

Fish and Wildlife Technician

With increasing emphasis on sustainable development, integrated resource policy and ecosystem based management across Canada and 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 subjects with the Forestry Resources Technician program, has been designed to enable students with a specific interest in fish and wildlife to participate in studies directed specifically 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, parks and interpretation programs. Graduates are employed with governmental and private agencies in fields ranging from forestry technicians to fisheries observers.

PROGRAM TRANSFERABILITY

Many graduates have gone on to pursue studies with advanced standing at a number of Canadian universities. Students who have graduated from the Fish and Wildlife Technician program can apply for entry with advanced standing at a number of Bachelor of Science and post-diploma programs in Canada. Please refer to the Transfer Guide of the NL Council on Higher Education (www.edu.gov.nl.ca/council), or contact your intended university or college.

ENTRANCE REQUIREMENTS

Comprehensive Arts and Science Certificate (College Transition program) with the following courses:

1. Math Fundamentals I and II
2. Two Science courses chosen from one of the following three combinations:
 - a. Introductory Biology I and II
 - b. Introductory Chemistry I and II
 - c. Introductory Physics I and II

Note: It is strongly recommended that all CAS students who intend to enroll in the Fish and Wildlife Technician program complete both Introductory Biology courses.

OR

High School Graduation Certificate with a 60% overall average in the following:

1. Language (1 credit) (minimum 60%) chosen from: 3101, 3102, 3103, 3112, 3172, 3192, 4121
OR
English (2 credits) chosen from: 3201, 3211, 3202, 3212, 3231, 3232, 3281, 3282, 3291, 3292
2. Mathematics (2 credits) chosen from: Advanced: 3201, 3211, 3221, 3231, 3271, 3281, 3291, 4225 (50%) minimum
Academic: 3203, 3200, 3210, 3230, 3270, 3280, 3290 (60%) minimum
OR
Mathematics (4 credits) chosen from:
Advanced: 2205, 3205 (50% minimum in each course)
Academic: 2204 (50% minimum), 3204 (60% minimum)
3. Science (4 credits) two of which must be selected from:
Biology: 3201, 3211, 3231, 3271, 3281, 3291, 4221
Physics: 3204, 3214, 3274, 3284, 3294, 4224
Chemistry: 3202, 3212, 3230, 3272, 3282, 3292, 4222
Environmental Science: 3205
Geology: 3203, 3213, 3223, 3273, 3283, 3293
Earth Systems: 3213, 3209

Note: The remaining 2 Science credits to be chosen from the highest Science mark in level 1, 2 or 3.

OR

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

OR

Grade XI Public Examination pass with a 60% average including a 60% pass in language, 60% in Matriculation Mathematics or 50% in Honours Mathematics, and one Science course,

OR

Adult Basic Education (Level III) Graduation indicating completion of the academic stream including the following courses:

1. Communications IC3211 & IC3112 plus one of IC3116 or IC3215 or IC3321 or IC3222
2. Mathematics from one of the following sections:
 - a. Mathematics IM3212, IM3213 and IM3216
 - b. Mathematics IM3219
3. Science from one of the following sections:
 - a. Biology IB3113, IB3214, IB3115, IB3316
 - b. Chemistry IH3215, IH3116, IH3117, IH3118
 - c. Physics IP3111, IP3112, IP3215, IP3216
 - d. Earth Science IS3212, IS3213, IS3214.

OR

Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses:

1. English 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
2. Mathematics 1104A, 1104B, 1104C, 2104A, 2104B,

DIPLOMA

- Two years
- September start
- Corner Brook Campus

COURSES

CODE	TITLE	Hrs/wk		
		Cr	Le	La
Semester 1				
BL1120	Biology I	3	2	3
CM1400	Technical Report Writing I	3	3	0
EN2120	Environmental Citizenship	3	3	0
MA1100	Mathematics	5	4	2
MC1080	Introduction to Computers	2	2	0
SU1150	Field Navigation	3	2	3
GE1420	Physical Environments	3	2	3
Semester 2				
CM1401	Technical Report Writing II	3	3	0
FR1330	Natural Resource Measurement I	3	2	3
BL1400	Fish and Wildlife Biology	4	3	3
EY2210	Silvics/Dendrology I	3	2	3
MA1670	Statistics	4	4	1
SU1550	Remote Sensing	3	2	3
Semester 3 (Intersession I)				
FT1410	Fish & Wildlife Spring Camp			2 wks
RM1400	Wildlife Techniques I	4	6	4
RM1500	Fisheries Techniques I	4	6	4
SU1400	Surveying	3	4	6

Intersession course hours per week are doubled to accommodate the six-week period. Credit value is based on a fifteen-week semester.

CODE	TITLE	Hrs/wk		
		Cr	Le	La
Semester 4				
EY1200	Ecosystem Ecology	2	1	3
FT1430	Fish and Wildlife Fall Camp			1 wk
HR2200	Human Relations	2	1	2
LW2210	Natural Resources Policy and Law	4	4	0
RM1401	Wildlife Techniques II	3	2	2
RM1501	Fisheries Techniques II	3	2	2
RM2200	Habitat Assessment	3	2	3
SU3210	Geographic Information Systems	2	1	3
Semester 5				
CS2620	Wilderness Survival	2	1	2
EY2510	Population Ecology	3	2	2
LW2211	Law Enforcement	4	3	2
MN1810	Integrated Resource Management	2	1	2
PR2660	Technical Report	2	1	2
RM2420	Habitat Management	3	2	2
RM2410	Wildlife Techniques III	3	2	2
RM2500	Fisheries Techniques III	3	2	2

CODE	TITLE	Hrs/wk		
		Cr	Le	La
Semester 6				
OJ1301	On-the-Job Training			3 wks

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 of completion of the following training over their two-year period of studies:

Canadian Firearm Safety Course / Hunter Education
Paddle Canada (Flatwater Canoeing Level A & B)
Canoeing
Coastal Navigation
Pleasure Craft Operators Card
Restricted Operators Certificate (Maritime) DSC Endorsement
Standard First Aid & CPR/AED
WHMIS/OHS
ATV Safety Training

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 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.

2104C, 3104A, 3104B, 3104C

3. 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 may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

SPECIAL REQUIREMENTS

Because of the extensive field exposure incorporated in this program, the students are required to acquire the following equipment and clothing: hard hat, compass, axe, snowshoes, quality safety boots, rainwear, and other clothing appropriate for outdoor work.

