Queen's Master of Management Analytics – Toronto

EARN A MASTER'S DEGREE IN MANAGEMENT ANALYTICS
WHILE YOU CONTINUE TO WORK



A one-year program at our Toronto campus starting in January or June. Previous work experience and current employment is not a requirement.



Today, with advancing technologies, most companies and organizations find themselves awash in a sea of data, but lacking the human resources, tools and knowledge to use it to create competitive advantage and generate value. Queen's Master of Management Analytics is designed to give you the skills you need to do exactly that.

Queen's Master of Management Analytics – *Toronto*

The Queen's Master of Management Analytics program will provide the skills and knowledge you need to develop, direct, and deliver projects in analytics that add value to your organization.





Fast-track to a successful career in the high-demand field of analytics

The field of management analytics is exploding, and companies are hard pressed to find qualified people who can organize, analyze, and create value from data. In fact, a recent study by McKinsey suggests that demand for deep analytical talent in North America will outstrip supply by 50% in 2018. Queen's Master of Management Analytics will provide you with the knowledge, skills and tools to succeed in this area of high demand.

A world-class degree in 12 months, while you work

Queen's University's Smith School of Business offers this unique opportunity to accelerate your career while you continue to work, eliminating the opportunity cost of lost wages and making this program an exceptional value when compared to full-time master's degree programs.

The Power of Teams

Smith School of Business utilizes an innovative approach to teambased learning that is far more sophisticated than that used in other programs. You will be assigned to a team for the core of the program and a professional Team Coach will work with your team, providing regular feedback and guidance that is pivotal to the learning process. You will graduate with a thorough understanding of how to create, contribute to, and lead a high-performance team.

Professional Certifications

The Queen's Master of Management Analytics program includes courses that may be applied to the certification requirements for the following designations: Certified Analytics Professional (CAP); Certified Associate in Project Management (CAPM); or, with additional training, Project Management Professional (PMP). As part of the curriculum, you will also take the SAS Certified Predictive Modeler exam.

1





A RICH TRADITION OF INNOVATION AND EXCELLENCE

Queen's is consistently ranked among Canada's very best universities. Established in 1841, Queen's has a rich tradition of academic excellence. It has long enjoyed the reputation of "Canada's lvy League" university, attracting students from across the country and around the world. Queen's graduates have made indelible marks on the national and international landscape, through their contributions to science, the arts, business and government. The extensive alumni network of more than 180,000 graduates spans 154 countries. You will find Queen's graduates in positions of leadership around the world. Queen's University is located in Kingston, Ontario — one of Canada's most vibrant small cities.



THE STEPHEN J.R. SMITH SCHOOL OF BUSINESS

at Queen's University

In October 2015, in recognition of an extraordinary gift from Queen's alumnus Stephen Smith, Queen's School of Business became The Stephen J.R. Smith School of Business. Under this new name, the School will continue to be one of the world's premier business schools and a major innovator in the field of business education.

In addition to its highly acclaimed Master's programs, Smith School of Business is also home to Canada's most prestigious undergraduate business program and an outstanding doctoral program. As well, the School is one of the world's largest and most respected providers of executive education.

Thought Leadership - Smith Business Insight

Smith School of Business has an impressive record of cutting-edge research and thought leadership, and both faculty and graduate students enjoy access to numerous resources that support this effort. Smith Business Insight (ssb.ca/insight) provides a platform to share insights with the world.



Globally Connected

Due to its strong reputation, Smith School of Business attracts top students from across Canada and around the world. The School maintains international exchange partnerships with 100+ respected business schools in over 40 countries, and welcomes more than 300 international exchange students annually.

Internationally Accredited

Smith School of Business is fully accredited by the world's leading accreditation bodies: the AACSB (Association to Advance Collegiate Schools of Business) in the USA, and EQUIS through the European Foundation for Management Development.





Game Plan

Smith School of Business is a founding partner of Game Plan, helping Canada's Olympic and Paralympic athletes transition to their post-athletic careers.







PROGRAM STRUCTURE

The program schedule is designed to enable you to earn the degree while you continue to work, but current employment is not a requirement. Students may elect to devote themselves full-time to their studies.

Residential Sessions

The program includes two one-week residential sessions at the Queen's campus in Kingston, Ontario – one at the beginning of each semester. The balance of your classes takes place at our downtown Toronto campus.

Class Schedule

Please visit our website for a complete schedule *ssb.ca/mma*. The class is divided into three sections. Classes are scheduled one evening per week and one day every other weekend.

| SECTION A | Evening classes are held every Wednesday |
|-------------------------|---|
| June Start | Weekend classes are held every other Saturday |
| SECTION B June Start | Evening classes are held every Thursday Weekend classes are held every other Sunday |
| SECTION C | Evening classes are held every Wednesday |
| January Start | Weekend classes are held every other Saturday |

Pre-Program Refresher in Statistics

For those who require an introduction or a refresher, Smith School of Business offers an optional one-day session in early May, prior to the June start and in December, prior to the January start.

CURRICULUM

Queen's MMA curriculum has been developed to provide the team skills, business acumen, analytic capabilities, and communication skills you will need to be successful. It includes extensive review of the fundamental, mathematical and statistical theories and methods that underlie modern analytics... but with a practitioner focus.

Professional Designations

During the program, you will be able to work toward three additional professional designations.

CERTIFIED ANALYTICS PROFESSIONAL (CAP)

During the program, you will receive training that can be applied to a Certified Analytics Professional (CAP) with the Institute for Operations Research and the Management Sciences.

PROJECT MANAGEMENT PROFESSIONAL (PMP)

The program also provides twenty-three instructional hours which can be applied to the certification requirements for either a Certified Associate in Project Management (CAPM), or (with additional training) a Project Management Professional (PMP) with the Project Management Institute (PMI).

SAS CERTIFIED PREDICTIVE MODELER

As part of the program, you will also take the SAS Certified Predictive Modeler (using SAS Enterprise Miner).



Courses

- Creating High-performance Teams
- · Introduction to Management
- Mathematical Foundations
- · Acquisition and Analysis of Data
- Big Data
- · Multivariate Statistical Analysis
- · Marketing Analytics
- · Project Leadership
- · High Performance Teams
- Entrepreneurship Workshop
- · Operations and Supply Chain Analytics
- · Analytical Decision-Making
- · Analytics for Financial Markets
- Pricing Analytics
- · Management of Analytics
- Text Analytics & Sentiment Analysis



6 6 I chose the Queen's Master of Management
Analytics program in order to complement my
business background with applied analytics
knowledge. We leverage analytics extensively
at work and I believe that the skills this program
provides will be invaluable, enabling me to
become a stronger leader of my analytics team. 99

Jane Ho, MMA 2014 Analytics Leader TD Bank Financial Group Toronto, ON



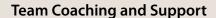
6 During the program, I was introduced to the newest and most innovative techniques and practices in data analytics through the outstanding group of professors and a multitude of guest speakers. It was a very motivating year and I recommend it to anyone who has an extensive interest in analytics. You will be amazed by the number of employment opportunities open to you after completion.

Joanie Gingras, MMA 2014 Senior Credit Risk Analyst Rogers Communications Toronto, ON

THE POWER OF TEAMS

Understanding the Power of Teams

Smith School of Business uses an innovative approach to team-based learning that is far more sophisticated than that used in other programs. We believe strongly in our team-based approach because it mirrors today's progressive workplace. You will be assigned to a team for the duration of the program, and you will gain a thorough understanding of the best practices for successful team-building and teamwork. Team members collaborate on assignments, projects and presentations, drawing on the skills and experience of individual team members, greatly enhancing the learning experience.



A dedicated, professional Team Coach is assigned to every team. Throughout the program, they will monitor your team's effectiveness and provide regular feedback and guidance that is pivotal to the learning process. You will be provided with proven processes and best practices for overcoming any obstacles that may arise during the year.

Developing Your Team and Leadership Skills

One of the greatest benefits of our team-based approach is the opportunity to develop your team and leadership skills — skills that are essential in business today. At Smith, you don't just learn about teamwork and leadership, you actually put them into practice. Each team member is given opportunities to lead projects as well as contribute to those led by other team members.





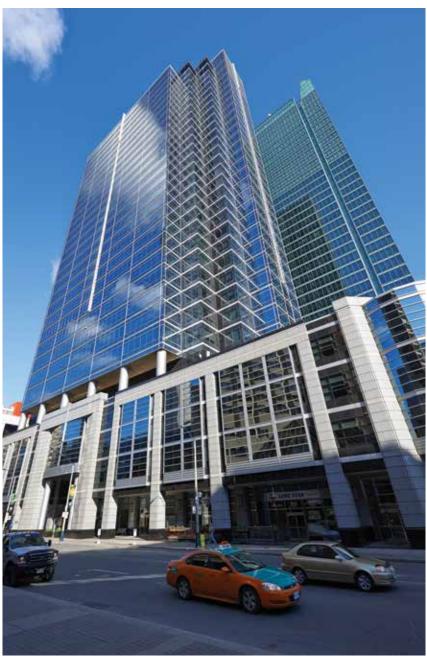
STATE-OF-THE-ART LEARNING FACILITIES

The program includes two one-week residential sessions at Queen's. The rest of your classes are held in our state-of-the-art downtown Toronto campus, located on the 30th floor at 200 Front Street West. In addition to classrooms, meeting rooms and program offices, the campus is also home to the IBM Canada/Smith Cognitive Computing Centre.









OUTSTANDING FACULTY TEAM

In the Queen's Master of Management Analytics program, you will be working with some of the best management educators in North America, as well as numerous industry representatives who bring their experience into the classroom.

Exceptional Academic Credentials

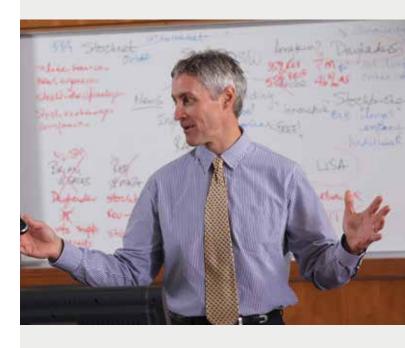
The professors who teach in the program are award-winning teachers and widely-published researchers. They are experts at merging theory and application. Using a blend of case studies, briefings, class discussions and experiential learning, your professors will create a classroom experience that is energized and exciting.

Industry Specialists and Practitioners

In addition to Smith School of Business faculty, several sessions will be led by industry specialists and practitioners. This ensures that you are being fully briefed on current trends and practices from the perspective of people who are currently working in the industry.

Committed to Your Success

The faculty at Smith School of Business is committed to your success, both academically and in your career. You will find them very approachable and available to answer questions and provide assistance outside of class time. The Queen's experience fosters close working relationships between faculty and students.





Management Analytics for several reasons: the strong reputation of Queens School of Business; the opportunity to earn the degree while I continued to work; and the strong focus on analytics within a business context. As we continue to build a data driven culture within our organization, this program will support me in my current job and ensure that I have the right mix of skills for the rest of my career.

Chris Hopkins, MMA 2014Director of Analytics North America
The Exchange Lab
Toronto, ON

CAREER SUPPORT

In today's competitive business environment, career success requires focused, strategic career management. Through our dedicated Business Career Centre, Smith School of Business provides comprehensive services and resources to help you achieve your career goals.

Career Coaching

A dedicated Career Coach is available to work with you to define your career objectives, shape your job-search strategy and fine tune your résumé, cover letter and interview skills.

Career Development Sessions

Smith provides career-related information sessions, seminars, workshops and corporate events to help you create and implement effective career management strategies.

On-Campus Recruiting

Students in the Queen's MMA program are invited to participate in the annual Corporate On-Campus Recruiting that takes place each fall at Queen's in Kingston.

Online Resources

Smith School of Business also provides a suite of online resources to assist you with career planning, career development and job search.

Industry Networking Event

Every year, the program holds a networking event for MMA students and industry people. This presents an excellent opportunity to make connections that will prove to be valuable throughout your career.





66 For someone interested in analytics and really wanting to be the conduit between the technical side and the business side, it's a great program. If you make the most of the opportunity, it can be a career changing program.

Brad Kent, MMA 2015 AVP, Program Analytics LoyaltyOne Toronto, ON



Queen's MMA gave me the credibility I needed to jump from a senior business role in a slow-growth-field, to a leadership role in a rapidly growing field. The program gives you the opportunity to dive as deep as you want into a large variety of very interesting topics. I would recommend this program unequivocally.

Chad Koziel, MMA 2015Senior Consultant, Informatics & Business Intelligence OntarioMD
Toronto, ON

CLASS PROFILE

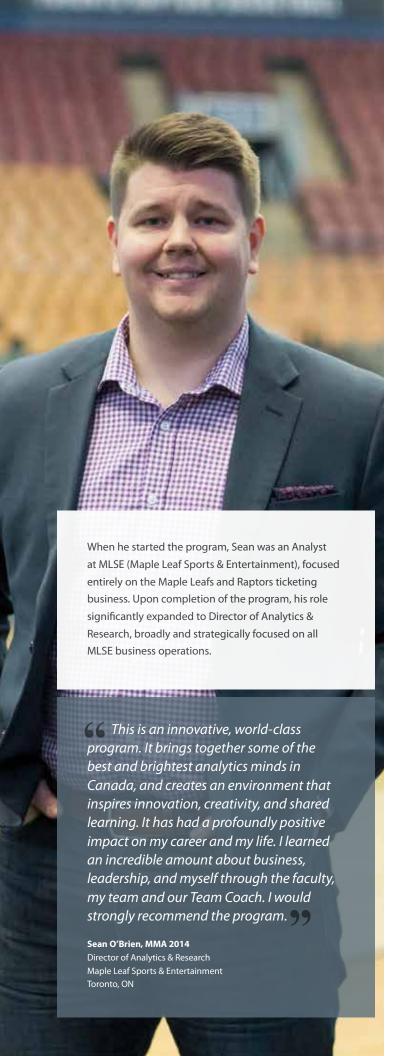


| Average Age | 30 |
|---|-------|
| Age Range | 22-52 |
| Average Years of Work Experience | 7 |
| Average Years of Management Experience | 3 |
| † 65% † | 35% |

Companies Represented

The following is a partial list of companies who have been represented in the MMA class.

- Accenture
- American Express
- AIMIA
- Bank of Montreal
- Bell Canada
- Canadian Forces
- Chase Card Services
- CIBC
- Deloitte
- Desjardins General Insurance Group
- Fujitsu Canada
- IBM
- LoyaltyOne
- Manulife Financial
- Maple Leaf Sports & Entertainment
- Ontario Lottery and Gaming Corporation
- Ontario Medical Association
- PwC
- RBC Insurance
- Royal Bank of Canada
- Rogers Communications
- Scotiabank
- Shaw Media
- Shoppers Drug Mart
- TD Canada Trust



SMITH SCHOOL OF BUSINESS ALUMNI NETWORK

When you graduate from Queen's Master of Management Analytics, you will not only have established an invaluable network of classmates, you will also join the impressive Smith School of Business alumni network which numbers over 22,000 graduates around the world.

Our commitment to you continues long after graduation. You will be able to stay in close contact with Smith School of Business, your fellow alumni, and faculty in a variety of ways. These include:

- Access to job opportunities through the Smith School of Business Career Centre
- The ability to speak to faculty regarding issues and opportunities you may be facing in your career
- Thought-provoking white papers and webinars
- · Class reunions and special networking events
- Smith Business Club events in cities across Canada, as well as New York, London and Hong Kong
- A free subscription to the alumni magazine

As a graduate of Smith School of Business, you also become part of a much larger family — the alumni network of Queen's University, with over 180,000 individuals in 154 countries around the world. In addition to 4 chapters in the USA, Queen's maintains active chapters in many other countries around the world.



GRADUATE SUCCESS STORIES

Our graduate success stories reflect a range of people, at a variety of levels within their organizations, who entered the program with their own unique career goals.

At the start of the program, Masoum was an Analyst, Business Analytics & Financial Services at Shoppers Drug Mart Inc. While in the program, he accepted the position of Senior Consultant, Advanced Analytics at Aimia, a global leader in marketing and loyalty analytics. He was subsequently promoted to Senior Manager, Advanced Analytics. He believes the Queen's MMA program was instrumental in his career progress.

The program had a profound impact on my professional network. As well, it really balanced the analytical/technical aspects, with other essential skills such as business acumen, relationship management and delivering complex ideas to an executive audience. The instructors and guest speakers were absolutely top-notch, providing insights and stories that were truly inspirational. The team-based approach is fantastic and actually mimics the real world. This was a key differentiator for me. I would definitely recommend this program.

Masoum Mosmer, MMA 2015 Senior Manager, Advanced Analytics Aimia Inc. Toronto, ON When Peter started the program, he was Director, Business Planning & Analytics with the Ontario Lottery & Gaming Corporation (OLG). He was presented with several job offers, both during and after the program and, nine months after graduation, he decided to join Fairmont Raffles Hotels International (FRHI) as Executive Director, Customer Insights & Analytics. He recently joined Shoppers Drug Mart as Director, Customer Analytics.

When Emily started the program, she was a Senior Audit Associate at EY (Ernst and Young). After completing the program, she accepted a position with Walt Disney Parks and Resorts in Orlando, as an Integration Consultant on the Management Science and Integration team, within Revenue Management. In this position, she provides analytics solutions to Disney's media networks, while gaining valuable exposure into how analytics is being applied throughout the Disney organization.

When Brice started the program, he was a Project Manager at IBM. Upon completion, he joined Deloitte as a Senior Consultant in the Information Management and Analytics Technology practice and, within a year, he was promoted to Manager.



Peter Cuthbert, MMA 2014 Director, Customer Analytics Shoppers Drug Mart Toronto, ON

students in the class, I found the program really augmented my practical analytics and business experience. More importantly however, the program provided a consistent focus on the application of cutting edge techniques and practices in real world scenarios. The team-based approach was a highlight of the program. We were all genuinely vested in driving each other's overall performance. I left the program with a tremendous life experience and relationships I will cherish for the rest of my life.



Emily Chambers, MMA 2014 Integration Consultant, MSI - Pricing & Revenue Management The Walt Disney Company Orlando, Florida

Without the Queen's MMA program, I would not be where I am today. Through the program, I was able to connect with a Disney executive who gave a presentation to our class on how Disney was using analytics. He put me in contact with some people within his organization, which led directly to my current position. The Queen's MMA program is relevant and very enlightening. I would certainly recommend it to anyone who wants to delve into the growing field of management analytics.



Brice Chan, MMA 2014Senior Manager, Analytics
Deloitte
Toronto, ON

The Queen's MMA program accelerated my career and has been fundamental to my success since graduation. The program provided me with the technical foundation and business context needed to be successful as a consultant advising clients on analytics. I am a strong advocate of the MMA program and the value that it provides to graduates in such a short time. At Deloitte we see the competitive edge the program brings and will continue to identify and recruit top talent from future classes.



When Brenda entered the program, she was a Senior Business Analyst at the Workplace Safety & Insurance Board (WSIB), and had a strong interest in a managerial position in the private sector. Near the end of the program she began to explore opportunities and eventually accepted the position of Manager at the Big Data Centre of Samsung Electronics in Suwon, Korea.

When Qahir started the program, he was a Senior Analytics Consultant at TD Bank. Upon completion of the program, he was hired by Nomis Solutions as a Principal, Business Analytics, working with Big Data analytics and cutting edge technology to help banking clients optimize their pricing and profitability. He credits his previous banking experience and the Queen's MMA program with enabling him to make this career move.

At the time he started the program, Frédéric was an Inventory Planner at Wolseley
Canada, an international trade distributor of plumbing and heating products and supplier of building materials. While in the program, he accepted the position of Consumer Packaged Goods Advisor at Aimia Inc. He later moved to CIBC as a Senior Analytics Consultant, and has since been promoted to Senior Manager, Fraud Management and Analytics.



Brenda Yun, MMA 2014Manager, Big Data Analytics
Samsung Electronics
Suwon, Korea

intensive but very worthwhile. I had been working in Business Intelligence and Analytics for 6 years, but mainly at the descriptive level. The program taught me various tools, techniques and industry trends. This prepared me well to effectively communicate with PhD level colleagues at Samsung today. The team-based approach was very beneficial and the classroom facility was simply great. I will recommend this program to analytics professionals interested in advanced analytics as well as others interested in a career switch to the field of analytics.



Qahir Rajwani, MMA 2015Principal, Business Analytics
Nomis Solutions
Toronto, ON

Analytics program in order to complement my marketing and business background with applied analytics knowledge. We use analytics extensively at work and I believe that the skills this program provides will be invaluable, enabling me to become a stronger leader of my marketing analytics team.



Frédéric Marier, MMA 2015
Senior Manager, Fraud Management and Analytics
CIBC
Toronto. ON

66 My goal in pursuing this degree was to focus my career on the field of analytics. Thanks to the program and the connections I made, I am now working at a global leader in loyalty analytics. It has opened so many doors for me and I am now considering career paths I could not have thought about before the program. Queen's MMA has provided an amazing network, the faculty was incredibly knowledgeable and approachable, and the team-based approach was exceptional. I highly recommend this program.

PROGRAM ADVISORY BOARD



Pavel Abdur-Rattman

Data Scientist & Associate Partner

IBM Cognitive & Robotics Solutions



Lori BiedaVice President, Business Analytics and Insights
Bank of Montreal



Declan Brady SVP Field Services Bell Canada



David CourtDirector
McKinsey & Company



Glenda CrispSVP & Chief Data Officer
TD Bank Group



Mike Durland (Advisory Board Chair) Retired Group Head and CEO, Global Banking and Markets Scotiabank



Achille Ettorre Faculty International Institute for Analytics



Damian Lee Vice President, Portfolio Manager CHA Systems



Ryan Maund SVP, Customer Operations & Loyalty Bell Canada



Yuri Medvedev Chief Mathematician Bank of Montreal



Raymond PinedaPartner, Consulting
Deloitte Canada



Brian RossPresident
Precima



Ronan Ryan Chief Development Officer Canadian Red Cross



David SaundersDean
Smith School of Business



Mark Shafer Senior Vice President, Revenue & Profit Management Walt Disney Parks and Resorts



Alison Simpson
Senior Vice President
Marketing and Branding
TMX Group



Kevin StantonPresident
MasterCard Advisors



William Stewart Head of Analytics RBC Wealth Management



Steven ThomasAssistant Adjunct Professor
Smith School of Business



Michael Zerbs
Executive Vice President and Co-Head
Information Technology, Enterprise Technology,
Scotiabank



Paul Zikopoulos Vice President BigData Cognitive Systems IBM

APPLICATION PROCESS

Admission Requirements

Although the program is designed to enable you to complete the degree while you continue to work, previous work experience or current employment is not a requirement. To be considered for admission to the Queen's Master of Management Analytics program, applicants must meet the following requirements:

- An undergraduate degree from a recognized university in Mathematics, Business, Computer Science, Economics, Engineering, or Science, with very good performance in mathematical and statistical coursework
- Successful applicants will have a GMAT score of 650 or above.
 This requirement may be waived for exceptional candidates.
- Two letters of reference (forms available online at ssb.ca/mma)
- Official transcripts from each post-secondary institution you have attended, sent by the Registrar of the institution directly to the Queen's Master of Management Analytics Admissions Committee
- · Cover Letter
- Résumé
- Completed application form (available at ssb.ca/mma)

Applications

Applications for admission are to be completed online. For a complete and more detailed explanation of the application process, including fees, please visit our website.

Note: Applicants whose first language is not English and whose undergraduate university studies were taken in a language other than English must achieve a satisfactory score on one of the accepted tests for facility in English. A complete list of accepted tests is available on our website.

Program Fees

Program fees and a fee schedule are available on our website.

Student Line of Credit

(Domestic Students Only)

Smith School of Business has partnered with the local Kingston branch of RBC Royal Bank to offer a student line of credit tailored to your needs. Visit our website for more details.



Student Loan Program

(International Students Only)

Prodigy Finance Ltd offers loans to international students in the Queen's MMA program. Visit our website for more details.



Academic Scholarships

Smith School of Business is pleased to offer Dean's Entrance Scholarships to applicants on the basis of outstanding academic and professional achievements.

Queen's Master of Management Analytics – Toronto

The Stephen J.R. Smith School of Business

Goodes Hall, Queen's University Kingston, Ontario Canada K7L 3N6 Toll-free: 855.533.6449 Tel: 613.533.6449 qmma@queensu.ca

ssb.ca/mma



This graduate degree program is offered by Smith School of Business at Queen's University, a non-profit institution dedicated to providing educational opportunities to undergraduate, graduate, and doctoral students. All proceeds from programs at Smith School of Business directly benefit the education of the business leaders of tomorrow.



