

PROGRAM INFORMATION

Academic Year	2024 – 2025
Credential	Graduate Certificate
Program Delivery	Full - Time
Duration	1 Year
Length	2 Semesters
Program Code	B305

DESCRIPTION

International Students Only

Practically all businesses depend on Information Technology. There is a growing need for companies to understand and strategically manage huge quantities of information allowing them to grow and maintain a competitive edge in industry. This has created a need for professionals with knowledge skill sets in both the business and technology fields individuals who can turn a vision into a reality. Computers, the Internet, wireless communications, databases are all forms of information technology which are used to collect, analyze, and share information. Information systems management examines how this technology can be used effectively in a constantly changing business environment.

The Information Systems Business Analysis program (ISBA) will help you develop critical skills in areas such as: application software, business data analysis and modeling, customer engagement management, business processes, enterprise resource planning, and communications.

A fundamental part of the post-graduate ISBA is the opportunity for experiential learning integrated with in program. Students will have the opportunity to engage in the practice of business analysis for information technology (IT) by working through case studies and industry projects.

Employment Opportunities exist within the Business or Technology sectors as: business or management information systems analysts, or information technology professionals. Work for banks, manufacturing, businesses within the private or the public service sector.

CAREER OPPORTUNITIES

- IT professional
- Business analyst
- Information systems business analyst
- Management information systems analyst

Employed in areas such as: IT consulting firms and IT units in the private and public sectors.

VOCATIONAL LEARNING OUTCOMES

1. Examine and evaluate the efficacy of established business processes to make recommendations for improvements to better meet organizational needs.
2. Plan and implement a system development life cycle for effective project management for new technical and non-technical systems.
3. Assess computing technologies to identify strengths and limitations according to the specific business processes of an organization.
4. Complete all work in compliance with relevant policies, practices, standards, processes, and procedures.
5. Communicate accurately, persuasively, and credibly to internal and external clients about approaches to information technology and solutions.

PROGRAM COURSES

The following reflects the planned course sequence for full-time offerings of the program. Programs at Northern College are delivered using a variety of instruction modes. Courses may be offered in the classroom or lab, entirely online, or in a hybrid mode which combines classroom sessions with virtual learning activities.

Semester 1		Hours
BU1113	Introduction to Information Systems	42
BU1173	Information Systems Ethics	42
BU1193	Business Process Development	42
BU1503	Database Management	42
IN1093	Computer Applications for Business & Technology	42
Semester 2		
BU1183	Intro to Systems Analysis & Development	42
BU2073	Career Planning and Professional Skills	42
BU4113	Project Management	42
IN2243	Foundations of Computer Science	42
IN2253	e-Business and e-Commerce Management	42
IN2363	Introduction to Programming	42

PROGRAM PROGRESSION

The following reflects the planned progression for full-time offerings of the program.

Fall Intake

Sem 1: Fall 2024

Sem 2: Winter 2025

Winter Intake

Sem 1: Winter 2025

Sem 2: Summer 2025

ARTICULATION/TRANSFER AGREEMENTS

A number of articulation agreements have been negotiated with universities and other institutions across Canada, North America and internationally. These agreements are assessed, revised and updated on a regular basis. Please contact the program coordinator for specific details if you are interested in pursuing such an option. Additional information can be found at [Articulation Agreements](#).

WORK INTEGRATED LEARNING OPPORTUNITIES

N/A

ADDITIONAL INFORMATION

N/A

PROGRAM SPECIFIC REQUIREMENTS

N/A

ADMISSION REQUIREMENTS

International Admission Requirements

The admission criteria for this course is Degree/Diploma in Computer Science, Information Technology, Engineering or relevant field as this is a post-graduate certificate.

1. Proof of Senior High School Diploma/Certificate
2. English Proficiency (we will require one of the following):
 - International English Language Testing System (IELTS – Academic) – minimum overall score of 6.0 must be achieved, with no individual band score under 6.0.
 - TOEFL International Based Test (iBT) – overall minimum score of 88+
 - iPTE – Graduate Diploma: 60+

All educational documents must be submitted in English and will be dependent on the country of citizenship. For more information, please contact admissions@northern.on.ca.

GRADUATION REQUIREMENTS

11 Program Courses

GRADUATION ELIGIBILITY

To graduate from this program, a student must attain a minimum of 60% or a letter grade of CR (Credit) in each course in each semester unless otherwise stated on the course outline. Students should consult departmental policies and manuals for additional detail and exceptions.

GRADUATION WINDOW

Students unable to adhere to the program duration of two years (as stated above) may take a maximum of four years to complete their credential. After this time, students must be re-admitted into the program, and follow the curriculum in place at the time of re-admission.

CONTACT INFORMATION

For questions about being admitted into the program, please contact Northern College Admissions at admissions@northern.on.ca or by phone at 705-235-3211 ext. 7222. For questions about the content of the program, contact the Program Coordinator.

Mikayla Lachance, Program Coordinator
Email: lachancem@northern.on.ca

COURSE DESCRIPTIONS

Semester 1

BU1113 Introduction to Information Systems

This subject is designed to provide the students the knowledge to understand information systems and technologies and their importance to the success of business organization. The instructor will present examples to teach students that the effective integration of Information System with knowledge can drive the creation of significant business value.

BU1173 Information Systems Ethics

This course is designed to provide students the updated discussion of the ethical and social issues that continue to evolve as computing and information technologies continue to advance. Student will gain knowledge about computer ethics, the legal aspects of computing, network security, and computer crime investigation. This course is also designed to teach students how to define ethical issues, and apply ethical reasoning to those issues to determine possible solutions. Students will learn the importance of risk assessment in computer technology, and how traditional intellectual property laws can be applied to technological advancements.

BU1193 Business Process Development

Students examine the core business processes that are integral to the activities of a business. Students study Enterprise Resource Planning systems, the integration of transaction level processes and the “Order-to-Cash”, “Procure-to-Pay”, and the “Production” processes. Financial and Controlling processes as well as Human Resource processes are also examined. Business processes define the steps involved in completing various business activities, such as order taking, purchasing, materials management, financial accounting and planning. Understanding these processes and how they cross department and organizational boundaries is critical to assessing real world business operations. Students enhance their knowledge of how computer systems support business processes through extensive hands-on experience using commercial based Enterprise Resource Planning (ERP) software simulation.

BU1503 Database Management

This course will present the essential skills for designing and working with relational databases. Students will acquire a solid foundation in Structured Query Language (SQL) by working on a series of existing databases. Techniques for the design and implementation of databases will be presented following the principles of normalization and referential integrity.

IN1093 Computer Applications for Business & Technology

In this course, students will gain practical experience with the essential features of Microsoft Office – MS Word, MS Excel, and MS PowerPoint to enhance their communication and analytical skills. Basic computer skills are required as a prerequisite. Students will gain hands-on experience with file management, software settings, system security, Word Reports (APA Functions), tables, advanced presentation functions, summarizing and analyzing data in Excel through a series of learning activities, projects, and exercises that focus on real world examples. Students gain practical knowledge that can be applied directly to the workplace setting.

Semester 2

BU1183 Intro to Systems Analysis & Development

This course is designed to provide the students with skills and hands-on approach to systems analysis and design with an even more in-depth focus on the core set of skills that all analysts must possess. The instructor will capture the experience of developing and analyzing systems in a way that students can understand and apply and develop a rich foundation of skills as a systems analyst.

BU2073 Career Planning and Professional Skills

This course provides a framework for students to build a successful and satisfying career in their chosen field. Students are introduced to career planning skills and strategies for personal and professional growth, learning about career change & assessment, networking tools and the job search process. At the end of the course, students will develop skills in resume development, job interviewing, job searching as well as important life skills such as goal setting, business etiquette and personal presentation. To benefit the most from this course, active participation will be required as students will be learning experientially, collaboratively and cooperatively.

BU4113 Project Management

This course is designed to provide the students the skills to work successfully in today's exciting project management environment, from how to organize and manage effective project teams, to planning, scheduling and cost management. Students also gain experience working with the latest version of today's most popular project management software, Microsoft Project 2010.

IN2363 Introduction to Programming

This course provides an introduction to programming using Java. The course will focus on core programming concepts that are universal to all modern programming languages. Students will learn to write programs using proper algorithm design, logic, data types, variables, control structures and functions (methods). The goal of the course is to provide a solid foundation of core programming skills that will allow students to further their learning in a variety of development environments.

IN2243 Foundations of Computer Science

This course is designed to provide the students with the fundamentals of computer science, which are divided into five parts; computer and data, computer hardware, computer software, data organization and with an introduction to some of the more advanced topics. It also introduces tools such as UML, structure chart and pseudo code, which students will need in the future.

IN2253 e-Business and e-Commerce Management

This course is designed to help the students explore the relationship between information and communication technology and the world of business, which has become an increasingly important and intertwined relationship. This course keeps pace with these changes by providing students the "classic" lessons and principles of e-business practice. It also offers a comprehensive introduction to the theory and practice of e-business and e-commerce management.