

Diploma in Internet Business Technology

Looking for a Career in Internet Business?

Since the past decade, internet and web-based technologies have evolved to become a fundamental part of operations in many large organizations. Today, internet sales account for at least one-third of economic growth, hence a demand for experts who know how to effectively analyze and manage a business with the appropriate internet technology. Small to large-sized businesses require professionals who are able to design and implement internet business systems in order to keep their competitive edge in the market.

The welcoming trend of online retailing has especially opened many opportunities in internet business. Trading of products and services over the internet is happening in increasing numbers as the internet offers customers the opportunity to comparison shop from the comfort of their home at any time of day or evening. It has given retailers an opportunity to sell their products and services to the global market.

It is not uncommon for managers working in marketing, human resources, finance, and many other areas to be involved in internet business projects of one sort or another. Jobs are available in market research, product buying, web design or maintenance, on-line security, technical support or customer service.

Typical career opportunities include:

- Affiliated Manager
- Online Marketing Specialist
- Business Systems analyst
- eMarketing Specialist
- Web Data Analyst
- Web Content Analyst
- Web Marketing Analyst
- Web Business Analyst
- Web Advertising Analyst
- Web Services Analyst
- Social Media Community Development
- Business Solutions Architect
- Consumer Data Intelligence Specialist
- Online Retail Specialist/Manager
- Internet Business Application Specialist
- Business Development Specialist/Manager
- Internet Sales and Marketing Specialist
- Internet Business Financial Specialist
- Data Specialist – Customer Analyst
- Internet Business Technology Consultant

How can a McGill Program prepare you for a career in Internet Business?

Today, potential employers are looking for people who have a well rounded business education, knowledge of programming, databases, networks, telecommunications, the internet and the Web as well as a good understanding of consumer behaviour. Our internet business programs will help you prepare for and meet these expectations.

By completing our programs, you will gain an understanding on the foundations of internet business, and you will be able to contribute to the planning and design of web-based systems and initiatives. You will make an excellent candidate for companies looking for knowledgeable managers who will ensure that their investments in internet business work towards meeting business objectives.

Our Diploma in Internet Business Technology, Diploma in Management (Internet Business concentration) and Graduate Certificate in Internet Business programs combine sound business courses with specific internet business concentrations. This combination will give you the knowledge and skills required to deal with the revolution in commerce that is being generated by the Internet and will help you to adapt to a new and rapidly changing market.

The Program

The Diploma in Internet Business Technology is a 30-credit program which consists of 7 required courses and 3 complementary courses.

Classes are offered once a week for 13 weeks and are generally from 6 p.m. to 9 p.m. Courses can be taken in the Fall, Winter, Spring and Summer sessions. Classes in the Spring and Summer sessions may be given in less than 13 weeks. Not all courses are offered every semester.

The diploma's program requirements are:

Note: Students must have knowledge of basic college mathematics, equivalent to McGill course CMSC 101 and have previous experience with some programming language equivalent to McGill course CCCS 300.

7 required courses:

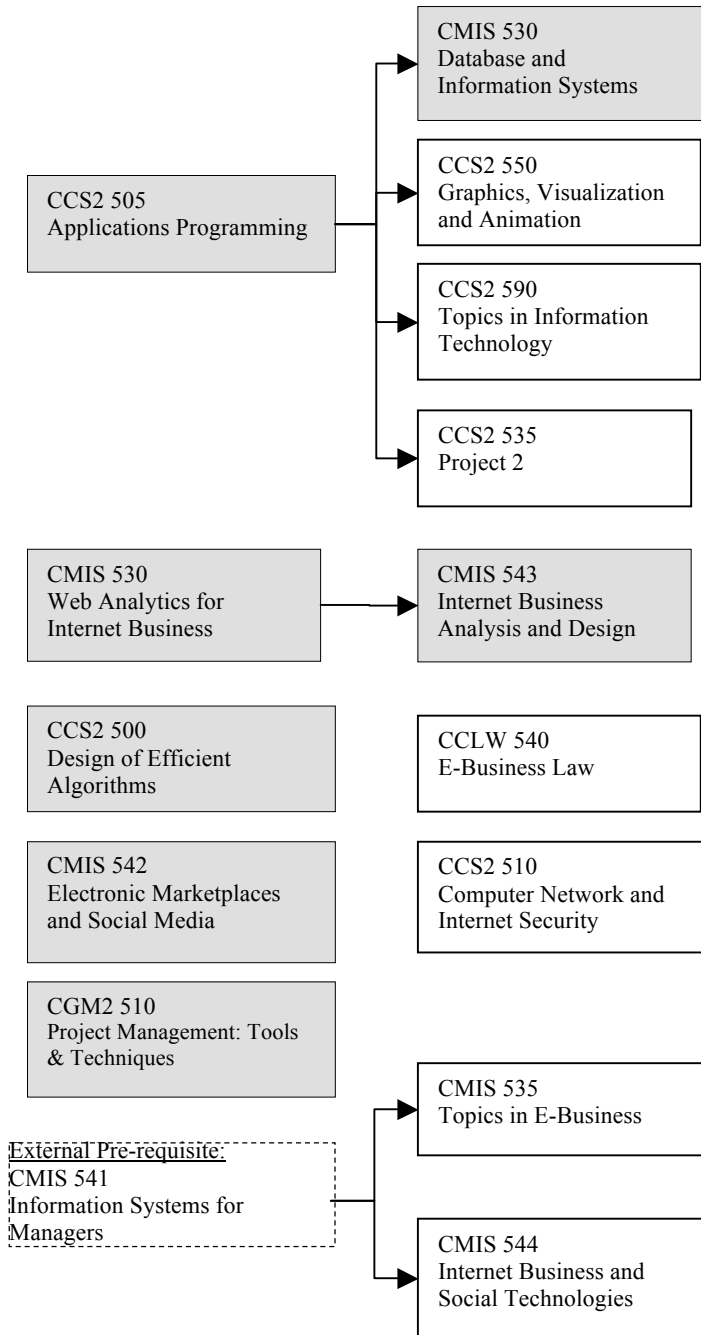
CCS2 500 Design of Efficient Algorithms
CCS2 505 Applications Programming
CCS2 530 Database and Information Systems
CGM2 510 Project Management: Tools and Techniques
CMIS 530 Web Analytics for Internet Business
CMIS 542 Electronic Marketplaces and Social Media
CMIS 543 Internet Business Analysis and Design

3 complementary courses from:

CCLW 540 E-Business Law
CCS2 510 Computer Network and Internet Security
CCS2 535 Project 2
CCS2 550 Graphics, Visualization and Animation
CCS2 590 Topics in Information Technology
CMIS 535 Topics in E-Business
CMIS 544 Internet Business and Social Technology

Course Sequence

Diploma in Internet Business Technologies



To obtain information on course offerings, please refer to the interactive timetable at <http://www.mcgill.ca/conted-cms/programs/grad/it-diploma/>.

Course Descriptions

CCCS 300 Programming Techniques 1

(3 credits)

Pre-requisite:
CMSC 101 College Algebra & Functions
Co-requisite:
MGCR 331 Information Systems

Fundamental programming techniques, concepts, and data structures, including modularization and maintainability. Emphasis on facilitating communication and understanding between systems analysts and programmers to support decision-making.

CCLW 540 E-Business Law

(3 credits)

Pre-requisite: None

Effect of various laws and regulations on electronic business conducted on the Internet and elsewhere by examining intellectual property law, law of contracts, telecommunications law, broadcasting law, certain aspects of criminal law, electronic business law, privacy law as well as, certain aspects of tort law (such as online defamation).

CCS2 500 Design of Efficient Algorithms

(3 credits)

Pre-requisites: None

Basic elements of algorithms, time and space performance, optimization criteria and methods, as well as basic data structures (vectors, arrays, structures, lists, trees, stacks, queues), their characteristics, behaviour and applicability to different problem types. Illustrative examples chosen from standard computer problems like searching, sorting, and memory allocation.

CCS2 505 Applications Programming

(3 credits)

Pre-requisites: None

Tools and techniques in designing and implementing enterprise software applications by using modern programming languages on an advance software development framework.

CCS2 510 Computer Network and Internet Security

(3 credits)

Pre-requisites: None

Basic principles, design and performance of computer networks. Theory and technology, including network security models, cryptography protocols and standards, network security threats and types of attacks, security counter-measure strategies and tools, firewalls, access control and platform-specific security issues.

CCS2 530 Database and Information Systems

(3 credits)

Pre-requisite:
CCS2 505 Applications Programming

Computers as information systems; databases and information representation models, concurrent access and data integrity, system management issues related to availability, correctness, security and distribution of information. Use of popular commercial applications. Remote access to services and data via Internet mediated technologies.

CCS2 535 Project 2**(3 credits)**

Pre-requisite:

CCS2 505 Applications Programming

Project design, development, implementation and “release”.

CCS2 550 Graphics, Visualization and Animation**(3 credits)**

Pre-requisites:

CCS2 505 Applications Programming

Interfaces and interaction, elements of computer graphics systems, algorithms used to perform simple and complex graphical operations, and techniques for effective visualizing of data using standard and non-standard graphical interfaces, computer vision and techniques used in the process of creating computer animations.

CCS2 590 Topics in Information Technology**(3 credits)**

Pre-requisites:

CCS2 505 Applications Programming

Specialized course covering an advanced topic in the Information Technology area selected from current issues or themes in literature. (Content could vary from year to year).

CMG2 510 Project Management: Tools and Techniques**(3 credits)**

Pre-requisite: None

Focus on main concepts and theories of project management from initiation to close-out. Topics include: project life cycle, planning, scheduling, implementing, monitoring, controlling, close-out and ethics. The concepts presented apply to projects of various sizes, types and degrees of complexity.

CMIS 530 Web Analytics for Internet Business**(3 credits)**

Pre-requisite: None

Understanding of the web analytics terminology. Fundamental techniques for measuring a website’s success and effectiveness. Analyse web visitor traffic and data to meet a website’s objectives and to improve online marketing.

CMIS 535 Topics in E-Business**(3 credits)**

Pre-requisite:

CMIS 541 Information Systems for Managers

Current issues in electronic business. (Content will vary from year to year.)

CMIS 542 Electronic Marketplaces and Social Media**(3 credits)**

Pre-requisite: None

Introduction to electronic marketplaces and their evolving role in e-business focusing predominantly on the use of general and vertical marketplaces by businesses. Social media marketing including new channels of marketing, advertising and communication will also be discussed.

CMIS 543 Internet Business Analysis and Design

(3 credits)

Pre-requisite:

CMIS 530 Web Analytics for Internet Business

Tools and techniques to effectively design and advertise online. Measurement of results from marketing campaigns. Improve web user experience by optimising information architecture, navigation and website search engines. Management strategies in tracking and reporting of website activities and practical skills for successful web deployment will also be covered.

CMIS 544 Internet Business and Social Technologies

(3 credits)

Pre-requisite:

CMIS 541 Information Systems for Managers

Exploration of technologies' role as an integral part of current social and work structures. Introduction to Enterprise Resource Planning systems. Examine how technologies such as mobile devices, blogs, instant messaging and other information management systems can be used to develop and enhance work and social life.

CMSC 000 Foundations for Mathematics

(0 credits; 12 CE Units)

Pre-requisites: None

Operations with real numbers, polynomials, first-degree equations and applied word problems. Factoring, fractions, exponents, roots and radicals. Systems of linear equations and linear inequalities. Absolute values, equations and inequalities. Quadratic equations, applied problems.

CMSC 101 College Algebra and Functions

(3 credits)

Pre-requisite:

CMSC 000 Foundations of Mathematics or the Exemption by Examination Test

Linear and quadratic functions, exponential and logarithmic functions, applications. Sequences and series, mathematics of finance. Permutations and combinations. Introduction to probability. Matrices and systems of linear equations.

MGCR 331 Information Systems

(3 credits)

Pre-requisites:

CMSC 101 College Algebra and Functions or Exemption by Examination Test¹

Introduction to principles and concepts of information systems in organizations. Topics include information technology, transaction processing systems, decision support systems, database and systems development. Students are required to have background preparation on basic micro computer skills including spreadsheet and word-processing.

¹ For more information on how to obtain course exemption by the means of challenge exam, please visit website: <http://www.mcgill.ca/conted-cms/courses/math/test/>

Admission Requirements

1. Undergraduate degree from a recognized university as approved by Ministère des Relations avec les citoyens et l'immigration (MRCI) with a cumulative grade point average (CGPA) of 3.0/4.0 or a CGPA of 3.2/4.0 for the last two full-time academic years.
2. If your CGPA is lower than the above requirement, please submit the following for consideration with your application, official transcript.

Letter of Intent: A letter, 1 to 2 pages in length single-spaced, written in English or French, which addresses the following:

- basis for interest in the program;
- your knowledge that would be pertinent to the program;
- your interest in the field of study and the reasons for applying to our program
- plans for integrating the training into your current or future career;
- a description of your professional experience and its relevance, if applicable, to the program
- awards received or other contributions;
- any additional information relevant to your application.

Curriculum Vitae

Two Letters of Reference: At least one should be from a current or former employer. Supporting documents should be delivered to:

Student Affairs Office
Admissions & Convocation
Centre for Continuing Education
688 Sherbrooke Street West
Room 1125
Montreal, QC H3A 3R1 Canada

3. If you have studied outside of Canada, you are required to request an evaluation of your degree called “Évaluation comparative des études effectuées hors du Québec”, from MRCI. For further details you may contact their office at: (514) 864-9191 or visit them on the web at: www.immigration-quebec.gouv.qc.ca/en/education/comparative-evaluation/index.html
4. If you have completed an undergraduate degree from a recognized university outside of Canada and are applying to a program for which a minimum CGPA is required, please visit the following website: http://www.mcgill.ca/gps/documents/admissions/country_sheets/

Note: Students must have knowledge of basic college level Mathematics, equivalent to McGill Course “CMSC 101 College Algebra and Functions” and have a previous experience in some programming language, equivalent to McGill course "CCCS 300 Programming Techniques 1".

Students are expected to have a working knowledge of word processing and spreadsheets.

Language Requirements

The language of instruction for most courses and programs at McGill is English; however, students may submit any written work that is to be graded in English or French, except in cases where knowledge of the language is one of the objectives of the course. Applicants must demonstrate an adequate level of proficiency in English **prior to admission**, regardless of citizenship status or country of origin. McGill University has this language requirement in place to ensure that all students are provided with the opportunity to succeed in their chosen program. In all cases, the University reserves the right to require proof of English proficiency if it is deemed necessary. Below you will find information on when proof of proficiency is required.

If you answer “yes” to any of the following seven statements, you do **NOT** necessarily need to provide proof of English proficiency, but must provide documentation to support your answer.

- Have you lived and attended school, for at least **four** years, in a country where English is the acknowledged primary language?
- Have you completed both Secondary V and a DEC at a French CEGEP in Quebec?
- Have you completed a DEC at an English CEGEP in Quebec, during or later than 2003?
- Have you or will you complete a French Baccalaureate – Option Internationale (British or American section)?
- Have you or will you complete International Baccalaureate English A with a final result of 5 or better?
- Have you or will you complete the British Curriculum A-Level English with a final grade of ‘C’ or better?
- Have you completed the British Curriculum GCSE/IGCSE/GCE O-Level English, English Language, English First Language, or English as a Second Language with a final grade of ‘B’ or better?

If you answered “no” to all of the above, but answer “yes” to any of the following questions, you will be asked to provide supporting documentation to this effect and **may** still be asked to provide proof of English language proficiency.

- Do you consider English to be your mother tongue?
- Have you been attending school, for at least four consecutive years, at an accredited educational institution (in a non-English speaking country) where English is the language of instruction?
- Have you obtained an undergraduate degree from an accredited educational institution where the language of instruction in your program of study was English (minimum three years)?
- Have you obtained a graduate degree from an accredited educational institution where the language of instruction in your program of study was English (minimum two years)?

Applicants to the Department of Career and Management Studies who do not meet any of the above-listed conditions must demonstrate proficiency in English using **one** of the following options:

- 1) TOEFL (Test of English as a Foreign Language): minimum acceptable scores are

iBT (internet based test)	PBT (paper based test)	CBT (computer based test)*
90 overall (a minimum individual component score of 21 in each of the four components i.e. reading, writing, listening and speaking)	577	233
*The CBT is no longer being offered. CBT results will be accepted as long as considered valid by ETS.		
N.B. an institutional version of the TOEFL is not acceptable.		

- 2) IELTS (International English Language Testing System): a band score of 6.5 or better.
- 3) MELAB (Michigan English Language Assessment Battery): a minimum mark of 85%.
- 4) APIEL (Advanced Placement International English Language): a minimum score of 4.
- 5) McGill CCE TELP (McGill CCE Test of English Language Proficiency): a Category A result.
- 6) McGill Certificate of Proficiency in English or McGill Certificate of Proficiency – English for Professional Communication: Certificate of Proficiency awarded.
- 7) University of Cambridge ESOL Certificate in Advanced English (CAE): a grade of “B” (Good) or higher.
- 8) University of Cambridge ESOL Certificate of Proficiency in English (CPE): a grade of “C” (Pass) or higher.
- 9) Edexcel London Test of English – Level 4 – with an overall grade of at least “Merit Pass”.
- 10) Edexcel London Test of English – Level 5 – with an overall grade of at least “Pass”.

NOTE: Your test results must be reported directly to the University by the test centre; consequently, candidates’ copies of results will not be accepted as proof of English language proficiency. It is your responsibility to ensure that the official test results in an official format are forwarded directly by the testing service to the Student Affairs Office (Admissions) of the Centre for Continuing Education, 688 Sherbrooke St. West, 11th Floor, Montreal, Quebec, H3A 3R1. For TOEFL and APIEL, the institutional code at McGill University is 0935-00.