Diploma in Digital Analytics and Business Intelligence

Looking for a Career in Digital Analytics and Business Intelligence at McGill University's School of Continuing Studies?

This program is designed to provide the fundamentals of digital media, digital analytics and data science technology so as to prepare students for careers in the increasingly important and in-demand fields of digital analytics, business intelligence and data analytics. The program objective is to use data to improve digital media, predict future trends, transform customer experiences, improve productivity, and guide business decision making. As such, students will be uniquely equipped with the deep analytical skills integral to business today.

Typical career opportunities include:

- Affiliated Manager
- Digital Marketing Specialist
- Business Systems analyst
- Marketing Analytics Developer
- Digital Analytics Specialist
- Web Content Analyst
- Web Data Analyst
- Web Business Analyst
- Web Advertising Analyst
- Web Services Analyst

- Social Media Community Developer
- Business Intelligence & Analytics Developer
- 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 Consultan

How can a McGill Program prepare you for a career in Digital Analytics and Business Intelligence?

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 Digital Analytics and Business Intelligence 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 Digital Analytics and Business Intelligence work towards meeting business objectives.

Our Diploma in Digital Analytics and Business Intelligence and Diploma in Management (Internet Business concentration) 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 Digital Analytics and Business Intelligence is a 30-credit program which consists of one co-requisite course and 10 required courses.

Classes are offered once a week for 13 weeks and are generally from 6 p.m. to 9 p.m.
Not all courses are offered every semester.

The diploma's program requirements are:

1 Corequisite course:
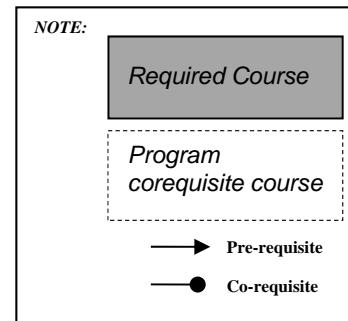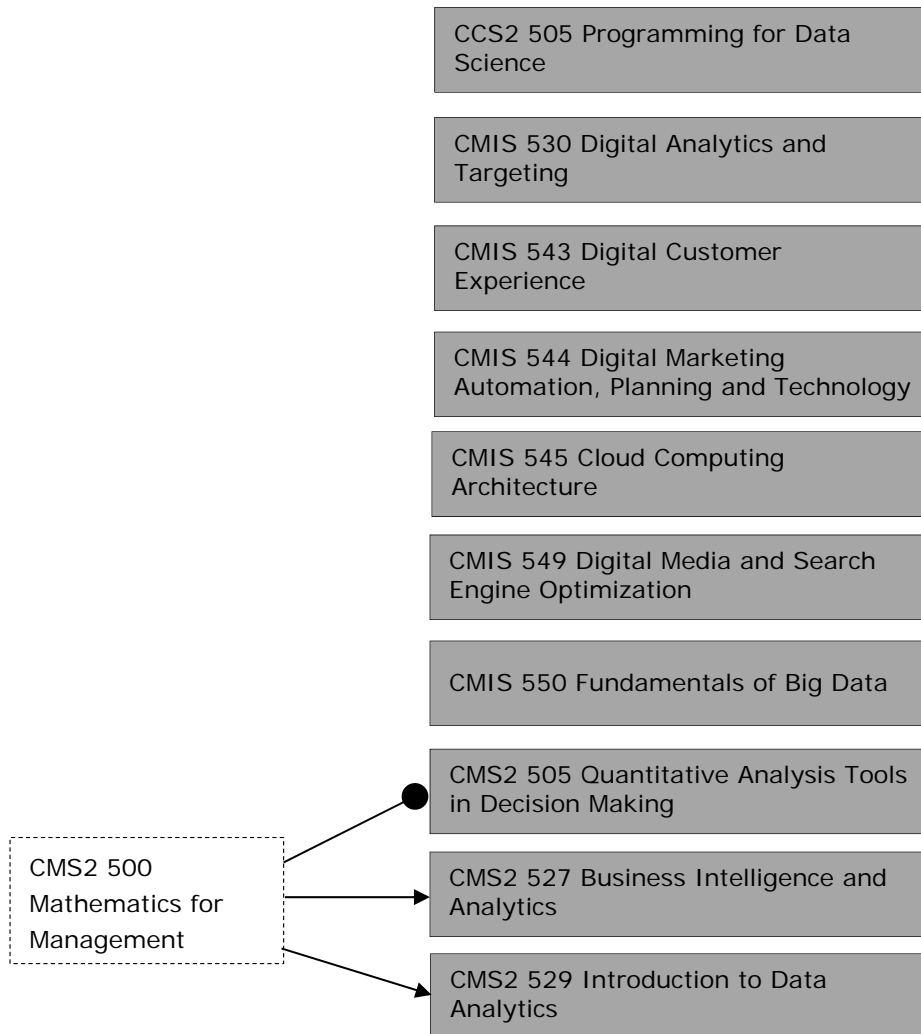
CMS2 500   Mathematics for Management
                     (or the Exemption by Examination Test)

10 Required courses (30 credits):

CCS2 505   Programming for Data Science
CMIS 530   Digital Analytics and Targeting
CMIS 543   Digital Customer Experience
CMIS 544   Digital Marketing Automation, Planning and Technology
CMIS 545   Cloud Computing Architecture
CMIS 549   Digital Media and Search Engine Optimization
CMIS 550   Fundamentals of Big Data
CMS2 505   Quantitative Analysis Tools in Decision Making
CMS2 527   Business Intelligence and Analytics
CMS2 529   Introduction to Data Analytics

Course Sequence

CCS2 505 Programming for Data Science

CMIS 530 Digital Analytics and Targeting

CMIS 543 Digital Customer Experience

CMIS 544 Digital Marketing Automation, Planning and Technology

CMIS 545 Cloud Computing Architecture

CMIS 549 Digital Media and Search Engine Optimization

CMIS 550 Fundamentals of Big Data

CMS2 505 Quantitative Analysis Tools in Decision Making

CMS2 527 Business Intelligence and Analytics

CMS2 529 Introduction to Data Analytics

CMS2 500 Mathematics for Management

NOTE:

Required Course

Program corequisite course

→ Pre-requisite

●— Co-requisite

Course Descriptions

CCS2 505 Programming for Data Science   (3 credits)
Pre-requisite: None

Tools and techniques in designing and implementing software applications by using modern programming languages relevant to data science.

CMIS 530 Digital Analytics and Targeting   (3 credits)
Pre-requisite: None

Covers fundamental techniques in measuring and analysing the digital marketing experience success and effectiveness as well as using audience data to improve advertising and content using targeting and experiments. How to measure, analyze, and act upon the evolving internet technologies and trends.

CMIS 543 Digital Customer Experience   (3 credits)
Pre-requisite: None

Covers the fundamental techniques for understanding, analyzing and optimizing customer experience on digital platforms. Explores best practices in designing and optimizing conversion actions in an online business. Management of customer data and confidentiality.

CMIS 544 Digital Marketing Automation, Planning and Technology   (3 credits)
Pre-requisite: None

Covers the fundamental concepts needed to develop a digital marketing plan. Enables students to gain an understanding of market behaviour, translation of corporate goals into digital marketing objectives, basic overview of various strategic approaches to align to objectives, as well as implementation and control.

CMIS 545 Cloud Computing Architecture   (3 credits)
Pre-requisite: None

Covers different cloud infrastructures and architectures in the context of deployed cloud computing systems that are appropriate for different businesses. Enables students to use key business metrics to make decisions on the suitability of applications for cloud deployment.

CMIS 549 Digital Media and Search Engine Optimization   (3 credits)
Pre-requisite: None

Covers the fundamentals of promoting a brand through digital mediums and how to take advantage of earned digital media. Provides an understanding of how paid search, search engine optimization, various forms of digital media planning and placement, social media promotion work and, how to monitor and optimize performance.

CMIS 550 Fundamentals of Big Data   (3 credits)
Pre-requisite: None

Investigates big data's enabling technologies; compares big data to traditional data models; and explores how big data enables applications such as data mining and deep learning.

CMS2 500 Mathematics for Management (3 credits)

Pre-requisite: CMSC 000 Foundations of Mathematics or the Exemption by Examination Test

Basic mathematics needed for business applications, including graphs, series summation, mathematics of finance, annuity, discounted cash flow, internal rate of return, permutations, combinations, maxima and minima functions with business applications in optimization, introductory statistics and probability.

CMS2 505 Quantitative Analysis Tools in Decision Making (3 credits)

Co-requisite: CMS2 500 Mathematics for Management

This course provides applications-oriented operations research modeling tools, such as: linear programming, integer programming, network modeling, and queuing theory. Use of spreadsheet/modeling software is an integral part of this course.

CMS2 527 Business Intelligence and Analytics (3 credits)

Pre-requisite: CMS2 500 Mathematics for Management

This course provides a managerial and technical focus on computational and business techniques which can help to identify new business opportunities and transform an organization's future by optimizing operational and strategic decision making.

CMS2 529 Introduction to Data Analytics (3 credits)

Pre-requisite: CMS2 500 Mathematics for Management

Focuses on executing statistical methods on data sets for descriptive, predictive, and prescriptive analysis, and effectively interpreting and presenting analytic results in support of business decision making.

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.

    a. **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.

    b. **Curriculum Vitae**

    c. **Two Letters of Reference**: At least one should be from a current or former employer.

    d. **GMAT and/or GRE Test Score Results (optional)**: Submit a copy of the official test score results.

    For other related Internet Business programs, please visit:
        http://www.mcgill.ca/continuingstudies/programs-and-courses/information-technology/graduate-programs

Admissions Procedures

How to APPLY to the *Diploma in Digital Analytics and Business Intelligence?*

Please follow the steps below:

STEP 1:
- Go to http://www.mcgill.ca/continuingstudies/
  Click on "Apply"
  Click on "Graduate Programs"

STEP 2:

Verify on the **"Apply for Admission to a Program" page,** the "Application Deadlines" for Canadian/Permanent Residents or International Students to ensure that you submit your application before the term deadline.

STEP 3:
- **Review your Admission Requirements:** Once you have checked your application against all the requirements, you will be ready to apply to the program.

- Before you proceed you will need:
  A valid **email address** and a **credit card** (Visa, MasterCard or American Express).

STEP 4:
- Once you are ready to apply online:
  Click on **"Click here now"** to bring you to the Application for Admission page.

- Click on the red bold **"Apply Now"** on the Application for Admission page.
  (Do **not** apply through "uApply" link).

- Fill in the login information on the "Admissions Login" page and the Biographical Information.
- On the "Apply for Admission" page, fill in the information requested.
  NOTE: When asked: "What are you applying for at McGill", click on "Continuing Studies"
- Select the program you are applying to on the "Program Choice Selection" page.
- Continue to fill in the remainder of the application. (All sections to be completed are indicated in the textbox on the left hand side of the screen).

STEP 5:
- Once you have applied online, you will receive a confirmation email providing you with a McGill ID number and a 6-character **PIN (Personal Identification Number).**
- You will need to use this information to **log into MINERVA** (www.mcgill.ca/minerva) (McGill's web-based information system for students) so that you can upload documents required for admission and follow-up on your status of your application.

STEP 6:

- Once your application has been received and you have access to your Minerva account, you will be able to **upload your supporting documentation**, including a copy of transcripts. (A copy of your transcript with confirmation of degree awarded and date of graduation).

- Uploading your documents will speed up your application process and is strongly recommended.
- For instructions on how to proceed, please go to: http://www.mcgill.ca/applying/nextsteps/documents/upload

  (If you are unable to upload the documents, you can send them by regular mail or bring them in person to our Client Services office at the address above).

STEP 7:

- **Sending official transcripts: All transcripts received via the upload process are considered unofficial**. If transcripts are required for your application, you will also need to have any official transcripts sent directly to the School by mail, in a sealed envelope by the educational institution(s) where you studied.

  What is an Official Transcript?

  If you have studied at an institution:

  - In Canada or the United States – you will need to request a copy of your official transcripts (your marks) from that institution which the institution will mail to the address below in a sealed envelope with the official institution's logo.
  - Outside of Canada or the United States, - you will need to request a copy of your official transcripts (your marks) from that institution which the institution will mail to the address below in a sealed envelope with the official institution's logo.
  - **Note:** In cases where the language of instruction at the institution is not English or French, you must also send an official translation of the official transcript certified by a representative from the **Ordre des traducteurs, terminologues et interprètes agréés du Québec (OTTIAQ - http://ottiaq.org/).**

- You need to request **official transcripts** as soon as possible once your application has been submitted to the School of Continuing Studies. Your Educational Institution must then mail these directly to the appropriate office below:

  Client Services c/o Admissions

  McGill University – School of Continuing Studies
  688 Sherbrooke Street West, Room 1125
  Montreal, QC
  Canada, H3A 3R1

- **Important:** You must make sure you apply by the application deadline. However, if you have any outstanding supporting documents at the time of your application, you may upload them as they become available or forward them directly to the School of Continuing Studies as soon as possible. Your admission application will only be completed once the School has received all of the required documents.

- **Note**: All required documents received by McGill University School of Continuing Studies become the property of the university. Official documents and/or transcripts will not be returned to the applicant.

- **Note**: Transcripts received by McGill University's School of Continuing Studies cannot be transferred to any other department or program as it would constitute submitting a new application. Therefore, you must submit a new sealed envelope of your official transcripts for each application made to McGill University's School of Continuing Studies.

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. For additional information, please click on the link below.

  http://www.mcgill.ca/continuingstudies/current-students/academic-policies/language-policy

Exemption by Examination

Students admitted to a Certificate, Graduate Certificate or Diploma program requiring a pre-requisite or co-requisite course, must provide proof that they have taken an equivalent 3 credit course, at the appropriate level elsewhere or successfully completed the Exemption by Examination test. Otherwise the student must register for the course.

- Please note that the Exemption by Examination test is **not applicable to required or complementary course(s)** within a program.

- You cannot take the Exemption by Examination test if you have already attempted the course (a grade of W is considered as have attempted the course).

- If you are unsuccessful in the Exemption by Examination test(s) you will not be permitted to repeat the test(s) and must instead enroll in the course(s) for which the particular test(s) was taken.

You must be admitted into a program or have applied to a program to be eligible to write the Exemption by Examination test. (The test is optional).

For more information on how to obtain a course exemption by means of a challenge exam, please consult the Exemption by Examination form available on our website at:

http://www.mcgill.ca/continuingstudies/prospective-students/apply/exemption-examination

Student Awards and Financial Aid

Note: The amount and number of McGill University's School of Continuing Studies Bursaries, Scholarships, and Graduating Prizes issued varies from year to year, depending on funds received and their specifications.

McGill University's School of Continuing Studies Bursaries
The School of Continuing Studies will post the application form and eligibility requirements for the active term on its website. Please refer to link below for further information.

http://www.mcgill.ca/continuingstudies/current-students/fees/student-awards-and-financial-aid

McGill University's School of Continuing Studies Scholarships
For a list of McGill Scholarships, please consult the McGill School of Continuing Studies website by clicking on the link below.

http://www.mcgill.ca/continuingstudies/current-students/fees/student-awards-and-financial-aid

McGill University's School of Continuing Studies Graduating Prizes
For a list of McGill SCS Graduating Prizes, please consult the McGill School of Continuing Studies website by clicking on the link below.

http://www.mcgill.ca/continuingstudies/current-students/graduating-students/awards