the solution of natural resources problems and challenges.
3. To provide knowledge and experience with a wide range of field and office equipment and techniques associated with the assessment and analysis of natural resources data.
4. To provide the foundation for continued learning experiences at the post graduate level.

## EMPLOYMENT OPPORTUNITIES

Graduates of the Natural Resources Technician program are qualified for employment with federal and provincial governments as well as the private sector. Examples include Department of Fisheries and Oceans, Parks Canada, Department of Natural Resources, and private companies such as Seawatch who provide offshore observers and river guardians for Department of Fisheries and Oceans.

## PROGRAM TRANSFERABILITY

Students who have graduated from the Natural Resources Technician program can apply for entry with advanced standing at a number of Bachelor of Science, Bachelor of Environmental Science and post-diploma programs in Canada. Please refer to the NL Department of Education's transfer guide ([www.cna.nl.ca/transfer](http://www.cna.nl.ca/transfer)), or contact your intended university or college.

Marine Advanced First Aid  
Marine Search & Rescue Seminar  
Pleasure Craft Operators Card  
Pollution Control (Coast Guard Oil Spill)  
Restricted Operators Certificate (Maritime) DSC Endorsement  
WHMIS / OHS

**Note: Students should be aware that additional fees and expenses apply for some of these certifications and for field camps, tours and On-the-job Training.**

**This program is currently under review and it is anticipated that changes will occur.**

## 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):

i. English (2 credits) (minimum 60%) from: 3201 or 3202

ii. Mathematics (4 credits) chosen from:

Advanced: 2205, 3205 (50% minimum in each course)

OR

Academic: 2204 (50% minimum), 3204 (60% minimum)

iii. 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. In addition, it is recommended that students who intend to enroll in the Environmental Technology program complete CH1030 and CH1031.

### 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

ii. Mathematics 1104A, 1104B, 1104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C

iii. Science from one of the following sections:

a. Biology 1101, 2101A, 2101B, 2101C, 3101A, 3101B, 3101C

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.

## SPECIAL REQUIREMENTS

Because of the extensive field exposure incorporated in this program, students will be required to obtain quality outdoor clothing and equipment, including navigation compass, snowshoes, quality safety boots, rainwear, and other clothing appropriate for outdoor work.