



Schulich
School of Business
Executive Education Centre

UPCOMING PROGRAM DATES

Sep. 16, 2019 - Jan. 17, 2020

3 Standalone modules of 5 days each over 4 months • Optional: Start your Masters Certificate journey at any of the three standalone modules.

Complete all three to obtain your Masters Certificate.

See Page 3 for details.

LOCATION

Miles S. Nadal Management Centre
222 Bay Street, Toronto

Masters Certificate in Analytics for Leaders

Learn what's required to leverage data for smarter business decisions.

Program Leadership Insights

Analytics understanding is the filter you need to stay afloat in the current and future explosion of data.

Leveraging data is critical to identifying new market opportunities and maintaining competitiveness.

Implementation is highly idiosyncratic to an organization's specific circumstances and requires a diverse set of skills.



In association with



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Why Implement Data Analytics?

Decisions based only on gut feeling or spreadsheet level analysis are increasingly a recipe for extinction.

While many organizations collect data as a basis for decision making, **seeing patterns in the exploding volumes of data being generated by customer and client interactions with services and products quickly becomes impossible.** That's why collecting big data is simple, but analyzing it properly to **extract and distill the insights it contains** in order to **make better and more profitable business decisions** requires some specialized skills.



What Does Predictive Analytics Entail?

Leveraging analytics involves collecting data and a technical process of analyzing it to “open a window into the future” for **experimentation with different courses of action to assess the potential outcomes.**

There are lots of applications across all sectors and functional areas, but at the heart of them all is **a fundamental understanding of core business parameters.** Analytics works when somebody has **fully aligned the technical aspects with the specific business details of the organization.** There is no out-of-the box software which will give you immediate answers.

Leadership Skills Are Critical

A simultaneous understanding of technical and business dimensions is necessary in order to unearth meaningful business insights. **Shaping those insights into an understandable form and effectively communicating them to executives across the organization** for business decision-making is a critical part of sustained analytics success. Those working in the field also need the **interpersonal skills to interact effectively with stakeholders all across the organization** who may be involved in analytics projects.



Masters Certificate in Analytics for Leaders

Whether your organization is looking to implement a data analytics program from scratch, take your use of data to the next level, or simply learn how to do it more effectively, this program will **increase your fluency in the domain, and round out your knowledge of the skills necessary** to successfully analyze, interpret, communicate and present data with confidence.

The program is structured in **standalone modules which can be taken individually** by managers from any sector or functional department.

The first two modules allow participants to quickly **get to the heart of business applications for data analytics, and to learn the leadership skills required** to ensure its successful integration into the organization's managerial processes. The final module offers a **deep dive into the foundations of predictive analytics and data science**. Participants must take all three modules to receive their Masters Certificate.

Key Program Take-Aways

The program has been designed to give participants knowledge of:

- Different analytical approaches to **enhance strategic business decision-making** for increased performance or profitability.
- The role of data in customer acquisition and retention to **create competitive advantage and improve marketing and sales strategies**.
- **The softer skills critical to successfully leading analytics projects** in organizations, including communication, presentation, negotiation and exerting influence.
- The ability to **summarize, interpret and derive insights from data**, and incorporate uncertainty in decision-making.

Convenient Modular Format!

Standalone modules make it possible to start with the next one scheduled, complete the rest in sequence and still enjoy full-program tuition savings. Alternatively, you may register in the modules in any sequence over 36 months at the individual module price. For complete details, visit: seec.online/stand-alone-modules.



Overview of Course Modules

Achieve your Masters Certificate in as little as 15 days over 4 months, or register for standalone modules.

MODULE • SEPTEMBER 16 - 20, 2019

Marketing Analytics

Opens the eyes of participants to the full range of business applications which can benefit from analytics.

- Introduction to Marketing Analytics (1 day)
- Data Insights & Interpretation (1 day)
- Marketing Strategy (2 days)
- Digital Marketing Analytics (1 day)

MODULE • OCTOBER 28 - NOVEMBER 1, 2019

Analytics & Leadership

Covers the full range of softer skills and knowledge required to successfully integrate data analytics into an organization.

- Leading with Analytics (1 day)
- Data Governance of Big Data (1 day)
- Overview of Big Data Tools (1 day)
- Leadership Skills (1 day)
- Negotiation and Influencing Skills (1 day)

MODULE • JANUARY 13 - 17, 2020

Predictive Analytics and Big Data

A hands-on deep dive into the tools, technologies, and methodologies of predictive analytics.

- Data Visualization with Tableau (2 days)
- Data Science (2 days)
- Intro to Regression Analysis (1 day)

How technically demanding is the program?

The modules have been developed for non-data scientists and do not require a high degree of prior technical knowledge. Some topics make use of math but only for explanation or demonstration purposes. All participants require to absorb the insights, skills and knowledge from this program is an openness to learning.

Visit us online to see detailed program content or register:
seec.online/12264



See detailed program content & register



Program Director
Murat Kristal, PhD

Masters Certificate in Analytics for Leaders

Find Out More Today!

Visit <http://seec.online/12264>

1. Watch a brief **video introduction** by Murat Kristal, Program Director, Centre of Excellence in Big Data and Analytics Leadership
2. Join Murat for a **free 1-hour online information session**. Once you register, you will be sent your login details
3. For **program content-related questions**, ask Murat directly:
Tel: 416.736.5079
Toll free: 1.800.667.9380
email: mkristal@schulich.yorku.ca

Participant Profile

This program has been designed for **executives and professionals with diverse needs** from any sector or functional area, including managers who:

- Want to learn about data analytics **tools and techniques** and leverage insights from big data to allow their organization to make better business decisions
- Are tasked with implementing, enhancing or **expanding the role of analytics** in their organization
- **Currently work on analytics projects** or are involved with a data team, and want to increase their fluency in the domain and their command of its tools and techniques

Unique Program Features Include

- **Comprehensive, in-depth coverage** of material for an actual understanding of how to do real analytics
- **In person, hands-on training** by high quality professors and leaders in the field – not available online
- Derived from Schulich's MBA Business Analytics concentration; incorporates **content and skills most requested by industry leaders**
- Only open enrolment analytics program with **data visualization and machine learning** components
- INFORMS CAP® (Certified Analytics Professional) recognized program



Registration Details

Next Session: Sep. 16, 2019 - Jan. 17, 2020
(15 days over 4 months)

Module: Marketing Analytics
September 16 - 20, 2019

Module: Analytics & Leadership
October 28 - November 1, 2019

Module: Predictive Analytics and Big Data
January 13 - 17, 2020

Program Location & Time

Nadal Management Centre, 222 Bay Street, Suite 500, Toronto Dominion Centre, Toronto, Ontario M5K 1K2

Sessions run: 9:00 a.m. - 4:30 p.m.

Masters Certificate Program Fee:

\$10,850 CDN + applicable taxes (save \$2,500 over the individual module price).

Per module: \$4,450 + applicable taxes

- Fee includes program tuition, teaching materials, lunches and refreshments.
- A deposit of \$1,000 CDN is required to secure your place in the program.
- Full program fee is payable prior to start of program.
- Schulich Executive Education Centre's liability is limited to reimbursement of paid tuition fee.
- Contact us about multiple registration discounts from one organization, or a convenient tuition payment plan.
- Modules, speakers, topics, dates, fees and locations are subject to change.
- Complete registration details at seec.online/FAQ.

Optional Accommodations

Participants receive a special corporate rate at area partner hotels. For details, please visit the **Contact and Locations** section of our website.

Administrative Inquiries

Tel: 416.736.5079 • Toll Free: 1.800.667.9380
Fax: 416.736.5689
email: exceedinfo@schulich.yorku.ca



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Detailed Program Content

5-DAY MODULE

Marketing Analytics

1. Introduction to Marketing Analytics (1 day)

For both B2B and B2C organizations to become customer centric, they need to be laser focused on meeting customer needs. Marketing analytics helps you achieve this focus by giving you enhanced knowledge of your clients, which in turn allows you to develop segmented campaigns and promotions that keep them happy. In this one-day introductory workshop, participants will participate in a real-time simulation in which they compete against each other to increase the sales of their products via the use of an analytical dashboard. The simulation lays the groundwork for a deeper dive into the fundamentals of customer relationship analytics, with specific attention paid to three fundamentals concepts:

- Recognizing the limitation of statistical models
- Understanding the application of different model types
- Evaluating model design given specific data types

2. Data Insights and Interpretation (1 day)

The ability to understand and ask the right questions of your data is a powerful competitive advantage, resulting in new income streams, better decision making and improved productivity. This session will demonstrate the concepts, skills and methods to find the key message of the data, and turn it into information, insight and intelligence. Participants will learn how to use the data – whether it's structured data in Excel, unstructured data in social media, research results presented in reports, slideshows, dashboards or infographics – to create an interesting, engaging and impactful business story.

- Learn how to focus on the most important parts of the data and ignore the clutter that confuses information
- Learn the steps to transform data into insight and business intelligence
- Be able to analyze a data set, summarize the key findings and make it presentable to clients or management

3. Marketing Strategy (2 days)

We do not collect, analyze and interpret data just for the sake of doing an exercise. There is no inherent value in the endeavour unless we do something about it. In this module, you will learn how to develop successful marketing (go-to-market) strategies by answering three important questions: (1) How should we segment our customers? (2) What value propositions should we develop for each segment? (3) Have we given customers a reason to do business with us and not someone else?

- Recognize that marketing is an analytical process of creating and capturing customer value
- Understand the three principles behind successful customer segmentation
- Learn how to build and communicate a strong brand to differentiate your business in the marketplace

4. Digital Marketing Analytics (1 day)

What outcomes do you expect from your website or mobile applications, and how do you measure success? Digital analytics helps you answer these questions – using qualitative and quantitative data from your business and your competitors to drive continual improvement of the online experience.

- How to establish business objectives for various types of websites; including affiliate sites, company pages and search engine links
- Typical user actions that align with marketing funnel pathways.
- How website and mobile development and functionality can support

business objectives

- Examples of both “macro” and “micro” conversions – from selling products and services to helping users research and request information
- What experiences drive the right outcomes by using data that reflects individual online behavior

5-DAY MODULE

Analytics & Leadership

1. Leading with Analytics (1 day)

It is not always clear where and how analytics can help your company succeed. Even worse, it can sometimes seem like everyone is speaking a different language! This session will help you harmonize your organization and lead it to greater success by pairing your expertise about the business with an understanding of where and how data science can help. You'll also learn how to collaborate effectively with experienced data scientists and to mentor novice analytics professionals to engage in the business.

- Describe applications of exploratory, explanatory, predictive, forecasting and prescriptive analysis
- Identify the best corporate analytical strategy to drive success
- Frame business problems for data and analytics answers
- Identify and manage different communication and work styles, and overcome communication barriers among data team members

2. Data Governance of Big Data (1 day)

Data privacy is a vital management planning concern. Ensuring proper business ethics and governance of data is essential across industries. During this module, participants will review and discuss real life business and public sector examples to strategically manage legal or ethical problems, ranging from perception to compliance to data sovereignty.

- Security, privacy, sovereignty and ethical considerations of big data collection, warehousing and analytics use
- Options for privacy protection and data governance including policy creation and enforcement, rights and responsibilities of all parties
- Governance strategies, implications, associated obligations and models

3. Overview of Big Data Tools (1 day)

How are today's most forward-thinking organizations using big data analytics and data science to make more informed business decisions? This opening session will explain all of the terminology and allow participants to see innovative examples of Big Data applications from different sectors – and begin evaluating how their organization can grow through more effective use of data analytics.

- How Big Data relates to cloud, mobility, security, social media and online business activities
- How Big Data analytics drives competitive advantage in your industry
- Big Data tools and others, and their usefulness

4. Leadership Skills (1 day)

You can measure your leadership by the confidence that your team members, your partners, your customers and the public have in you. Achieving your strategic plan requires people to be inspired by your vision and commit to it. But to be successful in this regard, you need to be yourself. Your ability to connect with others, to communicate, to influence and inspire defines your leadership strengths. In this session, participants will learn to:

- Differentiate management and leadership
- Develop self-awareness

- Craft communications that inspire and incite action
- Engage stakeholders effectively
- Create a culture of collaboration

5. Negotiating and Influencing Skills (1 day)

Negotiating with and influencing people effectively are important skills gained through experience and effective training. During this module, participants will learn the art and science of negotiating, as well as new skills, strategies and behaviours needed to influence others and achieve better 'win-win' outcomes.

- How to gain agreement on difficult and contentious issues
- How to achieve team commitment to deliverables
- When to apply the three primary ways to influence others (power/rights/interests)
- An "interest-based" approach to negotiating and influencing with others
- An influencing "toolkit" for all situations
- How to negotiate past barriers to help both parties get "unstuck"

5-DAY MODULE

Predictive Analytics and Big Data

1. Data Visualization with Tableau (2 days)

The rate at which data is generated and managed has increased exponentially in today's information-based economy. Data visualization is both an art and a science which seeks to communicate information clearly and efficiently to users in an abstracted, schematic form. In this session, participants will use visually interactive Tableau software to quickly:

- Differentiate between statistical graphics, plots, information graphics, tables and charts
- Analyze, develop insights and make conclusions about data and evidence
- Make complex data more accessible, understandable and usable
- Choose the most effective visualization technique for the task at hand

2. Data Science (2 days)

Data Science extracts knowledge or insights from data in various forms and clearly communicates these findings to clients and end-users. Participants will be introduced to the field of data science, including current and future trends, intended business applications and major technical categories. Through case analyses, participants will learn a comprehensive set of metrics to assess the precision of their analysis and tools to make statistically sound decisions.

- The essential elements of any successful data science project
- How to prepare analytical reports and project proposals
- Evaluation metrics, and how to understand performance graphs
- How to distinguish superficial results from truly meaningful information
- Recommendation system (i.e. Netflix) and online targeted display (i.e. Amazon recommendation system) case studies

3. Introduction to Regression Analysis (1 day)

As organizations collect more data through advances in technology, business managers have improved opportunities to make data-driven decisions. This module teaches participants how to use regression analysis to identify the relationships between different business and data variables, and make future predictions with statistical support.

- How to use regression analysis in your organization
- Identifying what variables will predict an outcome in a particular population or data segment

Murat Kristal, PhD

Program Director, Centre of Excellence in Big Data and Analytics Leadership

Murat is an associate professor of operations management at Schulich. He teaches in the areas of business operations strategy, channel management, customer modeling, and business analytics. He has helped diverse companies manage their customer relationships using predictive analysis techniques.

Jon Bromstein, MBA

Jon is Analytical Lead at Google Canada, overseeing four industries: Travel, Tourism, Government and Energy. He is passionate about turning data into insights and strategy for clients by developing new methods of measuring, analyzing and optimizing digital advertising.

David Elsner, MBA

David is the President of DHE Consulting where he leverages over 20 years of experience working with leading organizations across industries, helping guide them to make use of their data assets and providing solution implementation. An experienced lecturer and trainer, David provides analytical and professional classes to a wide range of academic programs and corporate clients.

Zhepeng (Lionel) Li, PhD

Lionel's research method emphasizes machine learning and analytics techniques, which applies to address business problems that involve Business AI, Targeted Marketing, Social Recommendations, Network Analytics, FinTech, and smart Health etc. Lionel has taught courses ranging from analytical to technological topics in business schools.

Mark Norman

Mark is a professional leadership consultant and trainer with extensive experience facilitating teams and relating to the psychology of human dynamics in the workplace. He has led major

organizational change initiatives for diverse clients and facilitated thousands of people from assembly lines to boardrooms, helping them achieve creativity and grow.

Joseph Sherrin, CSP, HoF, Global Speaking Fellow

Joe is the President of Ethos Enterprises Inc., and is a management effectiveness expert. His corporate experience includes 25 years in senior management positions with a Fortune 500 company. A two-time national bestselling author, his most recent book is *iLead, Five Insights for Building Sustainable Organizations*.

Ajay Sirsi, PhD

Ajay is a senior marketing professor at Schulich whose research has won awards internationally. He is the author of three books including: *Marketing Led – Sales Driven: How Successful Businesses Use The Power Of Marketing Plans And Sales Execution To Win In The Marketplace* and *Marketing: A Roadmap To Success*. His next book, on customer segmentation, will be published in 2019.

Catherine (Cat) Truxillo, PhD

Cat is Director, Advanced Analytics Education at SAS Institute, and an award-winning trainer with over 25-years experience consulting and teaching in many industries. She is a vibrant and energetic speaker, and her students say she has a gift for breaking complex topics down to manageable bits.