MBAN

Master of Business Analytics

Academic Handbook

2023-24

Table of Contents

Can't find what you're looking for? Check the Graduate Academic Handbook!

Review important information about:

- Tuition and fees
- scholarships and financial aid
- Exams, grades and conduct
- Petitions and appeals
- student services and enrolment
- student life and clubs
- Libraries, transit, childcare, health services

Available on the Academic Resources webpage

Disclaimer

The material contained in this Handbook has been submitted by the administrative departments and academic units concerned. All general information and course references have been checked for accuracy as much as possible. If errors or inconsistencies do occur, please bring these to the attention of the responsible department. York University reserves the right to make changes to the information contained in this publication without prior notice. Not every course listed in this handbook need necessarily be offered in any given academic year.

It is the responsibility of all students to familiarize themselves each year with the general information sections of this Handbook and with the sections covering the Schulich School of Business, as well as with any additional regulations that may be on file in the Division of Student Services and International Relations in the Schulich School of Business.

It is the responsibility of all students to be familiar with the specific requirements associated with the degree, diploma or certificate sought. While advice and counseling are available, it is the responsibility of each student to ensure that the courses in which registration is affected are appropriate to the program requirements of the Schulich School of Business.

While the University will make every reasonable effort to offer courses and classes as required within programs, student should note that admission to a degree or other program does not guarantee admission to any given course or class.

EVERY STUDENT AGREES BY THE ACT OF REGISTRATION TO BE BOUND BY THE REGULATIONS AND POLICIES OF YORK UNIVERISTY AND OF THE SCHULICH SCHOOL OF BUSINESS.

In the event of an inconsistency between the general academic regulations and policies published in student handbooks and calendars, and such regulations and policies as established by the Schulich School of Business and Senate, the version of such material as established by the Schulich School of Business and the Senate shall prevail.

York University Policies

York University disclaims all responsibility and liability for loss or damage suffered or incurred by any student or other party as a result of delays in or termination of its services, courses, or classes by reason of force majeure, fire, flood, riots, war, strikes, lock-outs, damage to University property, financial exigency or other events beyond the reasonable control of the University.

York University disclaims any and all liability for damages arising as a result of errors, interruptions or disruptions to operations or connected with its operations or its campuses, arising out of computer failure or non-compliance of its computing systems.

York University is a smoke-free institution. Smoking is permitted in designated areas only.

Important Websites

RESOURCE	URL	GO HERE FOR...
The Schulich School of Business official website	schulich.yorku.ca	Program Information, Financial Aid, International Opportunities, Career Development Centre, MySchulich student portal
Schulich Current Graduate Students page	schulich.yorku.ca/current-students/graduate-students	Important Dates, Course Offerings, Wait List, Upcoming Events, Enrolment Details, Academic Peititons and Appeals
Student Services GradBlog	gradblog.schulich.yorku.ca	Student stories, Regular updates about courses, important dates, enrolment and events
York Online Services	currentstudents.yorku.ca	Enrolment & fees, Housing & Transportation, Academic Regulations & Grade Reports
York Counseling & Disability Services	cds.info.yorku.ca	Resources for academic and personal development, individual and group counselling, Learning Skills Workshops
Graduate Business Council	gbcschulich.com	Mission statement, executive reps, student clubs, services and events

2023-2024 Sessional Dates

SUMMER 2023			
Activity	**Term S**	**Term E**	**Term G**
Class Start Date	May 8	May 8	Jun 26
Class End Date	Aug 4	Jun 23	Aug 4
Reading Week	N/A	N/A	N/A
Examinations	Aug 8 - 14	Jun 30	Aug 8 - 14
Last date to enrol without permission	May 15	May 15	Jul 3
Last date to enrol with permission	May 22	May 22	Jul 10
Last date to drop courses	Jun 12	May 29	Jul 17

FALL 2023			
Activity	**Term F2**	**Term A**	**Term M**
Class Start Date	Sept 11	Sept 11	Oct 30
Class End Date	Dec 8	Oct 23	Dec 8
Reading Week	Oct 24 - 27	N/A	N/A
Examinations	Dec 11 - 15	Oct 24 - 27	Dec 11 - 15
Last date to enrol without permission	Sept 18	Sept 18	Nov 6
Last date to enrol with permission	Sept 25	Sept 25	Nov 13
Last date to drop courses	Oct 16	Oct 2	Nov 20

WINTER 2024			
Activity	**Term W2**	**Term C**	**Term N**
Class Start Date	Jan 8	Jan 8	Feb 26
Class End Date	Apr 8	Feb 16	Apr 8
Reading Week	Feb 20 - 23	N/A	N/A
Examinations	Apr 10 - 16	Feb 20 - 23	Apr 10 - 16
Last date to enrol without permission	Jan 15	Jan 15	Mar 4
Last date to enrol with permission	Jan 22	Jan 22	Mar 11
Last date to drop courses	Feb 12	Jan 29	Mar 18

2023 Important Dates

DATE	REMINDER
May 8	First day of Summer classes
May 10	Summer Term fees due
May 22	Victoria Day (university closed)
May 26	Mandatory Make-up Day (in lieu of Victoria Day)
July 1	Canada Day (university closed)
July 3	Additional statutory holiday (university closed)
July 7	Mandatory Make-Up Day (in lieu of Canada Day)
August 7	Civic Holiday (university closed)
September 4	Labour Day (university closed)
September 10	Fall Term fees due
September 11	First day of Fall classes
October 9	Thanksgiving (university closed)
December 8	Last day of Fall classes

Find Important Dates online!
schulich.yorku.ca/current-students/graduate-students/key-dates

Contact Us

The School's Division of Student Services & International Relations should be consulted on questions related to admissions, enrolment, registration, grade or course problems, financial assistance or special advising.

Meet us online!
schulich.yorku.ca/student-enrolment-services/

TITLE	NAME	ROOM	E-MAIL
Associate Dean, Students	Kiridaran (Giri) Kanegaretnam	S344H	kkanagaretnam@schulich.yorku.ca
Financial Administrative Assistant	Heidi Furcha	W262E	hfurcha@schulich.yorku.ca
STUDENT & ENROLMENT SERVICES			
Director, Student & Enrolment Services	Luba Pan	W263A	panlyuba@schulich.yorku.ca
Manager, Student Success		W263D	studentservices@schulich.yorku.ca
Manager, Communications	Beth Gallagher	W262G	bethlg@schulich.yorku.ca
Records & Promotion Assistant	Sophia Yu	W262E	sophyu@schulich.yorku.ca
Student Success Coordinator	Fern Best	W262C	fbest@schulich.yorku.ca
Student Success Coordinator	Lyndsay Vair	W262M	vairl@schulich.yorku.ca
Registration & Academic Service Assistant	Kareene Martin	W262P	studentservices@schulich.yorku.ca
Student Service Assistant	Maria Rizzuto	W263B	studentservices@schulich.yorku.ca
Systems Coordinator	Vivian Sun	W263B	studentservices@schulich.yorku.ca
Communications Coordinator	Nikeeta Machado	W262G	nikeeta@schulich.yorku.ca
FINANCIAL AID			
Assistant Director Admissions & Financial Aid	Jeffrey Little	W263F	finaid@schulich.yorku.ca
Financial Aid Officer	Anne Caulfield	W263C	finaid@schulich.yorku.ca
INTERNATIONAL RELATIONS			
Associate Director, International Relations	Ann Welsh	W262J	awelsh@schulich.yorku.ca
Graduate International Program Coordinator	Cheryl Stickley	W262O	cstickley@schulich.yorku.ca
International Information Assistant	Lan Yu	W262P	intlrelations@schulich.yorku.ca
International Student Support Specialist	Vino Shanmuganathan	W262N	vshan@schulich.yorku.ca
International Student Support Specialist	Sophie Yang	W262	yangjy@schulich.yorku.ca

Julian Scott Yeomans, BA, BSc, MASc, PhD
Program Director, Master of Business Analytics
Program Director, Master of Management in Artificial intelligence
Professor of Operations Management and Information Systems

Denise Dunbar
Program Coordinator
MBAN, MMAI & MSCM
MB 230
416-736-2100 ext. 44681
denise1@schulich.yorku.ca

Fern Best
Student Success Coordinator
fbest@schulich.yorku.ca

Lyndsay Vair
Student Success Coordinator
vairl@schulich.yorku.ca

Enrolment

ENROLMENT PROCESS

Registration and Enrolment

- The course enrolment process at York is completed by students online

- The process of making enrolment changes at York is also automated (e.g. changing course sections, substituting one course for another by dropping one and adding another, or dropping a course)

- Students without immediate access to a computer may use on-campus terminals, including the library, computer lab, or the computers in the Schulich Student & Enrolment Services Office, W263

- Students normally enrol for Summer term courses in March and for Fall and Winter courses in June

- Enrolment is on a first-come, first-served basis

- Students cannot add or drop courses after the term deadline. See the **Key Dates webpage** for details.

Enrolment Blocks

All students having an outstanding balance of $1,000.00 or more will be blocked from enrolling in the Summer, Fall and/or Winter terms.

Enrolment Access Notification

Enrolment access start dates are posted on the Registrar's Office website (**registrar.yorku.ca**) by selecting "Find out when I can enrol." Enrolment access times are determined according to the number of completed credits a student obtains. Schulich access periods begin on different days. Students with the highest number of credits completed begin first. Once the enrolment access has begun, it continues until the final date to enrol in courses for that term.

We recommend that students enrol as early as possible once their access period begins. We also encourage students to verify their enrolment periodically online.

COURSE OFFERINGS AND WITHDRAWALS

The Master of Business Analytics is a one year, full-time program with a specialized set of courses. Students are not permitted to take additional courses within the MBAN program at Schulich or out of Faculty, except courses specified in the list of electives or by permission from the program director.

Course Withdrawals

- dropping one or more courses will prevent a full-time student from completing the MBAN degree program within the prescribed program length and will result in withdrawal from the program

- see your academic advisor ahead of time to discuss the implications of dropping a course

- this program is offered on a full-time basis only

OTHER ENROLMENT INFORMATION

Course Cancellations

If a course is cancelled, Student & Enrolment Services immediately informs those enrolled via their Schulich e-mail.

Revised Course Offerings

Revisions to course offerings are also posted on the **Schulich Course Offerings database.**

Revisions can include:

- cancelled courses
- new courses
- schedule changes (day/time)
- room changes
- new instructors

Master of Business Analytics (MBAN)

The Master of Business Analytics (MBAN) is a professional degree program designed to provide students with the breadth and depth of knowledge to be successful in a wide range of careers in areas such as banking, insurance, marketing, consulting, supply chain management, healthcare, and large technology firms.

Students will gain a conceptual understanding and methodological competence of established techniques in business analytics which are used to create and interpret knowledge in various business environments. They will be able to address complex issues using quantitative methodologies and create value for organizations using business analytics as a key measurement of performance and organizational planning. Graduates will understand how to apply business analytics to generate solutions which balance time, resources and complexity. They will possess a skill set that is both quantitative and qualitative, with the technical competence to analyze data coupled with the skills required to communicate insights effectively.

This one year, three term program culminates with an experiential capstone course spanning the last two terms in which students complete a hands-on, problem-driven analytics project and develop applicable business solutions. Students interface directly with industry leaders and develop both technical and organizational expertise. All Schulich MBAN students are awarded the SAS™ (Statistical Analysis Software) certification upon completion of the program.

STUDY OPTIONS

- May entry

- Full-time study only

PROGRAM LENGTH

- 12 months (3 terms)

GRADUATION REQUIREMENTS

- Overall grade point average (GPA) of **4.40 (B-),** excluding failures

- Successful completion of **45.00 credits** of courses, consisting of:

  - **30.00 credits** of Required Core Courses
  - **6.00 credits** of an Experiential Learning Course
    (Analytics Consulting Project) undertaken in terms 2 and 3)
  - **9.00 credits** of Elective Courses

  Additional promotion standards apply.

CAREER OPPORTUNITIES

With increased data available by newer technologies, banking, healthcare, retail, e-commerce and many others industries are acknowledging the importance of analytics and hiring specialized professionals to analyze big data, create value and drive decision making.

Some of the functional roles where Schulich students are hired include: Forecasting Analyst, Business Analyst, Analytics Consultant, Business Intelligence Manager and Manager – Customer Analytics.

"The Schulich Master of Business Analytics provided the tools and expertise to launch my career in the high-demand field of data analytics."

- Yon-Joon Choo, MBAN '16
Senior Consultant, Artificial Intelligence, Deloitte

Find Program Details Online!
schulich.yorku.ca/programs/mban

MBAN at a Glance

PROMOTION STANDARDS

1. Students enrolled in the Master of Business Analytics program will be reviewed as follows to determine whether or not they have met promotion requirements below:

- initial review upon completion of Term 2
- subsequent review at the end of each following term

2. To maintain their standing in the program, all students must maintain a GPA of at least 4.20 and not receive a grade of F in more than 3.00 credits of course work.

3. Students who do not meet these requirements will be withdrawn.

4. Students who fail a required course must retake it. Students who fail an elective course may retake it, or may elect to take another course. Students who re-take a failed course and receive a second failing grade will be withdrawn.

5. A student who has been withdrawn from the program is advised to seek the help of their Academic Advisor to discuss the best way forward. The student may petition to the Student Affairs Committee to be allowed to continue in the program without having met the promotion requirements.

MASTER OF BUSINESS ANALYTICS (MBAN)		
Term 1: Summer (15.00 credits)	**Term 2: Fall** (15.00 credits)	**Term 3: Winter** (15.00 credits)
MBAN 6110 3.00 Data Science I	MBAN 5110 3.00 Predictive Modelling	MBAN 5140 3.00 Visual Analytics and Modelling
MMAI 5000 3.00 Artificial Intelligence Fundamentals	MBAN 6120 3.00 Data Science II	SUST 5100 3.00 Ethics and Technology
MMAI 5100 3.00 Database Fundamentals	OMIS 6000 3.00 Models & Applications in Operational Research	Elective 3.00 credits
MGMT 6300 3.00 Case Analysis and Presentation Skills	Elective 3.00 credits	Elective 3.00 credits
OMIS 6750 3.00 Project Management	MBAN 6090 6.00 Analytics Consulting Project	

☐ Core Courses

☐ Core Consulting Project

☐ Elective Courses

Academic Requirements:

REQUIRED COURSES (36.00 credits)

MMAI 5000 3.00	Artificial Intelligence Fundamentals
MMAI 5100 3.00	Database Fundamentals
MBAN 5110 3.00	Predictive Modelling
MBAN 5140 3.00	Visual Analytics and Modelling
MBAN 6110 3.00	Data Science I
MBAN 6120 3.00	Data Science II
MGMT 6300 3.00	Case Analysis and Presentation Skills
OMIS 6000 3.00	Models & Applications in Operational Research
OMIS 6750 3.00	Project Management
SUST 5100 3.00	Ethics and Technology
MBAN 6090 6.00	Analytics Consulting Project

ELECTIVE COURSES (9.00 credits)

Students will choose electives from a limited list selected by the Program Director.

Instructions regarding enrolment in elective courses will be sent to students via e-mail from Student & Enrolment Services.

Co-curricular Experience:

REQUIRED WORKSHOPS

Analytics and Professional Development workshops augment academic learning, promote professional development, and are facilitated by industry experts. Participation is expected.

Workshops will be offered over the course of the academic year, and may require single day or multiple day scheduling. Though workshops will not be offered each week, the expectation is that students will be available and attend workshops as they are scheduled. Additionally, some workshops may extend to the weekend.

Students will be informed of upcoming workshops by the MBAN Program Office.

PROFESSIONAL DEVELOPMENT SERIES

MBAN students have access to a variety of specialized services and resources that will support them in their success.

MBAN career related activities include:

• networking events

• information sessions

• interviews

• workshops

• MBAN résumé book

MBAN Career related activities are scheduled throughout the course of the academic year.

MBAN Instructors: 2023-2024

Program Director
Julian Scott Yeomans
BA, BSc, MASc, PhD
Program Director, Master of Business
Analytics
Program Director, Master of Management in Artificial intelligence
Professor of Operations Management
and Information Systems

Murat Kristal
BSc (METS, Turkey); MBA (Bilkent, Turkey); PhD (North Carolina)
Associate Professor of Operations Management and Information Systems; Director, Centre of Excellence in Analytics & AI Leadership, Schulich Executive Education Centre; Special Advisor, AI & Business Analytics

Adam Diamant
BSc (Toronto); MSc (Boston); PhD (Toronto)
Associate Professor of Operations Management and Information Systems

David Elsner
BA, BSc
Adjunct Professor, Master of Management in Artificial Intelligence (MMAI) Program and Master of Business Analytics (MBAN) Program; President, DHE Consulting; Managing Partner, illuminaite

Devlin Russel
BA (Simon Fraser); MA (Toronto); PhD (Toronto)
Sessional Assistant Professor of Philosophy

Hemant Sangwan
Lecturer, Master of Business Analytics and Master of Management in Artificial Intelligence

Hjalmar Turesson
Deloitte Data Scientist; Lecturer, Master of Business Analytics and Master of Management in Artificial Intelligence

Moren Lévesque
Professor of Operations Management and Information Systems; CPA Ontario Chair in International Entrepreneurship; Co-director of Entrepreneurial Studies

Işık Biçer
BSc (Turkey); MSc (Turkey); PhD (Switzerland)
Assistant Professor of Operations Management and Information Systems

Julian Scott Yeomans
BAdmin & BSc (Regina); MASc (Toronto); PhD (McMaster)
Professor of Operations Management and Information Systems

Zhepeng (Lionel) Li
B.Sc. (University of Technology, Hefei, China); M.S. (University of Science and Technology, Hefei, China);Ph.D. (University of Utah)
Associate Professor of Operations Management and Information Systems
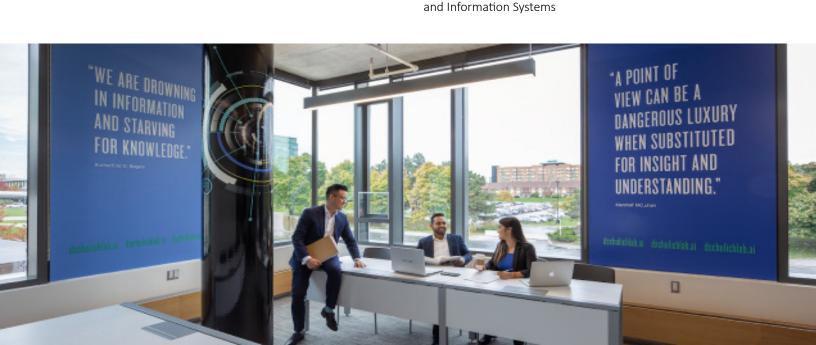
Henry M. Kim
BASc (Toronto); MEng (Michigan); PhD (Toronto)
Associate Professor of Operations Management and Information Systems; Co-Director, BlockchainLab

Markus Biehl
Professor of Operations Management & Information Systems

Richard H. Irving
Professor Emeritus of Operations Management and Information Systems

MBAN Advisory Board

Chair
Murat Kristal
Associate Professor,
Operations Management
and Information Systems,
Schulich School of Business;
Director, Centre of Excellence
in Analytics & AI Leadership,
Schulich Executive Education
Centre; Special Advisor, AI &
Business Analytics

Connie Bonello
Insights and Data Finaicial
Services Leader,
Capgemini

Justin DeLuca
Regional Vice President,
Eastern Canada, Beyond Beer,
Labatt Breweries of Canada

Victor Dudemaine
Assistant Vice President,
Enterprise Data OPTrust

Dana Fox
Founder,
Waterloo Institute for Smarter
Government

Neil Freyke
Chief Data Officer, Group
Functions,
Manulife Financial Corporation

Victor Garcia
Chief Executive Officer,
ABC Live Corporation
Silvia Gonzalez-Zamora
Director, KPMG Canada

Hershel Harris
Board Member,
Habitat for Humanity GTA

Peter Husar
VP, Analytics Strategy
& Planning,
TD Bank Group

Steven Karan
Vice President Digital &
Analytics, GHD DIgital

Paul Lewis
Global Vice President and
CTO, Hitachi Vantara

Sanjay Khanna
Futurist,
Baker and McKenzie LLP

Theo Ling
Partner,
Baker and McKenzie LLP

Ramsey Mansour
Vice President,
Marketing and Strategy,
Purolator

Chris Matys
Founder,
Ignite AI

Alex Mohelsky
Partner, Canadian Data and
Analytics Leader,
Ernst & Young LLP

Damien Mok
Director, Rewards &
Loyalty Insights and
Business Performance,
Royal Bank of Canada

Eric Monteiro
Senior Vice President,
Chief Client Experience
Officer,
Sun Life Financial

Derek Nogiec
VP, Business Development
& Strategic Alliances,
Plotly

Sumeet Pelia
Director, AI
Deloitte
Omnia AI

Stefan Popowycz
Partner
Deloitte

Daniel Preston
Vice President, Finance
Labatt Breweries of
Canada

Eugene Roman
Principle
Design Ai Ltd.

Parinaz Sobhani
Director, Machine
Learning,
Georgian Partners

Palash Thakur
Senior Director,
CIBC

Rogan Vleming
Head of Data Science
& Engineering, Simon-
Kucher & Partners

Arif Virani
Chief Operating Officer
DarwinAI

Alexis Zamkow
Digital Strategy and
Innovation,
IBM

Course Descriptions

ACTG 5210 1.50   Management Accounting

An introduction to management accounting techniques that are useful in management decision-making situations such as cost management, pricing special orders, determining service levels and performance appraisal. The non-applicability of external reporting figures for most management decisions is reviewed.

ECON 6210 3.00   Economic Forecasting and Analysis

An increasing number of organizations make explicit forecasts of the economic environment within which they will be operating as a basis for forward-looking plans. This course studies the main forecasting methods in relation to the length of the forecasting time horizon. Several systematic appraisals of past forecasts are reviewed.

FINE 5200 3.00   Managerial Finance

Provides an opportunity to learn about investment and financing decisions. The investment decisions involve asset valuation, capital budgeting, risk management, working capital management and performance assessment. The financing decisions include the choice of capital structure and financial instruments, the risk-return trade-off, financial planning and cost of capital. Ethical, environmental, and corporate governance considerations are integrated into investment and financing decisions.

FINE 6310 3.00   Econometrics of Financial Markets

This empirical methods course focuses on the statistical techniques that are most often used in the analysis of financial markets. The list of topics include: statistical properties of asset returns, tests of asset pricing models, efficient market hypothesis, event study methodology, simulation methods, panel data analysis, and volatility estimation such as GARCH, value-at-risk, and time-varying correlations.

FNSV 6700 3.00   Management of Risk in Financial Institutions

Risk is the fundamental element that influences the behaviour of financial institutions. FNSV 6700 provides a comprehensive introduction to risk management. Presented within the framework of financial institutions, the course covers the design and operation of a risk-management system, modeling and the interplay between internal oversight and external regulation. The theory of risk management (market, credit and operational risk) comes alive through practical case evaluation and presentations from the senior executives in the risk management field. The course provides the essential analytical foundations of risk management in a way appropriate for those who do not have a mathematical background.

FNSV 6990 1.50   Enterprise Risk Management and Strategy

Strategy and risk management are two sides of value creation for companies. Strategic choice must identify how these choices affect a broad array of stakeholders. A firm must be organized to recognize, measure, monitor, and disclose risks if it is to implement its strategy. This course will focus upon the strategic importance of risk management rather than more technical aspects.

MBAN 5110 3.00   Predictive Modeling

This course provides the tools needed to build models from data sets, validate models, and make predictions. The course emphasises the SAS environment. Major areas for discussion include analysis of variance, regression, categorical data analysis, and predictive modelling. The course emphasizes both theory and practice, allowing students to use statistical theory for purposes of business case analysis.

MBAN 5140 3.00   Visual Analytics and Modelling

This course is an introduction to the fundamental theories of visual communication design applied in data visualization and visual analytics. Students become familiar with data-driven decision making workflows and storytelling best practices. Major areas for discussion include visual design principals, data structures, taxonomy of data visualization models and weekly technical tutorials using the Tableau software.

MBAN 6090 6.00   **Analytics Consulting Project**

The Analytics Consulting Project is the capstone integrative course of the MBAN program. It will allow students to deepen their understanding of the subject matter and methodologies, as well as provide an opportunity for hands-on, problem-driven research and application. It is an intensive, 2-term project where groups of four MBAN students undertake a comprehensive analytics project of an organization ("client site") and provide business insights to enhance the site's future success. At the conclusion of the analytics consulting project, students submit and present their final work to a panel of at least two experts, including the course director, and alaos to the client site.

MBAN 6110 3.00   **Data Science I**

An introduction to data science techniques designed for students who will work with data scientists or invest in related ventures. The course introduces fundamental concepts and techniques for the analysis of data-centered business problems, the creation and evaluation of solutions, the data science strategies, the basic cycle of a data-mining project, and the integration into business strategies.

MBAN 6120 3.00   **Data Science II**

This course is designed for business students who will pursue a career in the related industries. The course first teaches students Unix command line and Python programming language, which constitute the uniform computing environment for the following topics: data visualization; predictive modelling; relational database and SQL; Web APIs; big data, Hadoop and MapReduce; and Stochastic Search and Optimization methods. Towards the end of the course, various business cases from data since are introduced; examples may include: (i) online recommender systems; and (ii) Online targeted display advertising. Through in-class labs, the course gives students hands-on experience of advanced data science techniques. Students are required to bring their own laptop to participate in these in-class labs.
Prerequisite: MBAN 6110 3.00

MBAN 6500 3.00   Artificial Intelligence in Business I

Students are introduced to the field of artificial intelligence, with a focus on business applications and a historical perspective that covers the basic terminology and concepts. The course covers multiple facets of artificial intelligence including knowledge representation and symbolic reasoning; biologically inspired approaches to artificial intelligence; supervised, unsupervised, and reinforcement learning; multi-agent systems; planning; and natural language processing.

MBAN 6510 3.00   Artificial Intelligence in Business II

The emphasis in this course will be on automation and autonomous cyber-physical system applications of artificial intelligence. Students will delve deeper into topics which include: probabilistic reasoning & handling uncertainty; search; perception & sensing; human-computer interfacing; conversational systems; and autonomous robotics, drones, and autonomous vehicles.
Prerequisite: SB/MBAN 6500 3.00

MGMT 6300 3.00   **Case Analysis and Presentation Skills**

This course is designed to give students the opportunity to practice and develop their analytical thinking and presentation skills. The key objective of the course is to train students to successfully participate in national and international case competitions. A secondary objective is to prepare students to successfully interview for management consulting positions. Second-year MBA students who enjoy analyzing cases and delivering presentations are encouraged to take the course.
Prerequisites: ACTG 5100 3.00, MGMT 5150 3.00, MGMT 5260 3.00, MKTG 5200 3.00, ORGS 5100 3.00
Corequisite: SGMT 6000 3.00

MKTG 5200 3.00   **Marketing Management**

This course familiarizes students with the major marketing concepts (buyer behaviour, segmentation, targeting, positioning, product/service development and management, pricing, distribution, communication). It applies these concepts to profit, not-for-profit, new, mature, service, product-based, domestic and international organizations. It develops specific skills such as problem-solving, verbal presentation, business writing and group work. Marketing ethics and sustainability issues are integrated into the course.

MKTG 6050 3.00   **Marketing Research**

This course develops students' understanding of basic and advanced market research methods. Students learn to evaluate completed research projects and conduct research studies, developing proficiency in defining research questions, developing research designs, selecting appropriate samples, conducting analysis and writing actionable management reports. Also examined are mobile research, brand maps, social media monitoring/metrics, Big Data, consumer surveillance and data privacy issues.

MKTG 6150 3.00   **Consumer Behaviour**

This course assists students in developing a thorough understanding of both organizational buyers and end consumers. The psychological, sociological, organizational and environmental factors that shape buyer behaviour

are reviewed. Throughout the course, the implications for both marketing strategies and tactics are addressed.

MKTG 6250 3.00   Business Marketing

The course explores the management of inter-firm relationships in a supply chain context, encompassing both supplier-manufacturer relationships, and the relationships between manufacturers and channel intermediaries. Students learn to see these relationships as strategic combinations of market competition, power, and trust. Topics include firm buying behaviour, the design of distribution channels, strategic implications of forward and backward vertical integration, various technology applications in SCM, and franchising.

MKTG 6300 3.00   Service Marketing

This course examines the need for marketing in service industries, develops an understanding of the ways in which service marketing differs from product marketing, and improves students' understanding of how service characteristics affect the marketing function. Students learn to develop and implement marketing plans for service organizations.

MKTG 6360 3.00   Marketing Metrics

This course focuses on developing the analytical skills required to successfully apply the principles of quantitative analysis to the marketing discipline. Students will learn the most common measurement methods currently being used in the marketing field.

MMAI 5000 3.00   Artificial Intelligence Fundamentals

This course introduces students to the field of artificial intelligence, with a focus on AIdriven business applications. It provides a historical perspective tracing the emergence of basic concepts of contemporary AI. Students learn key artificial intelligence techniques including knowledge representation and symbolic reasoning, biologically inspired approaches to AI, supervised, unsupervised and reinforcement learning, multi-agent systems and natural language processing.

MMAI 5100 3.00   Database Fundamentals

Database Management Systems are computer-based systems used by organizations to manage the vast amount of data that accompany daily operations, support data analysis, and enable intelligent decision making. This course provides an applied introduction to database management systems and their use in the business environment. The course covers the fundamentals of database analysis and design.

OMIS 6000 3.00   Models and Applications in Operational Research

This course provides a survey of selected topics in operational research (OR). Emphasis is placed on the practical application of OR tools rather than on the mathematical properties. Application areas include: financial planning and portfolio selection, production, priority planning and marketing. Topics include: linear programming and its applications; programming to achieve a set of goals or targets with applications in finance and production; capital budgeting and project selection; transportation and network models; and portfolio models.

OMIS 6350 3.00   Advanced Spreadsheet Modelling & Programming for Business

This course enables the design, development, and implementation of integrated business analysis systems by combining the extended functionality of spreadsheets with the Visual Basic for Applications (VBA) programming language. The course demonstrates the power of combining the advanced analysis and modelling techniques of spreadsheets and VBA through applications to several practical problems from disparate business functions.

OMIS 6560 3.00   Supply Chain Management

This course is about how to make decisions that lead to the better design and management of supply chains. This often involves changing the network of relationships between suppliers and customers and other stakeholders as they design, contract, order, plan and coordinate goods and services together. This course covers essential quantitative supply chain management models, supportive information and ecommerce technologies, environmentally and socially responsible practices and customer-supplier relationship management.

OMIS 6610 3.00   Digital Transformation in Services

Service industry constitutes approximately 70% of the Canadian economy. Digital technologies are rapidly changing the way service organizations do business and interact with their customers. While investing in technological advancements, services struggle with reaping the benefits of this powerful shift. In this course, students explore and learn the foundations and components of digital transformation and make the connection between the strategy, technology, and implementation. The course will provide students with real-life business cases in which various trade-offs must be made according to the technology, the business strategy, and the service requirements.

OMIS 6750 3.00   Project Management

Previously MGMT 6700 3.00
This course covers the strategic, organizational and operational aspects of managing projects. Students learn to manage the technical, behavioral, political and cultural aspects of temporary groups performing unique tasks. Topics covered include: defining deliverables, formulating project strategy, effective group organization, and management, dynamically allocating resources, managing without authority and resolving conflict. Traditional cost and time management techniques are covered using Microsoft Office and open-source, free project management software.
Course Credit Exclusion: MGMT 6700 3.00

OMIS 6955 3.00   Service Operations
                                  Management

This course is about designing and implementing service processes that respond effectively to customer requirements. Service processes involve high customer interaction, information intensive products and the requirement for real-time responsiveness to a wide variety of customer demands. Designing, implementing and maintaining these processes in a competitive environment requires service-oriented organizations to have a new level of competence. This course concentrates on the problems and opportunities found in large companies in rapidly changing industries such as financial services. Best practice and generic problems in service delivery can be found in many industries from manufacturing to retailing. Identifying effective strategies as well as specific techniques for process planning and control, and project implementation are important in the development of managerial competence in service operations.
Prerequisites: OMIS 5120 1.50, OMIS 5210 1.50.

ORGS 6350 3.00   Managing Change

As the environment of many business and non-profit organizations becomes increasingly complex and unstable, it is imperative that top managers be able to create a climate of flexibility and adaptability in their operations. Organizations must be able to undertake major change without destructive side effects to be truly successful. This course surveys the major methods available to the modern manager for effectively managing the process of change and creating a general climate in which needed changes are sought and welcomed throughout the organization. The course emphasizes case studies and the discussion of alternative change management models.

ORGS 6560 3.00   Negotiations

Provides students with insight into their own negotiation style and how to become a more effective negotiator. The course takes an experiential approach to exploring the concepts, theories, and psychology of negotiations. Students will gain knowledge of the different approaches to negotiations and the strategies and tactics unique to each. The course will provide students with opportunity to learn, practice, and refine negotiation skills as well as equip them with the skills necessary to negotiate constructive resolution to conflict in the workplace.

SUST 5100 3.00   Ethics & Technology

This course explores the ethical underpinning of several technological issues including Artificial Intelligence, Privacy, Machine Replacement, etc. Students will seek to understand the implications of such technological developments on society, and to manage employees and organizations in a way that balances the tension between technological advancement and human ethics.

Notes

Master of Business Analytics
Academic Handbook
2023-24

CONNECT:

Student Services &
International Relations

studentservices@schulich.yorku.ca
SSB W263 | 416-736-5303

Last Updated: December 8, 2023