

Software Development

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.

The program includes course work, team projects, and a 15-week work term. The program focuses on computer programming, database design and development, systems analysis, 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 Software Development.

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.

OBJECTIVES

The aim of the Software Development program is to graduate a student with the:

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

NOTE: Some employers may require the graduate to have a Certificate of Conduct from the Royal Newfoundland Constabulary (RNC), the Royal Canadian Mounted Police (RCMP) or local provincial/municipal police force as a condition of employment.

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: 2205, 3205 (50% minimum in each course)
 - Academic: 2204 (50% minimum), 3204 (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
- 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 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.

DIPLOMA

- Two Years
- September Start
- Corner Brook Campus

COURSES

CODE	TITLE	Hrs/wk		
		Cr	Le	La
Semester 1				
CM1400	Technical Report Writing I	3	3	0
EP1130	Business for Information Systems	3	3	0
CP1850	Procedural Programming	6	5	3
MA1900	Problem Solving for Information Technology	4	4	1
CP1880	Computer Systems Architecture	4	4	1
SD1740	College and Career Preparation	2	2	0
Semester 2				
CM1401	Technical Report Writing II	3	3	0
CP3410	Fundamentals of Database Design	4	3	2
CP1930	Introduction to Systems Analysis and Design	5	4	3
CP1890	Object-Oriented Programming	4	3	3
CP1330	Windows Server Administration	4	3	3
Semester 3				
CR1510	Website Development	3	2	3
CP2280	Object-Oriented Programming in Java	4	3	3
Semester 4				
EP2400	Business Solutions	4	4	0
CP2560	Advanced J2SE Programming	4	3	3
CP2840	Programming with ADO.NET	4	3	3
CP3160	Multimedia Development	3	2	3
CP1950	Object-Oriented Development with UML	4	3	3
Semester 5				
CP4200	Rich Internet Application Development	3	2	3
CP4260	SQL Programming	4	3	3
CP3370	Software Development with ASP.NET	3	2	3
CP4280	Programming for Mobile Devices	4	3	3
CR2800	Security for Programmers	3	3	0
CM2200	Oral Communication Skills	2	2	0
SD2420	Personal and Professional Development	2	2	0
Semester 6				
WT1190	Work Term	5	15	wks

