49

# SECTION 9: FACULTY OF BUSINESS AND INFORMATION TECHNOLOGY

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# 9.1 Degrees offered

Bachelor of Commerce (Honours) - BCom (Hons)

- Accounting major and minor
- · E-Commerce major and minor
- · Finance major and minor
- Marketing major and minor

Bachelor of Information Technology (Honours) - BIT (Hons)

- · Game Development and Entrepreneurship specialization
- Information Technology Security specialization
- Networking specialization

The Faculty of Business and Information Technology offers innovative degree programs in Commerce and Information Technology. By placing a strong emphasis on how technology can enhance business opportunities, students are prepared to launch successful careers in business and industry.

The faculty's research focuses in the areas of business process integration and management, risk management, international business, marketing, corporate governance, and information technology security. The faculty also promotes commercialization of technology.

A Master of Information Technology Security (MITS) program is also available. Section 17 of this calendar provides information about the graduate programs offered at UOIT.

#### 9.2 Program information – Bachelor of Commerce (Honours)

# 9.2.1 General information

The Bachelor of Commerce (Honours) degree prepares graduates with strong employability skills and the foundations for excellence in managing business corporations.

Organizations are examined from a number of perspectives, including how they are managed and the changing environments in which they operate. National and international contexts of business are explored, along with relevant issues facing managers in business, labour and the public sector.

Students receive extensive practice in applying theory to the processes of decision-making and problem-solving through computer-based exercises and simulations, case study analyses, problem-based learning activities and field-based projects.

Year two, the core year, is an introduction to each of the functional areas of business— accounting, e-commerce, finance, human resources, and marketing—and an examination of the ways in which these are integrated within an operation. In years three and four, students may choose to specialize in one or more functional areas, such as accounting, marketing, finance or e-commerce. In year four, students benefit from the UOIT Edge Capstone Study Project and Strategic Management courses.

These unique courses provide an opportunity to consolidate learning from earlier years of the program on the site of a partnering organization and under the supervision of both university faculty and the organization's management team. In lieu of UOIT Edge Capstone Study Project, qualified students may also enrol in the internship program as described in Section 9.2.3.

51

#### 9.2.2 Admission requirements

Current Ontario secondary school students must complete the Ontario Secondary School Diploma (OSSD) with a minimum overall average of 70 per cent on six 4U or 4M credits including English (ENG4U) and one math (MHF4U or MCV4U or MDM4U). All other applicants should refer to section 4.5 of this calendar for the requirements for their specific category of admission.

# 9.2.3 Internship program

This program offers students who have successfully completed all the requirements for the third year, including having achieved a cumulative 3.3 GPA (B+) average, an opportunity to engage in a contracted learning partnership with businesses in the Durham region or around the globe. Our faculty may provide links to various internship placement opportunities or a student may secure an employer who meets the criteria as prescribed by the Faculty of Business and Information Technology. The internship program not only gives students an opportunity to apply classroom concepts to the challenges of organizational life, but also helps them to gain valuable and relevant work experience to promote networking and life-long career success. Participating employers are given the opportunity to bring the motivated learners, thinkers, and doers of tomorrow into their workplaces, as well as provide valuable mentoring to students.

The internship program placement equates to 560 hours of progressive business and management experience, on either a full-time or a part-time basis. The intern's wages (stipulated in a contract) are paid by the sponsoring business over a contracted period. Successful work placement completion and both a verbal and written final report will result in the intern receiving a mark and six credits toward the BCom (Hons) degree requirements. Students who have successfully completed the Internship program are not required to take the UOIT Edge Capstone Study Project.

#### 9.2.4 Careers

Employment opportunities are well above average, with a range of career possibilities or continuation of studies at graduate school. High demand exists for accountants, auditors, financial investment analysts, information technology experts, market research analysts, marketing managers, advertising executives, e-commerce consultants, and e-marketing managers.

#### 9.2.5 Degree requirements

To be eligible for the BCom (Hons) degree, students must successfully complete 120 credit hours, including all courses outlined below. For course descriptions, see section 16.

Beginning fall 2008, students may choose a major in one of the following four areas: Accounting, E-Commerce, Finance, and Marketing. As an option, students may also complete a minor from one of the abovementioned areas. Refer to section 9.2.6 for detailed requirements for each major and minor.

Students who commenced the BCom program as of fall 2006 may choose between the previous concentration program (refer to UOIT 2007-2008 Academic Calendar for detailed program requirements) and the new major program. Students must meet with their academic advisors to administer the change and discuss course options.

Although reasonable efforts will be made to adhere to the order and timing of courses as indicated below, course requirements and term offerings may change. For the most up-to-date list of course offerings please visit the faculty website at www.businessandit.uoit.ca.

#### YEAR 1

Semester 1 (15 credit hours) BUSI 1600U Management of the Enterprise BUSI 1830U Introduction to Programming BUSI 1900U Mathematical Foundations for Business ECON 2010U Microeconomics Elective\* Semester 2 (15 credit hours) BUSI 1450U Statistics BUSI 1650U External Environment of Management BUSI 2000U Collaborative Leadership BUSI 2150U Financial Accounting I

ECON 2020U Macroeconomics

# YEAR 2

#### Semester 1 (15 credit hours)

BUSI 2160U Financial Accounting II BUSI 2201U Marketing I BUSI 2311U Organizational Behaviour BUSI 2401U Finance I BUSI 2603U Introduction to Operations Management Semester 2 (15 credit hours) BUSI 2170U Managerial Accounting

BUSI 21700 Managerial Accounting BUSI 22020 Marketing II BUSI 23120 Introduction to Human Resources Management BUSI 24020 Finance II BUSI 26040 Introduction to Project Management and Supply Chain Management

# YEAR 3

Semester 1 (15 credit hours) BUSI 3040U Information Systems Major course Elective\* Semester 2 (15 credit hours) Major course Major course Elective\* Elective\* Elective\* Elective\*

#### YEAR 4

Semester 1 (15 credit hours) BUSI 4701U Strategic Management I BUSI 4991U UOIT Edge I – Capstone Study Project Major course Elective\* Semester 2 (15 credit hours) BUSI 4702U Strategic Management II

BUSI 47020 Strategic Management II BUSI 49920 UOIT Edge II – Capstone Study Project Major course Elective\* Elective\*

#### \*ELECTIVES

A total of 24 credit hours which must consist of:

- · No more than 6 credit hours in BUSI courses which are NOT considered core or major requirements;
- · No more than 6 credit hours in any BUSI major electives;
- · At least 12 credit hours in the area outside Business (BUSI prefix);
- · Accounting major: At least 12 credit hours must be in the area outside Business (BUSI prefix).

# 9.2.6 Program details - Accounting major and minor

#### 9.2.6.1 Accounting major

The Accounting major is designed for students interested in careers as professional accountants. The program will allow students to meet the course requirements of the three Canadian accounting professional designations: Chartered Accountant (CA), Certified Management Accountant (CMA), and Certified General Accountant (CGA). The program provides a heavy emphasis on accounting-related courses combined with broad coverage of the major business disciplines.

A major in Accounting requires a minimum of 30 credit hours in accounting courses. Students must complete six accounting core courses and a minimum of four accounting elective courses.

#### Accounting core courses:

BUSI 2150U Financial Accounting I BUSI 2160U Financial Accounting II BUSI 2170U Managerial Accounting BUSI 3101U Intermediate Financial Accounting I BUSI 3102U Intermediate Financial Accounting II

Plus one of: BUSI 3110U Introduction to Taxation or BUSI 3170U Auditing Standards and Applications or BUSI 3160U Advanced Managerial Accounting

## Accounting electives

Note: Accounting core courses may not be used as accounting electives.

BUSI 3110 Introduction to Taxation
BUSI 3120 Advanced Taxation
BUSI 3150 Financial Statement Analysis
BUSI 3160 Advanced Managerial Accounting
BUSI 3170 Auditing Standards and Applications
BUSI 3171 Advanced Auditing
BUSI 3172 Auditing Information Systems
BUSI 4101 Advanced Financial Accounting
BUSI 4140 Contemporary Issues in Accounting
BUSI 4190 Special Topics in Accounting

## 9.2.6.2 Accounting minor

The Bachelor of Commerce degree with an Accounting minor requires a minimum of 18 credit hours in accounting courses. Students must complete four accounting core courses and a minimum of two accounting elective courses.

#### Accounting core courses:

BUSI 2150U Financial Accounting I BUSI 2160U Financial Accounting II BUSI 2170U Managerial Accounting BUSI 3101U Intermediate Financial Accounting I

#### Accounting Electives:

BUSI 3110U Introduction to Taxation BUSI 3120U Advanced Taxation BUSI 3150U Financial Statement Analysis BUSI 3160U Advanced Managerial Accounting BUSI 3170U Auditing Standards and Applications BUSI 3171U Advanced Auditing BUSI 3172U Auditing Information Systems BUSI 4101U Advanced Financial Accounting BUSI 4140U Contemporary Issues in Accounting BUSI 4190U Special Topics in Accounting

# 9.2.6.3 Accounting Professional Designations

The following courses are offered to meet the requirements of the professional designations indicated:

Course	Title	CA1	CMA <sup>4</sup>	CGA <sup>6, 7</sup>
BUSI 1101U	Financial Accounting	$\sqrt{2}$	$\sqrt{5}$	$\sqrt{5}$
BUSI 1450U	Statistics		$\checkmark$	$\checkmark$
BUSI 2150U	Financial Accounting I	$\checkmark$	$\checkmark$	$\checkmark$

BUSI 2160U	Financial Accounting II	$\checkmark$	$\checkmark$	$\checkmark$
BUSI 2170U	Managerial Accounting	$\checkmark$	$\checkmark$	$\checkmark$
BUSI 3101U	Intermediate Financial Accounting I	$\checkmark$	$\checkmark$	$\checkmark$
BUSI 3102U	Intermediate Financial Accounting II	$\checkmark$	$\checkmark$	$\checkmark$
BUSI 3110U	Introduction to Taxation	$\checkmark$	$\checkmark$	$\checkmark$
BUSI 3120U	Advanced Taxation	$\checkmark$		$\checkmark$
BUSI 3160U	Advanced Managerial Accounting	$\checkmark$	$\checkmark$	$\sqrt{8}$
BUSI 3170U	Auditing Standards and Applications I	$\checkmark$	$\checkmark$	$\checkmark$
BUSI 3171U	Advanced Auditing	$\checkmark$		$\sqrt{8}$
BUSI 3172U	Auditing Information Systems	$\checkmark$		
BUSI 4101U	Advanced Financial Accounting	$\checkmark$	$\checkmark$	$\checkmark$
BUSI 4140U	Contemporary Issues in Accounting	√3		√9
BUSI 4190U	Special Topics in Accounting—Critical Thinking, Analysis and Decision Making	√ <sup>3,9</sup>		
BUSI 3150U	Financial Statement Analysis	√3		
BUSI 2201U	Marketing I		$\checkmark$	
BUSI 2202U	Marketing II		$\checkmark$	
BUSI 2311U	Organizational Behaviour		$\checkmark$	
BUSI 2312U	Introduction to Human Resources Management		$\checkmark$	
BUSI 2401U	Finance I	$\checkmark$	$\checkmark$	$\checkmark$
BUSI 2402U	Finance II	$\checkmark$	$\checkmark$	$\checkmark$
BUSI 2603U	Introduction to Operations Management		$\checkmark$	$\checkmark$
BUSI 2604U	Intro to Project Management and Supply Chain Management			$\checkmark$
BUSI 2705U	Legal Environment of Business	$\checkmark$		$\checkmark$
BUSI 3040U	Information Systems	$\checkmark$	$\checkmark$	$\checkmark$
BUSI 3800U	International Business		$\checkmark$	
BUSI 4410U	Advanced Corporate Finance			$\sqrt{8}$
BUSI 4701U	Strategic Management I		$\checkmark$	
BUSI 4702U	Strategic Management II		$\checkmark$	
ECON 2010U	Microeconomics	$\checkmark$	$\checkmark$	$\checkmark$
ECON 2020U	Macroeconomics	$\checkmark$	$\checkmark$	$\checkmark$
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<sup>1</sup> UOIT's accounting major program enables students to fulfill all 51 credit hours required by the Institute of Chartered Accountants of Ontario.

<sup>2</sup> Students in the UOIT Bridge Program take BUSI 1101 instead of BUSI 2150 and 2160. To meet the advanced accounting requirements and to obtain the necessary 51 credit hours required by the Institute of Chartered Accountants of Ontario, students who complete BUSI 1101 should take BUSI 4101 plus two of BUSI 3150, BUSI 4140, and BUSI 4190.

<sup>3</sup> To meet the advanced accounting requirements of the Institute of Chartered Accountants of Ontario students in the Bachelor of Commerce Program should take BUSI 4101 plus one of BUSI 3150, BUSI 4140, and BUSI 4190. For students who complete BUSI 1101 instead of BUSI 2150 and 2160, please see note 2 above.

<sup>4</sup> UOIT's accounting major program enables students to complete the prerequisite courses for the CMA program and be eligible to write the CMA Entrance Examination in the year of graduation.

<sup>5</sup> Students in the UOIT Bridge Program take BUSI 1101 instead of BUSI 2150 and 2160.

<sup>6</sup> Other CGA requirements may be fulfilled by the completion of other UOIT courses. Please see the Faculty of Business and Information Technology for advice.

- <sup>7</sup> Some CGA courses are subject to a challenge exam by CGA Ontario. See CGA Ontario's transfer credit policies for more information.
- <sup>8</sup> These courses are currently under review by CGA Ontario. When they are approved they will meet the requirements for a challenge exam as a PACE-level course by CGA Ontario.

<sup>9</sup> May not be offered every year.

Note: Please verify with your intended designation's accreditation institute, or online through their website.

# 9.2.7 Program details - E-Commerce major and minor

# 9.2.7.1 E-Commerce major

The Bachelor of Commerce degree with a major in E-Commerce requires a minimum of 30 credit hours in e-commerce courses. Students must complete six e-commerce core courses and a minimum of four E-Commerce elective courses.

# E-Commerce core courses:

BUSI 1830U Introduction to Programming BUSI 3501U E-Business Technologies (formerly BUSI 2501U) BUSI 3502U E-Commerce (formerly BUSI 2502U) BUSI 3503U E-Marketing BUSI 3510U Internet Engineering BUSI 3570U Server and Network Administration

# E-Commerce electives:

BUSI 3520U Applied Internet Multimedia BUSI 3530U Website Design and Management (formerly HTML and Website Design and Management) BUSI 3540U Object Oriented Programming BUSI 4590U Special Topics in E-Business and E-Commerce BUSI 4599U Directed Independent Study in E-Business and E-Commerce INFR 3810U Database Systems

# 9.2.7.2 E-Commerce minor

The Bachelor of Commerce degree with an e-commerce minor requires a minimum of 18 credit hours in e-commerce courses. Students must complete four e-commerce core courses and a minimum of two e-commerce elective courses.

# E-Commerce core courses:

BUSI 1830U Introduction to Programming BUSI 3501U E-Business Technologies (formerly BUSI 2501U) BUSI 3502U E-Commerce (formerly BUSI 2502U) BUSI 3510U Internet Engineering

# E-commerce electives:

BUSI 3503U E-Marketing BUSI 3570U Server and Network Administration BUSI 3520U Applied Internet Multimedia BUSI 3530U Internet Engineering BUSI 3530U Website Design and Management (formerly HTML and Website Design and Management) BUSI 3540U Object Oriented Programming BUSI 4590U Special Topics in E-Business and E-Commerce BUSI 4599U Directed Independent Study in E-Business and E-Commerce INFR 3810U Database Systems

# 9.2.8 Program details – Finance major and minor

The major in finance is offered to students interested in careers in corporate and government finance, banking, financial planning and investments. Finance graduates pursue a career with jobs such as financial analysts, loan officers, traders (in markets such as stocks, bonds, currencies,

futures, options and swaps), portfolio managers, security analysts, credit managers, budget directors, investment advisors, treasurers, financial planners, insurance representatives, and investment bankers. The finance major curriculum offers a variety of courses with topic coverage in equity analysis, derivative securities, portfolio management, fixed income security analysis, working capital management, advanced corporate finance applications and mergers and acquisitions to name a few.

## 9.2.8.1 Finance major

The Finance major in the Bachelor of Commerce program requires a minimum of 30 credit hours in finance courses. Students must complete six required finance courses and a minimum of four finance elective courses.

## Finance core courses:

BUSI 2401U Finance I BUSI 2402U Finance II BUSI 3405U Equity Asset Analysis (formerly Investments) BUSI 3410U Financial Institutions BUSI 3420U Derivative Securities BUSI 4410U Advanced Corporate Finance Applications

#### Finance elective courses:

BUSI 3430U Personal Finance
BUSI 3440U Financial Application Tools
BUSI 3480U International Finance
BUSI 3460U Fixed Income Strategies
BUSI 3150U Financial Statement Analysis
BUSI 4405U Portfolio and Investment Strategies
BUSI 4420U Working Capital Management
BUSI 4430U Mergers and Acquisitions
BUSI 4490U Special Projects in Finance
BUSI 4499U Directed Independent Studies in Finance

#### 9.2.8.2 Finance minor

The major in Finance is offered to students interested in careers in corporate finance, government finance, banking, financial planning and investments. Finance graduates pursue a career with jobs such as financial analysts, loan officers, traders (in markets such as stocks, bonds, currencies, futures, options and swaps), portfolio managers, security analysts, credit managers, budget directors, investment advisors, treasurers, financial planners, insurance representatives, and investment bankers. The finance major curriculum offers a variety of courses with topic coverage in equity analysis, derivative securities, portfolio management, fixed income security analysis, working capital management, advanced corporate finance applications and mergers and acquisitions to name a few.

The Finance minor in the Bachelor of Commerce program requires a minimum of 18 credit hours in finance courses. Students must complete four required finance courses and a minimum of two additional finance courses.

#### Finance required courses for the minor:

BUSI 2401U Finance I BUSI 2402U Finance II BUSI 3410U Financial Institutions BUSI 3430U Personal Finance

## Finance minor elective courses:

BUSI 3405U Equity Asset Analysis (formerly Investments) BUSI 3420U Derivative Securities BUSI 4410U Advanced Corporate Finance Applications BUSI 3440U Financial Application Tools BUSI 3480U International Finance BUSI 3460U Fixed Income Strategies BUSI 3150U Financial Statement Analysis BUSI 4405U Portfolio and Investment Strategies BUSI 4420U Working Capital Management BUSI 4430U Mergers and Acquisitions BUSI 4490U Directed Independent Studies in Finance BUSI 4499U Special Projects in Finance

#### 9.2.9 Program details - Marketing major and minor

The Marketing major provides students with rigorous training in the topics of consumer behaviour, marketing research, advertising, promotions, and strategy formulation in a dynamic marketing environment. The curriculum is designed to prepare students with the latest skills and perspectives essential for careers in marketing, advertising, sales management, product/brand management, retailing, e-marketing and marketing research. The use of technology, including simulations, internet exercises, projects and marketing software, is emphasized as a strong component of the different major courses in marketing.

#### 9.2.9.1 Marketing major

The Bachelor of Commerce degree with a major in Marketing requires a minimum of 30 credit hours in marketing courses. Students must complete six marketing core courses and a minimum of four marketing elective courses.

#### Marketing core courses:

BUSI 2201U Marketing I BUSI 2202U Marketing II BUSI 3503U E-Marketing BUSI 3210U Consumer Behaviour BUSI 3260U Marketing Research BUSI 4220U Marketing Strategy

#### Marketing electives:

BUSI 3200U Marketing Communications BUSI 3280U Brand Management BUSI 3220U Sales Management BUSI 3250U Service Marketing BUSI 4203U Advertising Management BUSI 4240U Retail Management BUSI 4250U International Marketing BUSI 4270U Business to Business Marketing BUSI 4290U Special Topics in Marketing BUSI 4299U Directed Independent Study in Marketing

#### 9.2.9.2 Marketing minor

The Bachelor of Commerce degree with a minor in Marketing requires a minimum of 18 credit hours in marketing courses. Students must complete four Marketing core courses and a minimum of two marketing elective courses.

#### Marketing core courses:

BUSI 2201U Marketing I BUSI 2202U Marketing II BUSI 3210U Consumer Behaviour BUSI 3260U Marketing Research

## Marketing electives:

BUSI 3200U Marketing Communications BUSI 3280U Brand Management BUSI 3220U Sales Management BUSI 3250U Service Marketing

- BUSI 3503U E-Marketing
- BUSI 4203U Advertising Management
- BUSI 4220U Marketing Strategy
- **BUSI 4240U Retail Management**
- BUSI 4250U International Marketing
- BUSI 4270U Business to Business Marketing
- BUSI 4290U Special Topics in Marketing
- BUSI 4299U Directed Independent Study in Marketing

## 9.3 Program information – Commerce Bridge program

## 9.3.1 General information

The Commerce Bridge provides students with the opportunity to apply the diploma or degree they have already earned toward a Bachelor of Commerce (Honours) degree at UOIT.

Students enrolled in the Commerce Bridge program can complete five bridge courses in as little as one semester of study (dependent on minimum enrolment). Upon successful completion of the bridge program with a cumulative B average (3.0 GPA) or better, students may apply directly to the third year of the Bachelor of Commerce (Honours) degree at UOIT.

#### 9.3.2 Admission requirements

To qualify for the Commerce Bridge program, students must have a minimum of any two-year college diploma with a cumulative A average or better; or any three-year university degree with a cumulative B average or better.

#### 9.3.3.3 Bridge completion requirements

Graduates of business programs

- BUSI 1101U Financial Accounting;
- BUSI 2170U Managerial Accounting;
- BUSI 2401U Finance I;
- · BUSI 2402U Finance II; and
- Non-Business Elective.

Graduates of non-business programs

- BUSI 1101U Financial Accounting;
- BUSI 2170U Managerial Accounting;
- BUSI 2401U Finance I;
- · BUSI 2402U Finance II; and
- BUSI 1450U Statistics.

## 9.4 Program information – Bachelor of Information Technology (Honours)

## 9.4.1 General information

The information technology (IT) profession requires university graduates who have the necessary education and skills to work in the fast-paced world of IT. UOIT's Bachelor of Information Technology (Honours) degree offers three specializations, including Game Development and Entrepreneurship, Information Technology Security, and Networking. Each specialization provides students with the knowledge and skills to be successful in the IT field.

# 9.4.2 Admission requirements

As part of the application process, applicants to the BIT – Game Development and Entrepreneurship program must submit a portfolio showcasing the creativity they would bring to the program. A separate submission form will be available from the UOIT website.

#### 9.4.3 Field placement opportunities

The program offers students who have successfully completed all the requirements of the first three years of the information technology program with an opportunity to engage in a contracted learning partnership with businesses in the Durham and GTA region as well as around the globe. The student secures an employer who meets the criteria as prescribed by the Faculty of Business and

Information Technology. The internship program not only gives students an opportunity to apply classroom concepts to the challenges of organizational life, but also helps them to gain valuable and relevant work experience to promote networking and life-long career success. Participating employers are given the opportunity to bring the motivated learners, thinkers, and doers of tomorrow into their workplaces, as well as provide valuable mentoring to students.

An internship placement equates to 560 hours of progressive experience, on either a full-time or a part-time basis. Successful work placement completion and final report submission will result in the intern receiving a mark and six credits toward the BIT (Hons) degree requirements.

Admission to the internship program is competitive and applicants must have a minimum cumulative 3.3 GPA (B+) average to be eligible.

#### 9.4.4 Careers

Graduates from the Game Development and Entrepreneurship specialization are prepared for all roles in the game development field and are equipped with the knowledge required to launch their own game development enterprise.

The specializations in both Information Technology Security and Networking prepare students for management, supervisory or specialist roles as information security officers, network administrators, technical support managers, IT trainers, database managers, custom PC application developers, and many other careers.

The Bachelor of Information Technology (Honours) prepares graduates for a variety of post-graduate opportunities.

## 9.4.5 Program details and degree requirements

#### 9.4.5.1 Program details – Game Development and Entrepreneurship specialization

Game Development and Entrepreneurship is designed to provide students with a wide range of game design and programming expertise. Students are introduced to game technology and theory, and to the artistic and creative aspects of game development. An innovative gaming and virtual reality laboratory is central to the program and features state-of-the-art equipment, including 30 Dell XPS 720 workstations, motion capture facilities, an audiometric (sound) room, and 3D (stereo projector) displays. Students acquire business and management knowledge and develop entrepreneurial skills, allowing graduates to quickly advance their careers in the game industry as employees or entrepreneurs in charge of developing and managing their own gaming businesses.

Although reasonable efforts will be made to adhere to the order and timing of courses as indicated below, course requirements and term offerings may change. For the most up-to-date list of course offerings please visit the faculty website at www.businessandit.uoit.ca.

## YEAR 1

## Semester 1 (15 credit hours)

INFR 1010U Discrete Mathematics INFR 1300U Creative Writing and Narrative Concepts INFR 1310U Graphic Design I (formerly Drawing I) INFR 1500U Information Technology General elective\*

Semester 2 (15 credit hours) BUSI 1700U Introduction to Entrepreneurship INFR 1015U Linear Algebra and Physics for Games INFR 1100U Introduction to Programming INFR 1320U Graphic Design II (formerly Graphic Design) General elective\*

# YEAR 2

# Semester 1 (15 credit hours)

BUSI 2205U Principles of Marketing (formerly Marketing in the Information Technology Sector) INFR 1350U Photographic and Image Processing Techniques (formerly Imaging I) INFR 2140U Object Oriented Programming INFR 2310U Computer Animation: Algorithms & Techniques (formerly Drawing II (Animation))

INFR 2810U Computer Architecture

## Semester 2 (15 credit hours)

BUSI 2120U Accounting for IT INFR 2330U Game Design and Production I INFR 2350U Introduction to Computer Graphics INFR 2370U Sound and Audio INFR 2820U Algorithms and Data Structures

# YEAR 3

# Semester 1 (15 credit hours)

INFR 2550U Information Technology Project Management BUSI 2700U Entrepreneurial Finance INFR 3110U Game Engine Design and Implementation INFR 3310U Advanced Graphics and Animation General Elective\* Semester 2 (15 credit hours)

INFR 3320U Filmmaking INFR 3330U Game Design and Production II INFR 3340U Intermediate Animation Techniques INFR 3830U Distributed Computing General elective\*

#### YEAR 4

#### Semester 1 (15 credit hours)

BUSI 3750U Advanced Entrepreneurship BUSI 4991U UOIT Edge I – Capstone Study Project INFR 4310U Multiplayer and Online Game Development (formerly Internet Gaming Development) INFR 4320U Artificial Intelligence for Gaming (formerly Artificial Intelligence for Simulations and Gaming) General elective\*

# Semester 2 (15 credit hours)

BUSI 4992U UOIT Edge II – Capstone Study Project INFR 4340U Business of Gaming (formerly Game Production and Documentation) INFR 4350U Virtual Reality and User Interaction (formerly Immersive Environments, Virtual Reality) INFR 4390U Project & Portfolio Development (formerly Design Studio) General elective\*

#### 9.4.5.2 Program details - Information Technology Security specialization

There has never been a greater need for professionals trained in network security. The BIT (Hons) specialization in Information Technology Security provides students with a background in networking and security. The coursework prepares graduates to manage the continuing changes and challenges of the IT security profession.

Although reasonable efforts will be made to adhere to the order and timing of courses as indicated below, course requirements and term offerings may change. For the most up-to-date list of course offerings please visit the faculty website at www.businessandit.uoit.ca.

#### YEAR 1

# Semester 1 (15 credit hours)

EDUC 1050U Technical Communications INFR 1010U Discrete Mathematics INFR 1410U Networking Basics, Routers and Routing Basics INFR 1500U Information Technology General elective\*

Semester 2 (15 credit hours) BUSI 1700U Introduction to Entrepreneurship BUSI 2000U Collaborative Leadership INFR 1016U Introductory Calculus INFR 1100U Introduction to Programming INFR 1420U Switching Basics, Intermediate Routing and WAN Technologies

## YEAR 2

## Semester 1 (15 credit hours)

INFR 2140U Object Oriented Programming INFR 2470U CISCO Security I: Fundamentals of Network Security INFR 2570U Cybercrime INFR 2810U Computer Architecture General elective\*

Semester 2 (15 credit hours)

INFR 2480U CISCO Security II: Network Security INFR 2550U Information Technology Project Management INFR 2820U Algorithms and Data Structures INFR 2830U Operating Systems General elective\*

# YEAR 3

# Semester 1 (15 credit hours)

INFR 3120U Web Programming INFR 3710U Signals and Random Processes INFR 3810U Database Systems INFR 2610U OS Security I: Windows General elective\*

Semester 2 (15 credit hours) INFR 2620U OS Security II: Unix INFR 3720U Basics of Digital Transmission INFR 3850U Enterprise Network Management INFR 4550U Law and Ethics of IT General elective\*

#### YEAR 4

#### Semester 1 (15 credit hours)

BUSI 4991U UOIT Edge I – Capstone Study Project INFR 4620U Emerging IT Security Technologies INFR 4630U Malware Worms and Viruses INFR 4750U Advanced Communications Networks General elective\*

Semester 2 (15 credit hours) BUSI 4992U UOIT Edge II – Capstone Study Project

INFR 4640U Web Services Security

INFR 4650U VPN and Data Privacy

INFR 4660U E-Business Security

INFR 4680U IT Security Policies and Procedures

#### 9.4.5.3 Program details - Networking specialization

Computer networking has become an integral part of today's business environment. The specialization in Networking prepares graduates with knowledge and skills in planning, designing, installing, operating, and managing information technology infrastructure. The core curriculum includes mandatory courses in business and management, providing students with the necessary business background to make significant contributions in today's workplace. This program also prepares graduates for all three levels of the Cisco certification program, namely, Cisco Certified Network Associate (CCNA®), Cisco Certified Network Professional (CCNP®), and Cisco Certified Internetwork Expert (CCIE®).

Although reasonable efforts will be made to adhere to the order and timing of courses as indicated below, course requirements and term offerings may change. For the most up-to-date list of course offerings please visit the faculty website at www.businessandit.uoit.ca.

# YEAR 1

## Semester 1 (15 credit hours)

EDUC 1050U Technical Communications INFR 1010U Discrete Mathematics INFR 1410U Networking Basics, Routers and Routing Basics INFR 1500U Information Technology General elective\*

#### Semester 2 (15 credit hours)

BUSI 1700U Introduction to Entrepreneurship BUSI 2000U Collaborative Leadership INFR 1016U Introductory Calculus INFR 1100U Introduction to Programming INFR 1420U Switching Basics, Intermediate Routing and WAN Technologies

#### YEAR 2

## Semester 1 (15 credit hours)

BUSI 2205U Principles of Marketing INFR 2140U Object Oriented Programming INFR 2410U Advanced Routing and Remote Access INFR 2810U Computer Architecture General elective\*

Semester 2 (15 credit hours) INFR 2420U Multilayer Switching INFR 2550U Information Technology Project Management INFR 2820U Algorithms and Data Structures INFR 2830U Operating Systems General elective\*

#### YEAR 3

#### Semester 1 (15 credit hours)

INFR 2430U Network Troubleshooting INFR 3120U Web Programming INFR 3710U Signals and Random Processes INFR 3810U Database Systems General elective\* Semester 2 (15 credit hours)

BUSI 2501U E-Business Technologies INFR 3720U Basics of Digital Transmission INFR 3850U Enterprise Network Management INFR 4410U Routing/Switching and Service Providers General elective\*

# YEAR 4

Semester 1 (15 credit hours) BUSI 4991U UOIT Edge I – Capstone Study Project INFR 3730U Multimedia Systems INFR 4420U Security INFR 4750U Advanced Communication Networks General elective\* Semester 2 (15 credit hours)

BUSI 4992U UOIT Edge II – Capstone Study Project INFR 4430U Voice INFR 4550U Law and Ethics of IT INFR 4610U IT Security INFR 4760U Network Performance Analysis

#### \*General elective

Students may select any non-INFR course from any faculty, subject to credit restrictions. See course descriptions in section 16.