

## DIPLOMA

- Three years
- September start
- Prince Philip Drive Campus

## COURSES

CODE	TITLE	Hrs/wk		
		Cr	Le	La
<b>Semester 1</b>				
CM2100	Workplace Correspondence	3	3	0
CP1120	Fundamentals of Programming I	6	5	3
CP1920	Computer Hardware and Troubleshooting I	4	3	2
MC1805	Software Applications	4	3	2
MA1900	Problem Solving for Information Technology	4	4	1
SD1460	College, Career and Portfolio Preparation	2	2	0
<b>Semester 2</b>				
CM2300	Report Writing	2	2	0
CP2130	Fundamentals of Programming II	4	3	3
CP2481	Microcomputer Database Programming	4	3	3
CR1100	Network Fundamentals	4	3	2
CR1510	Web Site Development	3	2	3
EP1150	Business for Information Technology	3	3	0
<b>Semester 3</b>				
WC1150	Work Term I	5	0	0
<b>Semester 4</b>				
EP1140	Business Operations in Information Systems	3	3	1
CM2200	Oral Communications	2	2	0
CP2280	Object-Oriented Programming in Java	4	3	3
CP3410	Fundamentals of Database Design	4	3	2
CP3421	Fundamentals of Systems Analysis and Design	4	3	2
SD2410	Personal, Professional and Portfolio Development	2	2	1
CR2800	Security for Programmers	3	3	0
<b>Semester 5</b>				
WC2150	Work Term II	5	0	0
<b>Semester 6</b>				
CP2190	Unix	2	1	2
CP2560	Advanced J2SE Programming	4	3	3
CP1950	Object-Oriented Development with UML	4	3	3
CP1330	Windows Server Administration	4	3	3
CP4411	SQL Using Oracle	4	3	3
<b>Semester 7</b>				
WC3150	Work Term III	5	0	0
<b>Semester 8</b>				
PR2460	Comprehensive Project	5	0	8
CP4461	Database Programming using ADO.NET	4	3	3
CP4471	Emerging Trends in Software Development	3	2	2
CP3561	Java Database and Web Component Development	4	3	3
SD3410	Portfolio Completion and Career Preparation	1	1	0
Elective (minimum of three credits)		3	3	0

## INFORMATION TECHNOLOGY

# Programmer Analyst (Business) Co-op

Programmer Analyst (Business) Co-op is a three-year program which trains the student to work effectively as a team member in a wide variety of business application development environments. This is a co-operative education program that offers the student work term placements in May of the first academic year, in January of the second academic year and in September of the third academic year. Each work term placement affords the student 12 to 16 weeks of workplace experience, for a total of 36 to 48 weeks during the three-year program.

The program's main emphasis is on the design and development of a variety of business-oriented applications using the most recent versions of widely used computer programming languages. Emphasis is on database design and programming, the traditional and object-oriented system development life cycles, and web-based programming. As well, ethics, best practices, team building, communications and interpersonal skills are developed throughout the program via coursework and participation on project teams.

The student is required to create a career plan and learning portfolio throughout the life of the program. The student will be given opportunities to assess skills, create/modify career plans and to reflect on her/his progress. The student must complete a comprehensive project in the final semester thereby consolidating all of the skills and knowledge acquired throughout the program.

The combination of coursework and work term experience provides the student with a skill set that will prepare her/him for an entry-level business programming position. With relevant work experience, the student should be able to follow the career progression to Programmer Analyst and eventually to Systems Analyst.

### 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 in a software development environment
4. the self-awareness and reflective skills to create, evaluate and modify personal growth, learning plans and career plans

### ACCREDITATION

The Programmer Analyst (Business) Co-op program has been accredited by the Canadian Information Processing Society (CIPS) until 2011. 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 activities may include computer programming, database design and development, and web page and web component implementation.

### ENTRANCE REQUIREMENTS

Eligibility for admission to Programmer Analyst (Business) Co-op 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)

#### 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.

