

# HONOURS BACHELOR OF COMMERCE (OPTION IN BUSINESS ANALYTICS) AND MASTER OF SCIENCE IN MANAGEMENT

## Honours Bachelor of Commerce (Option in Business Analytics)

The Business Analytics program is designed to help students develop the skills they need to become experts in transforming data into evidence-based action and be a valuable asset in the job market. This option exposes students to the basis of coding and programming in a management environment. Students will learn how to generate interactive visualizations, understand how data can inform policy and discover advanced predictive analytics methods, while gaining hands-on experience with simulations, decision modelling and formulation, software and results interpretation.

The option is recommended for students seeking a career as business/systems analyst, data analyst, project manager, operations manager, information systems manager, marketing analyst or data architect.

This program is offered in English and in French.

## Master of Science in Management (Research Project)

This exciting integrated accelerated bachelor's/master's program allows students to earn two degrees in five years. Designed for students with a strong academic record and a keen interest in conducting business research, this integrated program enables select undergraduate students to get a jump-start in their project-based master's program by completing two graduate courses during their last year of the undergraduate degree, and starting their research project in a familiar environment over the summer bridge term between the bachelor's and master's programs. This integrated program focuses on empowering students to develop their business acumen and research skills in a specialized field of study, and to contribute towards smarter decisions about policy and practice in creating a better Canada.

This program is offered in English only.

For further information on this Dual Fast-track Degree, please communicate with the Student Services Centre via [undergraduate@telfer.uottawa.ca](mailto:undergraduate@telfer.uottawa.ca) ([undergraduate@telfer.uottawa.ca](mailto:undergraduate@telfer.uottawa.ca)).

## Program Requirements

### Honours Bachelor of Commerce (Option in Business Analytics)

The French immersion stream is available with the Honours Bachelor of Commerce.

The MSc in Management program is offered in English only.

#### Compulsory courses at the 1000 level

ADM 1300	Introduction to Business	3 Units
ADM 1301	Business and Society	3 Units
ADM 1305	Mathematics for Business	3 Units
ADM 1340	Financial Accounting	3 Units
ADM 1370	Applications of Information Technology for Business	3 Units
ECO 1102	Introduction to Macroeconomics	3 Units
ECO 1104	Introduction to Microeconomics	3 Units
ENG 1131	Effective Business English	3 Units

#### Compulsory courses at the 2000 level

ADM 2302	Business Analytics	3 Units
ADM 2303	Statistics for Management	3 Units
ADM 2304	Applications of Statistical Methods in Business	3 Units
ADM 2320	Marketing	3 Units
ADM 2336	Organizational Behaviour	3 Units
ADM 2337	Human Resource Management	3 Units
ADM 2341	Managerial Accounting	3 Units
ADM 2350	Financial Management	3 Units
ADM 2372	Management Information Systems	3 Units
ADM 2381	Business Communication Skills	3 Units

#### Compulsory courses at the 3000 level

ADM 3301	Operations Management	3 Units
ADM 3318	International Business	3 Units

#### Compulsory courses at the 4000 level

ADM 4311	Strategic Management	3 Units
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#### Optional courses

9 optional course units in administration (ADM)	9 Units
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#### Electives

15 elective course units from another faculty <sup>1</sup>	15 Units
15 elective course units	15 Units

<b>Total:</b>	<b>102 Units</b>
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A maximum of 6 course units at the 1000 level can count towards this requirement.

## Business Analytics Option Courses

ADM 3305	Business Simulation Analytics	3 Units
ADM 3303	Hands-On Coding for Business	3 Units
ADM 4307	Business Forecasting Analytics	3 Units
ADM 4363	Business Optimization Analytics	3 Units
ADM 4964	Application of Business Analytics	3 Units
3 course units from:	3 Units	
ADM 3308	Business Data Mining	
ADM 3316	Competitive Intelligence	
ADM 3323	Market Research	

<b>Total:</b>	<b>18 Units</b>
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# Master of Science in Management (Research Project)

## Compulsory Courses

MGT 5200	Foundations for Quantitative Methods	3 Units
MGT 5300	Foundations of Management	3 Units

## Concentration Courses

18 course units from the chosen concentration	18 Units
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## Seminar

MGT 6191	Management Research Seminar Series <sup>1</sup>	
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## Research Project

MGT 6997	M.Sc. Research Project	6 Units
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<b>Total:</b>	<b>30 Units</b>
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## MSc list of concentrations

### Business Analytics

MGT 5101	Multivariate Research Methods	3 Units
MGT 5301	Predictive analytics	3 Units
MGT 5302	Decision analytics	3 Units
MGT 5303	Management analytics and case studies	3 Units
6 course units from:		6 Units

MGT 7108 Optimization and Modeling <sup>2</sup>

Elective course from another concentration

### Marketing & Behavioral Science

MGT 5100	Research Design Methodologies and the Conduct of Research	3 Units
MGT 5304	Generating marketing Insights	3 Units
MGT 5305	Behavioural insights and interventions	3 Units
3 course units from:		3 Units

MGT 5101 Multivariate Research Methods

MGT 5102 Qualitative Research Methods

3 course units from:	3 Units
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MGT 5301 Predictive analytics

MGT 5306 Recent topics in marketing

3 course units from:	3 Units
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MGT 5101 Multivariate Research Methods

MGT 5102 Qualitative Research Methods

Elective course from another concentration or another faculty

### Entrepreneurship

MGT 5100	Research Design Methodologies and the Conduct of Research	3 Units
MGT 6110	Entrepreneurial Process and Opportunity Recognition	3 Units

3 course units from:	3 Units
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MGT 5101 Multivariate Research Methods

MGT 5102 Qualitative Research Methods

9 course units from:	9 Units
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MGT 6112 Social Entrepreneurship and Innovation

MGT 6190 Research Topics in Management

MGT 8104 Theoretical Entrepreneurship Research

One of the Innovation Management concentration courses

### Innovation Management

MGT 5100	Research Design Methodologies and the Conduct of Research	3 Units
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MGT 6161	Managing Corporate Innovations	3 Units
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3 course units from:	3 Units
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MGT 5101 Multivariate Research Methods

MGT 5102 Qualitative Research Methods

9 course units from:	9 Units
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MGT 6112 Social Entrepreneurship and Innovation

MGT 6160 Systems of Innovation

MGT 6169 Recent Topics in Innovation Management

One of the Entrepreneurship concentration courses

### Finance

MGT 6120	Investment and Portfolio Management	3 Units
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MGT 8107	Finance	3 Units
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12 course units from:	12 Units
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MGT 5101 Multivariate Research Methods

MGT 6102 Financial Risk Management and Derivative Securities

MGT 6111 Venture Capital and Private Equity

MGT 6121 Application of Empirical Methods in Finance

MGT 6122 Advanced Corporate Finance and Empirical Methods

### Accounting

MGT 5100	Research Design Methodologies and the Conduct of Research	3 Units
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MGT 5102	Qualitative Research Methods	3 Units
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MGT 6126	Introduction to Qualitative and Experimental Research in Accounting	3 Units
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MGT 6127	Sustainability Accounting and Control	3 Units
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MGT 6128	Introduction to Accounting Research: Special Topics and New Developments	3 Units
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MGT 8101	Financial Accounting and Reporting	3 Units
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### Organizational Behaviour and Human Resources

MGT 5100	Research Design Methodologies and the Conduct of Research	3 Units
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MGT 6130	Evidence-Based HROB Interventions	3 Units
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MGT 6131	Current Trends in HROB	3 Units
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MGT 8113	Fundamentals of Human Resources Management	3 Units
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3 course units from:	3 Units
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MGT 5101 Multivariate Research Methods

MGT 5102 Qualitative Research Methods

Elective course from another concentration <sup>3</sup>	3 Units
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<sup>1</sup>

Students must attend at least 4 seminars during their studies.

<sup>2</sup>

MGT 7108 can be replaced by an elective course from another concentration or another faculty.

<sup>3</sup>

This requirement may be fulfilled by MGT 5101, MGT 5102 or a course in another concentration or another faculty.

## Specific requirements for the master's program

### Research Project

The Research Project (RP) is a capstone program component that requires students to conduct applied research with a partnering organization or as part of a Telfer faculty member's on-going research project. Students must show the ability to work independently (analysis and report writing) and apply knowledge gained in the MSc seminars to a well-defined practical problem. It is not required that the RP makes an original contribution to scholarly literature. Students are discouraged from collecting primary (original) data from human participants given the time taken to receive ethics approval and the short time frame given to complete the RP (3-4 months).

The RP can be theoretical, such as a literature review in which the student demonstrates how the existing academic literature can provide practical insight into a specific problem. It can also be empirical by using primary data (previously collected by a supervising faculty member) or secondary data (e.g., publicly accessible databases; results reported in published or unpublished research papers) to answer relatively simple research questions. Examples could be a replication of previously published research and a focused meta-analysis. Given the program's focus on facilitating evidence-based practice, the RP's central aim is giving students the opportunity to use their advanced research skills for informing practice within one organization or several organizations dealing with the same problem.

RP topics must be approved by the Telfer faculty member(s) responsible for coordinating RPs in the students' concentration. The completed RPs will be evaluated (pass/fail) by the same faculty member(s).

### Co-op Option

The co-op option is only available to students enrolled in the the research project option.

Co-op students must enroll full-time and complete two work terms:

- ADM 6001
- ADM 6002

### Management Research Seminar Series

Students must enroll continuously in Management Research Seminar Series (MGT 6191) from the beginning of their program and must attend at least four seminars in the series if they are in the one-year or CO-OP project-based options, and at least six seminars in the series if they are in the two-year thesis-based option. The notation "CTN" (for continuing activity) will be entered for each term until successful completion of the seminar requirements. The program director will confirm attendance and active participation.

### Duration of Program

The one-year with Research Project option can be completed in three terms or approximately 12 months. The maximum time allowed for completion of this option is two years.

The CO-OP with Research Project option can be completed in either five or six terms (approximately 20 or 24 months). Students preferring to complete this option in five terms are encouraged to take more than two courses during the first winter term. Also, completion within five terms requires that students get approval for their project's topic and

scope by the end of the second fall term. The maximum time allowed for completion of this option is four years.

The two-year with thesis option can be completed in six terms or approximately 24 months but can also be more quickly. The maximum time allowed for completion of this option is four years.