

Applied Analytics

Master of Science

New York City or Online Option

Using Analytics to Make a Difference

Rapid innovation in data collection and processing technologies requires organizations to find professionals who can use data to deliver insights through analytics. Columbia University's Master of Science in Applied Analytics prepares students with the practical data and leadership skills to succeed. The program combines in-depth knowledge of data analytics with the leadership, management, and communication principles and tactics necessary to impact decision-making at all levels within organizations.

Features

- Gain exposure to analytical tools and methods to address a wide range of business challenges.
- Learn to recognize opportunities to impact an organization's strategic direction through the implementation of analytics processes.
- Learn to source, store, and model the internal and external data needed to answer questions and produce value.
- Learn to incorporate sophisticated data analytical techniques, approaches, and models to affect outcomes and decision-making.
- Develop the management and analytical skills necessary to implement change based on data-driven decisions.

International Students

- International students may complete the program part-time online or full-time in New York City.
- F1 Optional Practical Training opportunities for international degree holders.

Program Options

Program Options	Required Experience	Course Formats	Time Commitment
Master of Science (full-time)	Ability to demonstrate critical thinking and leadership skills	On-campus*	3 consecutive terms***
Master of Science (part-time)	Ability to demonstrate critical thinking and leadership skills	On-campus* or Online**	6 consecutive terms

*Students registered in an on-campus option may participate in on-campus and online courses.

**Students registered in the online option may participate only in online courses.

***Summer term is optional for students registered in the full-time track.



"You will learn from, study with, and work with professors who are experienced professionals."

Alessandro Langer | '17SPS, Applied Analytics
Data Product Manager, Morgan Stanley

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Capstone Project

The capstone requires a synthesis of program content applied to industry challenges, aligning leadership, strategic management, communication, and analytics coursework with analytics projects. Working in teams with faculty, students critically assess a company's data challenges and opportunities, formulate a problem

definition, derive insights and develop an integrated data-savvy analytics plan and solution. The project helps students develop and apply the technical, leadership, and communication skills required to identify and implement solutions/approaches.

Sample Courses

Build your knowledge and skills with coursework you can apply to the workplace:

Analytics and Leading Change

Applied Analytics in the Organizational Context

Managing Data

Python for Data Analysis

Research Design

Storytelling with Data

Solving Real World Problems with Analytics

Who Should Apply

Individuals looking to enhance decision-making using data within a wide range of functions, including finance, operations, marketing, or sales.

Scholar-Practitioner Faculty

Our distinguished faculty have experience in analytics and related fields, and have come from global organizations such as:

- Accenture
- American Express
- BASF
- Federal Communications Commission
- Goldman Sachs
- Google
- HSBC
- IBM Thomas J. Watson Research Center
- Infosys Digital
- IPG Mediabrands
- Nielsen
- Pfizer, Inc.
- Roche Translational and eClinical Research Center
- S&P Global
- Swiss RE
- The Hartford
- Venmo



"The program provides the skills to bridge the gap between business practices and technology."

José Manuel Peña Mendez | '17SPS, Applied Analytics
Portfolio Manager, AFP Habitat