BACHELOR OF TECHNOLOGY IN INFORMATION TECHNOLOGY

At a Glance

Faculty

www.kpu.ca/business (http://www.kpu.ca/business/)

Area of Study:

www.kpu.ca/business/bachelor-technology-information-technology (http://www.kpu.ca/business/bachelor-technology-information-technology/)

Academic Level:

Undergraduate

Credential Granted:

Baccalaureate Degree

Start Date:

Fall (September)

Spring (January)

Summer (May)

Intake Type:

- Limited

Minimum Credits Required:

120

Curriculum Effective Date:

01-Sep-2018

Description

The Bachelor of Technology in Information Technology (BTech in IT) program allows students to earn a bachelor degree that prepares them for employment in the IT industry in Canada or for graduate school. Courses are offered so that students can focus on network administration and security or mobile and web application development based on their interests and career goals.

Requirements
Admission Requirements

In addition to the Faculty's Admission Requirements, which consist of KPU's undergraduate English Proficiency Requirement (https://calendar.kpu.ca/admissions/english-proficiency-requirements/), the following program admission requirements apply:

- Satisfy level E1 as defined by the Math Alternatives Table (https://calendar.kpu.ca/course-information/mathematics-alternatives-table/)

Curricular Requirements

The degree program requires a minimum of 120 credits of required courses and electives. The degree program with Co-operative Education requires an additional 28 credits of Co-op Education credits.

Year 1		Credits
BUQU 1130	Business Mathematics	3
or MATH 1140	or Calculus I (Business Applications)	
Select one of the following:		3
BUQU 1230	Business Statistics	
MATH 1115	Statistics I	
STAT 2342	Introduction to Statistics for Business	
INFO 1111	Introduction to Computer Hardware and Software	3
INFO 1112	Principles of Program Structure and Design I	3
INFO 1113	Systems Analysis and Design	3
INFO 1211	Operating Systems Principles And Applications	3
INFO 1212	Networking Technologies I	3
INFO 1213	Web Application Development	3
INFO 1214	Discrete Mathematics for Information Technology	3
PHIL 1150	Introduction to Formal Logic	3
	Credits	**30**
Year 2		
BUSI 1110	Fundamentals of Business in Canada	3
CMNS 1140	Introduction to Professional Communication	3
ENGL 1100	Introduction to University Writing	3
INFO 2311	Networking Technologies II	3
INFO 2312	Database Systems	3
INFO 2313	Principles of Program Structure and Design II	3
INFO 2315	Data Structure	3
INFO 2411	Foundations of Computer Security	3
INFO 2413	System Development Project	3
INFO 2416	Server Operating Systems	3
	Credits	**30**
Year 3		
INFO Core Courses		
INFO 3110	Professional Communications in Information Technology	3
INFO 3150	Object-Oriented Software Engineering	3
INFO 3250	Content Management and Information Architecture	3
INFO 3280	Information Technology Project Management	3
INFO Electives [1]		
Select four of the following:		12
INFO 3135	Advanced Web Application Development	
INFO 3171	System Security	
INFO 3180	Wireless Networks	
INFO 3225	Web Multimedia	
INFO 3235	Software Quality Assurance	
INFO 3240	Enterprise Resource Planning Systems	
INFO 3245	Mobile Programming	
INFO 3390	Networking Technologies III	
Select one of the following:		3
PHIL 3033	Business Ethics	
PHIL 3109	Foundations in Ethics	
Breadth Electives		
Select one course numbered 1100 or higher in any area of study other than CBSY, CPSC, or INFO.		3
	Credits	**30**
Year 4		
INFO Core Courses		
INFO 4190	Integration Project I	3
INFO 4290	Integration Project II	3
INFO 4310	Entrepreneurial Development in Information Technology	3

INFO Electives [1]

Select five of the following:		15
INFO 4105	Search Engine Principles	
INFO 4110	Cloud Computing	
INFO 4115	Human Factors and Website Design	
INFO 4120	Digital Forensics	
INFO 4125	Website and Cloud Security	
INFO 4235	Special Topics in Web and Mobile Application Development	
INFO 4260	Networking Technologies IV	
INFO 4330	Data Warehousing and Data Mining	
INFO 4370	Security of Wireless Systems	
INFO 4381	Internet of Things and Applications	
Breadth Electives		
Select two courses numbered 1100 or higher in any area of study other than CBSY, CPSC, or INFO.		6
	Credits	**30**
	Total Credits	**120**

[1] Students are advised to choose electives that match their career objectives. The examples of course combinations listed below are useful references.

Network Administration and Security - Students that plan a career in network administration and security are recommended to complete the following elective courses:

Code	Title	Credits
INFO 3171	System Security	3
INFO 3180	Wireless Networks	3
INFO 3240	Enterprise Resource Planning Systems	3
INFO 3390	Networking Technologies III	3
INFO 4110	Cloud Computing	3
INFO 4120	Digital Forensics	3
INFO 4260	Networking Technologies IV	3
INFO 4370	Security of Wireless Systems	3
INFO 4381	Internet of Things and Applications	3

Mobile and Web Application Development - Students that plan a career in mobile and and web application development are recommended to complete the following elective courses:

Code	Title	Credits
INFO 3135	Advanced Web Application Development	3
INFO 3225	Web Multimedia	3
INFO 3235	Software Quality Assurance	3
INFO 3245	Mobile Programming	3
INFO 4105	Search Engine Principles	3
INFO 4115	Human Factors and Website Design	3
INFO 4125	Website and Cloud Security	3
INFO 4235	Special Topics in Web and Mobile Application Development	3
INFO 4330	Data Warehousing and Data Mining	3

Credential Awarded

Upon successful completion of this program, students are eligible to receive a **Bachelor of Technology in Information Technology**.

Co-op Requirements
Co-operative Education

The Bachelor of Technology in Information Technology degree is offered with a Co-operative Education option. Co-operative Education gives a student the opportunity to apply the skills gained during academic study in paid, practical work experience semesters. Degree students can complete a minimum of three work terms while completing their degree. Work terms generally occur full-time in separate 4 month work semesters. Work semesters alternate with academic study.

Students wishing to enter and participate in the Co-op Option must meet the following requirements:

Declaration and Entrance Requirements

- Declaration into the Bachelor of Technology in Information Technology
- Declaration of the Co-operative Education option prior to completion of 90 credits for the Btech in Information Technology program
- Minimum program GPA of 2.5

Work Term and Program Continuance Requirements

Procedures for enrolment in Co-operative Education work terms are outlined in the COOP course descriptions. Conditions for continuance in the program are:

- Successful completion of COOP 1101 prior to completing 90 credits for the Bachelor of Technology in Information Technology
- Minimum program GPA of 2.5
- Instructor Permission

Co-op students are advised to consult kpu.ca/co-op (https://www.kpu.ca/co-op/) for information about course enrolment and work term placements.

Co-op Course Requirements

The Co-operative Education designation requires successful completion of the following courses:

Code	Title	Credits
COOP 1101	Introduction to Professional and Career Readiness	1
COOP 1150	Co-op Work Semester 1	9
COOP 2150	Co-op Work Semester 2	9
COOP 3150	Co-op Work Semester 3	9
Optional:		
COOP 4150	Co-op Work Semester 4	
Total Credits		**28**

Note: COOP courses must be completed in ascending numerical order. Contact the Co-op office for information about the possibility of part-time work terms. COOP courses may be used only to satisfy the Co-op designation and cannot be used to satisfy other curricular requirements of the program.

Additional Requirements

In addition to the requirements stated above, all Co-op students must satisfy the General Co-operative Education Requirements (https://calendar.kpu.ca/academic-regulations/co-operative-education/).

Other Information

Students enrolled in this program are expected to have their own laptop computers.

Credential Awarded

Upon successful completion of this program with co-operative education, students are eligible to receive a **Bachelor of Technology in Information Technology, Co-operative Education Option**.