



Schulich
School of Business
Executive Education Centre



Online
Virtual
Classroom
Format

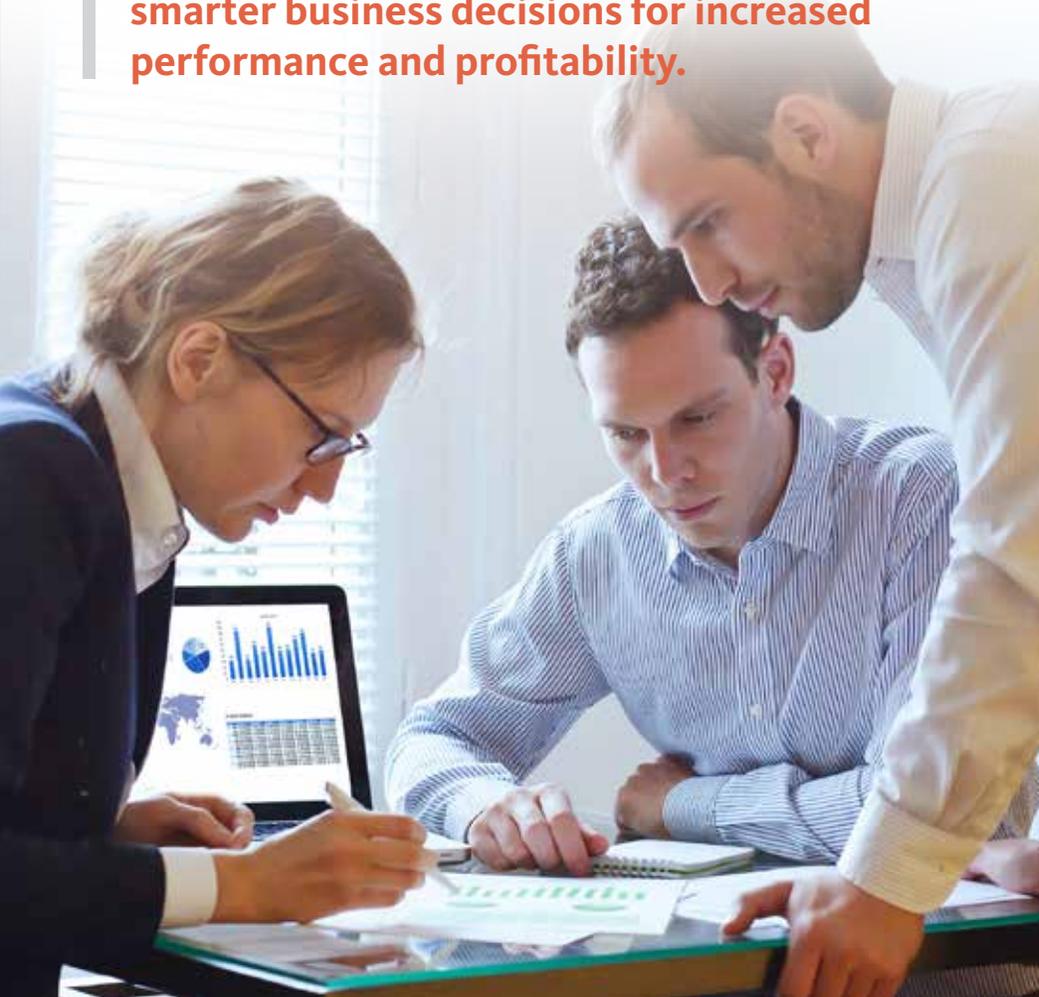
UPCOMING SESSION:
January 18 - April 26, 2021

- Equivalent of 13 days in the virtual classroom over 3 months in multiple convenient 2-hour sessions.

Masters Certificate in Analytics for Leaders

Redesigned to deliver even more value in an **engaging and interactive online format!**

Designed for executives looking to create value from organizational data and make smarter business decisions for increased performance and profitability.



Take Charge of Analytics and Turn Your Data Into a Competitive Advantage

Whether you're looking to implement a data analytics program from scratch, take your use of data to the next level, or simply increase your fluency in the domain, this is the program for you.

It has been designed to quickly round out your knowledge of all the technical, managerial and organizational dimensions required to successfully and sustainably generate insights from data and translate them into action.

Cutting edge content structured in convenient standalone modules can be taken by managers from any sector or functional area.

Benefit by attending with participants from other regions in Canada!



Delivered simultaneously by select University Executive Education Network schools:



84 PDU*

In association with



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What is Required to Implement Data Analytics?

It's no surprise that in the digital economy, companies that develop the ability to leverage their data make better decisions across many functional areas, and create a significant competitive advantage. But what organizational knowledge and skills are required to do so effectively?

While most organizations today collect data as a basis for decision making, seeing patterns in the exploding volumes being generated by customer and client interactions quickly becomes impossible. Analyzing it properly to extract and distill the insights it contains in order to make better business decisions requires some specialized skills and tools.

What Does Predictive Analytics Entail?

Leveraging data involves choosing and using the right analytics tools to “open a window into the future” for experimentation with different courses of action in order to assess the potential outcomes. It works when somebody is able to recognize when there is an opportunity and then ask the right questions of the data. The result is meaningful insights that uncover hidden or unexpected connections, correlations, patterns and trends.

Communication Skills Are Critical

It then becomes necessary to refine the insights and shape them into a format that effectively communicates results and recommendations to managers across the organization so they can take action. That's where data visualization that goes beyond the raw numbers and brings the data to life comes in. Implementation is driven by visuals that clarify concepts and tell the business story.

Leadership Dimensions

For analytics to gain traction, organizational infrastructure, processes and capabilities that support it over the long run must also be developed and implemented. That involves being able to envision, advocate for and manage change when necessary. Applying analytics-focused entrepreneurial and design thinking results in a culture that fully engages the workforce for maximum effectiveness. Those working in the field also need the interpersonal skills to interact effectively with stakeholders who are involved in analytics-based initiatives.



Program Objective

The program has been designed to furnish participants with a comprehensive working knowledge of the subject, allowing them to cultivate an analytics mindset and successfully apply analytics to inform and support organizational objectives and strategy.

Participants will...

- Quickly learn about the complete range of knowledge and skills required to practise analytics sustainably, and the management competencies required to oversee it
- Gain hands-on exposure to working with both basic and advanced concepts in data science without getting into the weeds of programming
- Develop the confidence to embrace data-driven opportunities and the skills to initiate data-analysis transformation in their organization or functional area
- Increase fluency in the domain in order to understand how to build and manage an analytics team, or communicate more effectively with data scientists

How Technically Demanding is it?

The modules have been developed for non-data scientists and do not require any prior technical knowledge. Some topics make use of math but only for explanation or demonstration purposes. All participants require to benefit is an openness to learning.



During the pandemic, this program has been moved online, using the new, secure ZOOM video-conferencing platform. You'll benefit from all this format has to offer: multi-modal presentation of material, engaging activities, interactive exchanges and breakout discussions with the instructors and your fellow participants.

Your Masters Certificate in Analytics for Leaders journey...

For more information or to register online now, visit seec.online/12965

For virtual classroom module dates and times, please see last page.

■ Introduction to Analytics

An exploration of the underlying principles, this module will familiarize you with the reasons why it's possible to trust data to make better decisions compared to intuition or experience.

Data vs. Intuition + Data-Driven Decision Making

- Decision-making strategies based on data vs. intuition
- Use data skills to build effective intuitions and vice versa
- Drive up ROI with data driven approaches

Understanding Variation + Correlation vs. Causation

- Consistency of process through measuring variability
- Distinguish correlation from causation for better insight
- Variables and relationships relevant to business problems

■ Analytics & Leadership

Learn, practice and perfect the softer leadership skills which have proven critical for successfully engaging with human factors when implementing analytics-based projects.

Leading with Analytics

- Pair your business expertise with data science's capabilities
- Identify the best corporate analytical strategy for success
- Overcome communication barriers

Negotiating and Influencing Skills

- Influence people on the conversational or interpersonal level
- The art and science of negotiating
- Attain win/win outcomes with conflict resolution

■ Business Insights with Data

"Moneyball" insights are real! Locate the moneyball instances within your organization by asking the right data questions, and then successfully present insights using data visualization.

Finding "Moneyballs" with Analytics

- Explore Applied Moneyball Theory as a unique value multiplier
- Unlock thinking and skills for identifying high value moneyballs
- Create predictive measures and questions to ask of the data

Data Visualization with Tableau

- Ask the right questions to reveal patterns and trends
- Illustrate actionable insights with data visualizations
- Empower decision makers with management dashboards

■ Managing Data

Learn the fundamentals of an analytics infrastructure: what's required to store, access, manipulate and manage data from technical, regulatory, privacy and cybersecurity perspectives.

Data Governance & Privacy

- Modern macro and micro drivers for effective data governance
- Organizational alignment and cross-functional engagement
- Internal/external roles and responsibilities

Overview of Databases and Big Data Tools

- Big data and data science for more informed business decisions
- How big data analytics can drive competitive advantage
- Cloud, mobility, security, social media and online business

■ Data Science in Action

Envision the practical predictive analytics applications most suited to your organization now, and explore the additional possibilities afforded by data science technologies.

Introduction to Predictive Analytics

- Explore the past to predict advantageous future outcomes
- Apply tools and methods to your business decisions
- Differing science and data needs across industries

A Map of the Terrain and Technologies

- The difference between supervised and unsupervised learning
- Common and useful data science algorithms in practice today
- Technologies most useful in enabling workplace data science

■ Digital Transformation

This module provides participants with strategies and techniques to enable the digital transformation which analytics represents to gain and maintain traction in their organization.

Entrepreneurial Thinking for Tech Strategies

- Data & AI challenges prevalent in the enterprise today
- Compare disruptive startup vs. enterprise tech strategies
- Methodologies to execute like a tech-enabled start-up

Design Thinking in the Age of Big Data

- Create organizational value through internal design thinking
- Frame internal challenges to deliver new benefits
- Apply design thinking through an analytics lens

■ Capstone Project Presentation

Participants will present in groups on a case which challenges them to think about artificial intelligence in the context of large enterprises and how to develop a scalable business to serve the AI needs of these firms.

Masters Certificate in Analytics for Leaders

Program Faculty (see complete bios online)

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.

David Elsner, MBA

David is 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.

Victor Garcia

Victor is the Managing Director of ABC Live Corporation, where his focus is helping clients develop, implement and sustain business strategy, transformation, governance, operational plans and emerging technologies. Areas of specialization include data analytics, visual analytics, artificial intelligence, intelligent infrastructure.

George Georgopoulos, PhD

George is the York Senior Fellow Scholar at the University of Toronto. His research is in the area of Business Statistics, Finance, and Business Economics Strategy. He has experience working with various governments regarding Statistical Analysis including the Governments of Dubai and Abu Dhabi, Bolivia and Canada.

Diana Kawarsky, MA, CPP

Diana specializes in business communications for Schulich's Executive Education Centre and is a facilitator, adult educator, coach and management consultant with Fortune 500 companies. With almost 20-years experience, she is a specialist in facilitating learning for professionals to hone their interpersonal and intrapersonal skill sets.

Keith Loo

Keith is a scale-up advisor and venture builder who advises businesses on their technology, revenue, and go-to-market strategies. He is involved in the Canadian tech start-up community. He has over 20 years of product and business experience with high profile companies and was co-founder and Chief Revenue Officer of CTO Boost, Canada's first fractional CTO service.

Tarun Rihal, MBA, MSc, SSBB

Tarun is a data science manager in Ontario's public service with more than 10 years of experience growing capacity for data science, management, and analytics. He specializes in helping organizations develop data science strategies that maximize return-on-investment by targeting high-value insight generation.

Eugene Roman, BA, MBA, CPA

Eugene is Principle at Design AI Ltd., advising companies on digital sustainability and unlocking moneyballs. In 2015, Eugene was named CIO of the Year by RIS News and Canada's CIO of the Year (Private Sector) by Information Technology Association of Canada.

Hemant Sangwan, PhD

Hemant is a Professor of Marketing at Seneca College and is affiliated with the Master in Business Analytics program and Schulich Executive Education Centre. He has 12-years experience in management consulting, marketing research, and economics and policy research in leading consulting firms.

Shane Saunderson, MBA

Shane Saunderson is an experienced management consultant, a seasoned entrepreneur, and Design Thinking expert. Part engineer, part businessman, and part creative, Shane is currently completing a PhD at the University of Toronto on the psychological and organizational implications of automation technologies (such as robotics and AI) as they become further embedded them into our workplaces and lives.

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.

What Past Participants Say...

"It's critical for executives and leaders today to have a good understanding of data and analytics beyond just using the buzzwords. This program gives participants a well rounded perspective of the subject and positions them to have more influence in changing or transforming their organizations with data. Living outside of the GTA, the program's flexible schedule was great in allowing me to learn a lot of content without being away from home or the office for an extended period of time."

Dominic Parent,
Director, Business Improvement Services
Canadian Coast Guard

"Excellent course with lot of insights on how to manage the Analytics project efficiently and effectively."

Nidhi Sethi
Manager, Reporting & Analytics
Scotiabank

For more information or to register online now, visit seec.online/12965





Winter 2021 • Virtual Classroom Module Session Dates and Times

Introduction to Analytics

Data vs. Intuition + Data-Driven Decision Making

January 18, 20, 22, 2021

Understanding Variation + Correlation vs. Causation

January 25, 27, 29, 2021

Analytics & Leadership

Leading with Analytics

February 1, 3, 5, 2021

Negotiating and Influencing Skills

February 8, 10, 12, 2021

Business Insights with Data

Finding “Moneyballs” with Analytics

February 17, 19, 22, 2021

Data Visualization with Tableau

February 24, 26, March 1, 2021

Managing Data

Data Governance & Privacy

March 3, 5, 8, 2021

Overview of Databases and Big Data Tools

March 10, 12, 17, 2021

Data Science in Action

Introduction to Predictive Analytics

March 19, 22, 24, 2021

A Map of the Terrain and Technologies

March 26, 29, 31, 2021

Digital Transformation

Entrepreneurial Thinking for Tech Strategies

April 7, 9, 12, 2021

Design Thinking in the Age of Big Data

April 14, 16, 19, 2021

Capstone Project Presentation

April 21, 23, 26, 2021

Online sessions run:

9:00 a.m. - 11:00 a.m. (Pacific Time)

12:00 p.m. - 2:00 p.m. (Eastern Time)

1:00 p.m. - 3:00 p.m. (Atlantic Time)

1:30 p.m. - 3:30 p.m. (Newfoundland Time)

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Program Director Murat Kristal, PhD

Find Out More Today!

Visit <https://seec.online/12965>

1. Watch a brief **video introduction** by Murat Kristal, Program Director, Centre of Excellence in AI and Analytics Leadership
2. Join Murat for a **free 1-hour online information session**. Once you register, you will be sent your login details. Upcoming info session dates: Oct. 29, 2020, 2:30 - 3:30 pm EDT
Nov. 17, 2020, 12:00 - 1:00 pm EST
3. For **program content-related questions**, ask Murat directly:
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**
- Share your experiences with **like-minded professionals** who are also keen on expanding their analytics strategies
- INFORMS CAP® (Certified Analytics Professional) recognized program



Registration Details

Upcoming Session:

January 18 - April 26, 2021
(Equivalent of 13 days in the virtual classroom over 3 months)

Note: virtual classroom sessions run:

9:00 a.m. - 11:00 a.m. (Pacific Time)
12:00 p.m. - 2:00 p.m. (Eastern Time)
1:00 p.m. - 3:00 p.m. (Atlantic Time)
1:30 p.m. - 3:30 p.m. (Newfoundland Time)

Full Masters Certificate Program Fee:

\$9,950 CDN + applicable taxes.

Individual 2-day module:

\$2,450 + applicable taxes

Registration Notes

- Fee includes program tuition and teaching materials.
- 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.
- Our 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 and fees are subject to change.

Complete registration details

See: seec.online/FAQ

Technical Requirements

See: seec.online/techreq