Bachelor of Technology (Business Systems Development) (Honours) (Co-op)Pathway for Computer Programming and Computer Engineering Technology - Computing Science

Honours Degree

Program Code: 6520A03FWO

4 Years

Ottawa Campus

Our Program

Today`s global business environment requires students that have developed the ability to become technology professionals capable of creating and implementing information and communications technology solutions to achieve competitive advantages, productivity gains, and innovation.

This four-year degree program prepares students for a career in business software systems development and technology management by providing skills and competencies in two closely related disciplines, technology and business. Our program curriculum provides the necessary key knowledge in software development and business technology management required by business and offers students the opportunity to use, develop, and research emerging business technologies such as mobile and wearable computing, artificial intelligence and agent technologies. Graduates of the Computer Programming Ontario College Diploma or Computer Engineering Technology - Computing Science Ontario College Advanced Diploma receive credit for 16 courses, entering the program in Level 05, and reducing the time to completion to 2 years.

Students gain practical experience in technology project management, systems analysis and design, software development and implementation, data analysis, database technologies, operating systems, web applications and information security. When combined with knowledge of business principles, economics, accounting, internal audit and human resource management, students develop a unique skill set critical for strategic information and communications technology development environments.

Students also gain real-world experience through a paid co-operative education (co-op) work term (s) (see Additional Information for more details). Please note that places in the co-op work term(s) are subject to availability and academic eligibility. Please note admission to a co-op program does not guarantee a co-op placement.

Graduates have a unique blend of applied knowledge and skills in core competencies in software development and business, including the project management book of knowledge (PMBOK) and the business analysis book of knowledge (BABOK). Students gain significant hands-on experience through online, in-class, simulation-based learning experiences and experiential learning activities such as co-op work terms and interdisciplinary final year team-based projects. The combination of knowledge, skills and experience allows students to integrate quickly into the complex global technology and business workforce in entry-level information communications technology positions.

The Bachelor of Technology (Business Systems Development) (Honours) program is aligned with the learning outcomes and competencies published by the Business Technology Management (BTM) standards. Algonquin College has initiated the accreditation process with BTM.

SUCCESS FACTORS

This program is well suited for students who:

- Possess strong analytical, logical, critical-thinking and interpersonal skills.

- Succeed working independently and collaboratively in problem-solving teams.

- Are interested in working in diverse situations spanning business, and technology.

- Enjoy working with computers, mobile devices and up-to-date technology.

- Appreciate working in a creative environment, and challenging their beliefs through exposure to a diversity of opinions.

Employment

Graduates may find employment in municipal, provincial and federal government as well as within the private sector as business systems solution providers. Opportunities include employment as business systems analysts, systems designers, database analysts, database developers, business IT project managers, software developers, programmers and internal IT audit.

With the BTM alignment, graduates become cross discipline savvy, able to bridge technology and business being able to seek employment in entry-level business positions.

Learning Outcomes

The graduate has reliably demonstrated the ability to:

- Analyze, design, develop, implement and maintain business systems and/or components to support strategic business requirements.

- Manage the process of evaluating, selecting and using business systems.

- Develop and improve business systems by applying accepted methodologies, theories, concepts and practices.

- Manage data using appropriate methodologies and standards to improve business processes and decision-making.

- Apply the Project Management Institute`s Body of Knowledge to business systems software engineering projects.

- Apply security principles and practices in systems development and the systems environment.

- Apply principles and skills of business management, leadership and change management in the context of business systems software engineering.

- Apply quality assurance and quality management principles to business systems development projects.

- Educate a diversity of clients in the use of business technology to support, promote and improve business processes.

- Apply business technology management skills to innovate in business systems development targeting new and existing local and global markets.

- Adhere to professional, ethical and legal codes and standards.

- Conduct and evaluate research to contribute to evidence-based practice in business systems development.

- Identify and apply discipline-specific practices that contribute to the local and global community through social responsibility, economic commitment and environmental stewardship.

- Leverage artificial intelligence and agent technologies to support short and long term business decisions.

Program of Study

Level: 05	Courses	Hours
BUS0007	Strategic Business Intelligence	56.0
CST3110	Enterprise Architecture	42.0
CST3111	Project Management for IT	42.0
ESC4300	Operations and Supply Chain Management	42.0
ESC4503	Technology Integration Using SAP	42.0
MGT4102	Business Fundamentals	42.0

Co-op: 02	Courses	Hours
WKT0029	Co-Op Work Term 2	

Level: 06	Courses	Hours
ACC4201	Managerial Accounting	42.0
BUS0009	Risk Management and Strategies	42.0
CST3114	Professional Option I: Data Analytics	42.0
MGT4701	Advanced Business Statistics	42.0

Elective: choose 2	Courses	Hours
CUL4000	Global Citizenship	42.0
ENL4016	World Literature	42.0
ENL4100	Creative Writing	42.0
ENL4200	New Worlds and Alternative Realities: Speculative Fiction	42.0
ENL4300	The Brave New Worlds of Dystopian Fiction	45.0
PHI4000	Philosophy and Popular Culture	42.0
PHI4002	The Philosophy of Drugs	42.0
PHI4003	The Philosophy of Love and Sex	42.0
PHI4004	Technology, Society and the Environment	42.0
PHI4100	Survival in the Information Age: Risk and the Media	42.0
PHY4000	Black Holes, Big Bangs and the Cosmos	42.0
SOC4000	Criminology	42.0
SOC4001	Global Perspectives	42.0

Co-op: 03	Courses	Hours
WKT0030	Co-Op Work Term 3	

Level: 07	Courses	Hours
BUS0008	Business Analytics and Advanced Business Intelligence	56.0

BUS0010	Business Systems Security, Audit and Control	42.0
CST3115	Enterprise Mobile Application Development	56.0
CST3116	Project I	42.0
CST3119	Professional Option II: Wearable Computing	42.0
ECO4201	Macroeconomics	42.0

Level: 08	Courses	Hours
CST3117	Project II	42.0
CST3118	Business Software Agents and Artificial Intelligence	56.0
MGT0107	Business Technology Management	42.0
MGT6120	Entrepreneurship	42.0

Elective: choose 2	Courses	Hours
CUL4000	Global Citizenship	42.0
ENL4016	World Literature	42.0
ENL4100	Creative Writing	42.0
ENL4200	New Worlds and Alternative Realities: Speculative Fiction	42.0
ENL4300	The Brave New Worlds of Dystopian Fiction	45.0
PHI4000	Philosophy and Popular Culture	42.0
PHI4002	The Philosophy of Drugs	42.0
PHI4003	The Philosophy of Love and Sex	42.0
PHI4004	Technology, Society and the Environment	42.0
PHI4100	Survival in the Information Age: Risk and the Media	42.0
PHY4000	Black Holes, Big Bangs and the Cosmos	42.0
SOC4000	Criminology	42.0
SOC4001	Global Perspectives	42.0

Fees for the 2023/2024 Academic Year

Tuition and related ancillary fees for this program can be viewed by using the Tuition and Fees Estimator tool at https://www.algonquincollege.com/fee-estimator .

Further information on fees can be found by visiting the Registrar`s Office website at https://www.algonquincollege.com/ro .

Fees are subject to change.

Additional program related expenses include:

- Books and supplies cost approximately $1,000 per academic year.

Admission Requirements for the 2024/2025 Academic Year

Program Eligibility

- Graduates of the Computer Programming Ontario College Diploma program or Computer Engineering Technology - Computing Science Ontario College Advanced Diploma program, with Grade Point Averages of 2.7, a minimum of 420 hours of related work or co-op experience, and who successfully complete the 4-course bridging requirements: GEP1001 - Cooperative Education and Job Readiness, QUA2000 - Statistics, CST3113 - Enterprise Application Development, and ACC4101 - Financial Accounting are eligible to enter into Year 3, Level 05 of the degree program.

Admission Requirements for 2023/2024 Academic Year

Program Eligibility

Graduates of the Computer Programming Ontario College Diploma program or Computer Engineering Technology - Computing Science Ontario College Advanced Diploma program, with Grade Point Averages of 2.7, a minimum of 420 hours of related work or co-op experience, and who successfully complete the 4-course bridging requirements: GEP1001 - Cooperative Education and Job Readiness, QUA2000 - Statistics, CST3113 - Enterprise Application Development, and ACC4101 - Financial Accounting are eligible to enter into Year 3, Level 5 of the degree program .

Application Information

BACHELOR OF TECHNOLOGY (BUSINESS SYSTEMS DEVELOPMENT) (HONOURS) (CO-OP) Program Code 6520A03FWO

Applications to full-time day programs must be submitted with official transcripts showing completion of the academic admission requirements through:

ontariocolleges.ca
60 Corporate Court
Guelph, Ontario N1G 5J3
1-888-892-2228

Students currently enrolled in an Ontario secondary school should notify their Guidance Office prior to their online application at http://www.ontariocolleges.ca/ .

Applications for Fall Term and Winter Term admission received by February 1 will be given equal consideration. Applications received after February 1 will be processed on a first-come, first-served basis as long as places are available.

International applicants please visit this link for application process information: https://algonquincollege.force.com/myACint/ .

For further information on the admissions process, contact:

Registrar`s Office
Algonquin College
1385 Woodroffe Ave
Ottawa, ON K2G 1V8
Telephone: 613-727-0002
Toll-free: 1-800-565-4723
TTY: 613-727-7766
Fax: 613-727-7632
Contact: https://www.algonquincollege.com/ro

Additional Information

Algonquin College has been granted consent by the Ministry of Colleges and Universities, to offer this applied degree for a seven-year term starting July 2, 2019. The College shall ensure that all students admitted to the above-named program during the period of consent have the opportunity to complete the program within a reasonable timeframe.

CO-OP INFORMATION:
Co-operative education (Co-op) allows students to integrate their classroom learning with a real-world experience through paid work terms. Two academic terms prior to the cooperative education work term, students are required to actively participate in and successfully complete the self-directed co-op course, readiness activities and workshops.

Students must actively conduct a guided, self-directed job search and are responsible for securing approved program-related paid co-op employment. Students compete for co-op positions alongside students from Algonquin College and other Canadian and international colleges and universities. Algonquin College`s Co-op Department provides assistance in developing co-op job opportunities and guides the overall process, but does not guarantee that a student will obtain employment in a co-op work term. Co-op students may be required to relocate to take part in the co-op employment opportunities available in their industry and must cover all associated expenses; e.g., travel, work permits, visa applications, accommodation and all other incurred expenses.

Co-op work terms are typically 14 weeks in duration and are completed during a term when students are not taking courses. For more information on your program`s co-op level(s), visit the courses tab on your program`s webpage.

International students enrolled in a co-op program are required by Immigration, Refugees and Citizenship Canada (IRCC) to have a valid Co-op/Internship Work Permit prior to commencing their work term. Without this document International students are not legally eligible to engage in work in Canada that is part of an academic program. The Co-op/Internship Work Permit does not authorize international students to work outside the requirements of their academic program.

For more information on co-op programs, the co-op work/study schedule, as well as general and program-specific co-op eligibility criteria, please visit https://www.algonquincollege.com/coop .

Successful completion of all courses, including mandatory cooperative education (Co-op) Work Terms, is a requirement for graduation.

TRANSFER CREDIT RECOGNITION:
Applicants with degrees or degree level courses from Canadian institutions empowered to award degrees and from other degree granting institutions recognized by the Ontario Ministry of Colleges and Universities (MCU) will be assessed on a case-by-case basis. To receive a course credit, a minimum grade of C (65%) is required. Official transcripts and course descriptions/outlines must be presented with the application for credit recognition. Applicants with degrees or degree level courses from countries other than Canada or from postsecondary institutions not recognized by the MCU must have their degrees evaluated by a recognized Canadian public or private institution that specializes in the evaluation of international degree programs.

ADVANCED STANDING:
Graduates of related Ontario College Diploma or Ontario College Advanced Diploma programs may be eligible for advanced standing into the degree program. Please visit the degree program listing or speak to the Program Coordinator for more information and to confirm eligibility.

DEGREE ELECTIVE INFORMATION:
Students may choose from a variety of breadth courses. Courses from a range of disciplines are offered within the humanities, social sciences, sciences, global cultures and mathematics. Elective offerings vary from semester to semester.

INTERNATIONAL STUDENT INFORMATION:
International students are assessed individually. All candidates must have OSSD equivalencies and/or postsecondary equivalencies assessed by an appropriate body. Inquiries regarding eligibility of this nature should be directed specifically to Algonquin`s International Students` Office.

Course Descriptions

ACC4201 Managerial Accounting

Managerial accounting is the process of identifying, analyzing, recording and presenting financial information that is used for internal planning and control. Students explore the background, goals and methods of managerial accounting and its role in business planning, control and decision making. Students calculate product costing, variable costing, and product pricing, perform cost-volume-profit analysis, differential analysis, and prepare reports for budgeting and profit planning purposes.

Prerequisite(s): none

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Corerequisite(s):none

BUS0007 Strategic Business Intelligence

Business Intelligence (BI) allows organizations to leverage their ability to use available information in new and innovative ways that extend beyond the usual common approaches. As such, BI has proved to be an essential strategic resource for businesses. Students examine different types of analytics that enable managers to enhance their decision-making and increase opportunities for organizational competitive advantage. Special attention is given to BI strategy and management, emerging trends in BI, big data, SPSS and/or SAS, rendering and probability in the cloud, BI reports and OLAP cubes.

Prerequisite(s): CST3105
Corerequisite(s):none

BUS0008 Business Analytics and Advanced Business Intelligence

Business Intelligence systems are essential for collecting, storing, evaluating and analyzing information. Students study the principles related to designing, building and implementing a business intelligence (BI) system using a variety of technological tools. Topics include: data warehouse, SQL in relation to BI data manipulations, dimensional modeling, online analytic processing (OLAP), visualization tools dealing with high impact and low entry requirements, data mining, ETL (extract, transform, load) and dashboards.

Prerequisite(s): none
Corerequisite(s):none

BUS0009 Risk Management and Strategies

We live in an ever changing world where risk is part of day-to-day life. Both government and private sector strive to develop strategies to identify and manage risk. Students acquire the knowledge and skills needed to identify, assess, monitor, and limit risks using risk management strategies and principles. Topics include risk assessment and treatment, risk management principles and practices, and risk financing.

Prerequisite(s): none
Corerequisite(s):none

BUS0010 Business Systems Security, Audit and Control

As a result of the increasing concern for security of information, there is a growing demand for qualified auditors to perform security audits of large organizations' IT systems and infrastructure. Students examine and employ the principles and methodologies needed to plan and organize security audits and ensure compliance with enterprise security requirements. Curriculum is closely aligned with the industry-recognized Certified Information Systems Auditor's (CISA) requirements. Case studies, in-class discussions and learning activities focus on performing high level security audits.

Prerequisite(s): CST3110
Corerequisite(s):none

CST3110 Enterprise Architecture

In a strategic sense, enterprise system architects are key contributors of any business. Collaborating effectively at all levels within the organization is paramount. The ultimate goal of enterprise architecture is to align enterprise technology investment with business strategic planning. Students compare and contrast frameworks and methodologies used in guiding enterprise-level decisions. Through the use of case studies, students select and apply an appropriate process to support enterprise-level technology decisions used in building enterprise architecture.

Prerequisite(s): ACC4101 and BUS0008 and CST3109
Corerequisite(s):none

CST3111 Project Management for IT

The role of project management in information technology (IT) revolves around product development and implementation. The content has been closely aligned with the Project Management Institute's (PMIs) Project Management Body of Knowledge (PMBOK) concepts and methodologies. Topics include management issues re lated to planning, organization, scheduling, resource allocation and project monitoring and control. Students will also examine IT project management tools for effective project scheduling and management. Through relevant case studies, student projects and presentations, students develop skills and knowledge in relation to technology project management.

Prerequisite(s): CST3109
Corerequisite(s):none

CST3114 Professional Option I: Data Analytics

Collecting and analyzing raw data to draw conclusions helps to guide organizations in the decision-making process. Students explore the statistical tools most commonly used to process, analyze and visualize data. Topics include simple linear regression, multiple regression, logistic regression and analysis of variance, with applications to data mining and machine learning. Using interactive statistical software, students examine the commonly used tools of data analytics with emphasis on interpretation of the analytical results and effective visualization. In each topic area, real world applications help is establishing context and an understanding of the fundamental concepts.

Prerequisite(s): CST3105 and MAT8003 and QUA2000
Corerequisite(s):none

CST3115 Enterprise Mobile Application Development

Enterprise mobile software offers tremendous opportunity for engagement, both by ensuring customers return to your server on a regular basis, and in being central touch-point for employees or partners. Students differentiate between external (customer) and internal (employee) users and their respective design requirements. Topics include multi-platform management tools, network security requirements to support mobile users, mobile Web versus native mobile development, application programming interface (API) design for accessing enterprise data sources as well as sophisticated graphic user interface (GUI) experiences for external and internal users. Emphasis is on security (information protection, identity, device tracking, etc.) and cover forward-looking topics such as increased capability for data capture (sensors, GPS, cameras). Using Java, students develop both server and client (mobile) system components.

Prerequisite(s): CST3104 and CST3106
Corerequisite(s):none

CST3116 Project I

In order to practice in a professional capacity, students must fully integrate business systems development skills and knowledge. Students gain real-world experience working on a project drawn from a broad range of areas within computer science, of scope and quality comparable to a commercial application. Under the supervision of a faculty member, students collaboratively apply research methods to produce a proposal document detailing the project background, novel contribution, deliverables and timelines. As a team, students present and defend the proposal before beginning the development phase in the following semester. Prerequisite: All courses up to and including level 6.

Prerequisite(s): CST3111 and CST3113 and CST3114
Corerequisite(s):none

CST3117 Project II

Possessing practical and real-world experience in project execution is a necessity for entry into the field of business systems development. Students collaboratively develop and implement the project deliverable proposed previously. Students use acquired techniques and approaches to

develop and evaluate designs, analyze algorithmic solutions, and implement, debug and test the final deliverable. The project involves substantial programming with particular attention paid to graphic user-interface design. Students write and submit a report that is combined with the proposal document. In a team-based collaborative environment, students present their project and demonstrate the newly developed system.

Prerequisite(s): CST3116
Corerequisite(s):none

CST3118 Business Software Agents and Artificial Intelligence

An agent is anything that can be viewed as perceiving its environment through sensors and acting upon that environment through actuators. A rational agent, more specifically, carries out an action with the best outcome after considering past and current percepts. Students examine the fundamentals of artificial intelligence (AI), and how AI can be used to create agents that act with precise business objectives. Topics include types of agents and types of environments, rationality, performance measures, actuators, and sensors. Real world examples include domains such as e-Commerce, e-Business, with applications to supply chain management, web-based services negotiation. Students design, implement and deploy agents in simulated environments.

Prerequisite(s): CST3114 and CST3115
Corerequisite(s):none

CST3119 Professional Option II: Wearable Computing

Wearable computers (WCs) are systems that typically comprise one or more body-mounted devices such as monitors or sensors, endowed with a mobile communication capability. WCs support a variety of applications including medical, lifestyle, consumer electronics and recreation. Students investigate various technologies through programming projects and hands-on experimentation with a selection of devices. Topics include Augmented Reality, GPS-based services, medical applications, user tracking for business and retail service, and gaming.

Prerequisite(s): CST3103 and CST3104
Corerequisite(s):none

CUL4000 Global Citizenship

Informed citizens in today's world appreciate the meaning of civic life at the local, national and global level. Students reflect on and develop a personal awareness of the meaning of freedoms, rights and obligations in a diverse global community and consider the political, social and economic drivers that influence patterns of human behaviour and the health of the planet. Based on general principles of global citizenship, students look beyond national borders to assess personal responsibilities related to the health and well-being of the planet and inhabitants. Students critically evaluate information related to environmental and social health, equipped with attitudes and behaviours that foster global environmental and social responsibility.

Prerequisite(s): ENL1100 and PHI1000
Corerequisite(s):none

CUL4000 Global Citizenship

Informed citizens in today's world appreciate the meaning of civic life at the local, national and global level. Students reflect on and develop a personal awareness of the meaning of freedoms, rights and obligations in a diverse global community and consider the political, social and economic drivers that influence patterns of human behaviour and the health of the planet. Based on general principles of global citizenship, students look beyond national borders to assess personal responsibilities related to the health and well-being of the planet and inhabitants. Students critically evaluate information related to environmental and social health, equipped with attitudes and behaviours that foster global environmental and social responsibility.

Prerequisite(s): ENL1100 and PHI1000
Corerequisite(s):none

ECO4201 Macroeconomics

Macroeconomics is a social science that examines the objectives and policies that affect the whole economy. Students explore the principles of macroeconomics using economic models to analyze the performance of the economy at an aggregate level. Through lectures and discussions, Students examine how the level of unemployment, inflation and national income are determined, investigate the impact that fiscal and monetary policies have on stabilizing the economy and analyze Canada's international economic relationships, including the international flows of goods and of capital.

Prerequisite(s): none
Corerequisite(s):none

ENL4016 World Literature

Exposure to broad sources of literature promotes an open-minded perspective on today's global society and encourages an appreciation of diversity and human differences. In World Literature, students explore key literary works from around the world and examine the socio-historical and cultural contexts in which authors wrote and set these texts. Students learn to identify common themes and apply literary and cultural theory to these works towards expanding critical thinking skills and developing an analytical vocabulary. Through seminar presentations, group discussions, debates, journaling, and creative writing, students grapple with literary representations of social, political, and cultural issues from around the world, gaining an appreciation of what it means to be responsible global citizens and possess the ability to listen to, question, and value diverse perspectives.

Prerequisite(s): ENL1100
Corerequisite(s):none

ENL4100 Creative Writing

Whether for personal or public consumption, many people enjoy writing short fiction to express their creative energy while improving upon their overall writing abilities. Working with professional short stories as models, students examine the stylistic components that contribute to the excitement, atmosphere, and overall readability of short fiction. Students share their work and provide formal feedback on the work of others.

Prerequisite(s): ENL1100
Corerequisite(s):none

Prerequisite(s): ENL1100
Corerequisite(s):none

ENL4200 New Worlds and Alternative Realities: Speculative Fiction

Speculative fiction gathers together all those works of fiction in which new worlds or alternative realities are envisioned. Within this category of prose, students have the opportunity to explore the various sub-genres that present readers with new ways of thinking about some of the issues that face society. Students also develop skills in critical analysis using a variety of approaches and methodologies from literary studies.

Prerequisite(s): none
Corerequisite(s):none

ENL4300 The Brave New Worlds of Dystopian Fiction

Over the last century, dystopian fiction has become a remarkably popular genre in literature and film, particularly among young adults. Dystopian fiction often features oppresive totalitarian regimes, political dissent, environmental degradation and technological manipulation. In order to understand what a dystopia is, one must first understand what it is not. Through the study of representative works of literature and film, students examine the relationship between dystopic and utopic societies, and discover how dystopian fiction often functions as a creative outlet for authors and filmmakers to express the social, political, cultural, and technological anxieties of contemporary society. Students reflect on issues in the world around them, and develop an appreciation for how these concerns are mirrored in dystopian fiction.

Prerequisite(s): none
Corerequisite(s):none

ESC4300 Operations and Supply Chain Management

From a planning point of view, the need to balance demand and supply is paramount in today's business world. The basic concepts to manage a supply chain are covered from suppliers to customers. Students focus on production planning, master scheduling, MRP, capacity management, forecasting, purchasing, inventory management, and physical distribution, among other topics.

Prerequisite(s): none

Corerequisite(s):none

ESC4503 Technology Integration Using SAP

In the continuously evolving business world, there is a need for a solid framework for enterprise technology integration in business organizations, business processes and business tactical and strategic decision making. Students acquire the fundamental skills needed to start creating programs that will examine business reporting processes using SAP including NetWeaver, Business Warehouse (BW), Business Intelligence (BI) and Advanced Business Application Programming (ABAP). Through workshops and hands on learning, students build business report interfaces, write ABAP code to filter and drill down into business databases to support business decisions.

Prerequisite(s): CST4301 and CST4401
Corerequisite(s):none

MGT0107 Business Technology Management

Government and private sector organizations continuously undergo major transformation with respect to technology. Technology is a major enabler of these transformation initiatives. As a result, there is a growing need for professionals that can leverage technology to enable organizations to achieve strategic goals. These professionals possess the ability to bridge the gap between business and technology. Students develop business skills and understand the importance of aligning information technology to the business' objectives. Special attention is on discussing planning, decision-making, trends, alignment, optimization, processes and timing.

Prerequisite(s): BUS0007
Corerequisite(s):none

MGT4102 Business Fundamentals

In today's growing global economy, organizations are facing many new, diverse and competing challenges that have significant impact on their organizations. Students discover the essential management concepts of planning, organizing, leading and controlling. Other topics include human resources, strategy, decision making, ethics and social responsibility as well as organizational culture and change. Students apply various theoretical frameworks utilizing tools including case methodology, terms and discussions.

Prerequisite(s): none
Corerequisite(s):none

MGT4701 Advanced Business Statistics

With the unprecedented amount of data available, business analytics has become increasingly important in delivering value to businesses and changed the way organizations make decisions and run their operations. Building on the foundations of statistics, the areas of focus are design of experiments, analysis of variance, correlation, regression analysis, decision theory and time series forecasting.

Prerequisite(s): MGT4401 or QUA2000
Corerequisite(s):none

MGT6120 Entrepreneurship

Entrepreneurship and small business management are introduced from a Canadian perspective. Students develop the skills required to identify and evaluate a business opportunity; they investigate organizational structures of businesses and develop a business plan. A business simulation model provides the opportunity to practice and develop emerging entrepreneurial skills.

Prerequisite(s): ACC6104 and MKT6108 and MKT6111
Corerequisite(s):none

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PHI4000 Philosophy and Popular Culture

Many facets of today's popular culture engage, directly or indirectly, with the concerns of a variety of philosophical traditions. Drawing on a number of examples, students explore both the way popular culture permeates and spreads through society and the way it interprets and presents philosophical questions. Students develop skills and techniques for assessing the soundness and validity of thought experiments.

Prerequisite(s): PHI1000
Corerequisite(s):none

PHI4000 Philosophy and Popular Culture

Many facets of today's popular culture engage, directly or indirectly, with the concerns of a variety of philosophical traditions. Drawing on a number of examples, students explore both the way popular culture permeates and spreads through society and the way it interprets and presents philosophical questions. Students develop skills and techniques for assessing the soundness and validity of thought experiments.

Prerequisite(s): PHI1000
Corerequisite(s):none

PHI4002 The Philosophy of Drugs

Drugs are everywhere: professionals prescribe them to us to make us "better"; we take them recreationally; we give them to our children, pets and other loved ones; we buy them on the streets and in grocery stores. What are "drugs"? Why are some drugs legal and others not? How do drugs get to market? What ethical issues are relevant in a global drug industry? Are current intellectual property regimes appropriate if the goal of drug research is to promote benefits to society? Students critically examine these, and other, questions through the lens of historical and contemporary ethical, philosophical and legal theories and arguments. Students engage in various peer-oriented learning activities throughout the course.

Prerequisite(s): none
Corerequisite(s):none

PHI4002 The Philosophy of Drugs

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Prerequisite(s): none
Corerequisite(s):none

PHI4003 The Philosophy of Love and Sex

Love and sex are central to the human condition, and have been topics of academic inquiry and controversy throughout history. Various practices surrounding love and sex are celebrated in Western culture, such as monogamy and marriage, while other practices, such as polygamy and pedophilia, are condemned. Why is this? Students critically explore these and other issues surrounding love and sex using examples from popular music, movies and literature, framing those issues with the help of historical and contemporary philosophical theories and arguments. Students engage in various peer-oriented learning activities throughout the course.

Prerequisite(s): none
Corerequisite(s):none

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Prerequisite(s): none
Corerequisite(s):none

PHI4004 Technology, Society and the Environment

Environmental issues have come to occupy a central place in the marketplace, politics, policy, and society at large. Owing largely to the many environmental consequences that have accompanied industrialization, we humans have been forced to rethink the complex relationship between technology, society and the environment. Students investigate philosophical concepts and theories surrounding technology, society and the environment including: the "naturalness" of technology, sustainability and animal rights. Students critically examine course material by focusing on questions such as: What is nature, and what role do/should humans occupy in it? What do we owe non-human organisms? What do we owe future generations? Students engage in various peer-oriented learning activities throughout the course.

Prerequisite(s): none
Corerequisite(s):none

PHI4100 Survival in the Information Age: Risk and the Media

On an almost daily basis, the media, through its various outlets - television, radio, web sites, RSS, and podcasts - reports on issues that address our wellbeing. Through discussions, readings, and assignments, students enhance their ability to interpret and question information presented by the media by better understanding the inherent risks. Issues like alternative medicine (i.e. vaccinations) and socio-legal issues (i.e. bullying, hacking, surveillance, privacy) provide grounds for students to use principles from the social science as a means to think critically about real and perceived risks in daily life.

Prerequisite(s): PHI1000
Corerequisite(s):none

Bachelor of Technology (Business
Systems Development) (Honours) (Co-
op)Pathway for Computer
Programming and Computer
Engineering Technology - Computing
Science

Prerequisite(s): PHI1000
Corerequisite(s):none

PHY4000 Black Holes, Big Bangs and the Cosmos

The dynamic and exciting field of Cosmology outlines our current understanding of the Universe from its start, at the so-called Big Bang, through the ensuing 13 plus billion years to the present and beyond. Students learn how to discuss our present understanding of the three phases of the Universe as well as its five part make up, with matter making up only 4% of the whole. Students explain our knowledge of the various phases of evolution of the Cosmos and also the latest theories and experiments that are trying to address our uncertainties. Throughout the course, students evaluate and debate many of today's ideas and concepts revolving around cosmology.

Prerequisite(s): none
Corerequisite(s):none

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Prerequisite(s): none
Corerequisite(s):none

SOC4000 Criminology

The interdisciplinary study of social science examining the individual and social aspects of crime is known as criminology. Students work through an introduction to the social science perspective on crime. Presentations, discussions, and assignments allow students to investigate the various theoretical positions related to crime and criminal behaviour. Working forward from the types and definitions of crime, students trace some of the links between government policy and the impacts of these policies on both society and the individual.

Prerequisite(s): SOC2000
Corerequisite(s):none

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Prerequisite(s): SOC2000
Corerequisite(s):none

SOC4001 Global Perspectives

Sociology, through its exploration of the organization of society and the connections between people and their surroundings, provides new ways of looking at the world. Using fundamental knowledge in the field of sociology, students analyze globalization and its impact on Canadian society. Students take opposing views to debate the opportunities and challenges that come with globalization.

Prerequisite(s): SOC2000
Corerequisite(s):none

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Prerequisite(s): SOC2000
Corerequisite(s):none

WKT0029 Co-Op Work Term 2

Co-op provides an experiential opportunity which is directly related to the field of study. The second work term centers on an expanded role with a higher level of responsibilities in the workplace. Students returning from co-op work term two contribute expanded knowledge and abilities to their program of study. Although centred with public and private organization located in Eastern Ontario, co-op employment opportunities are sought throughout Canada and abroad.

Prerequisite(s): WKT0028
Corerequisite(s):none

WKT0030 Co-Op Work Term 3

Co-op provides an experiential opportunity which is directly related to the field of study. The third work term centers on an expanded role with a higher level of responsibilities in the workplace. Students returning from co-op work term three contribute expanded knowledge and abilities to their program of study. Although centred with public and private institutions located in Eastern Ontario, co-op employment opportunities are sought throughout Canada and abroad.

Prerequisite(s): WKT0029
Corerequisite(s):none