Political Analytics

Master of Science

New York City and Online

Providing the skills essential to succeed in the increasingly data-driven world of politics.

Drawing on Columbia University's academic strength in the quantitative social sciences—particularly political science, statistics, mathematical modeling, and applied analytics—this program meets the needs of learners who aspire to a career in political analytics and consulting.

Core Competencies

In this program you will:

Gain foundational knowledge, fluency in theoretical and empirical research methods, analytics capabilities, technical skills, and applied practice to impact decision-making at all levels of political analysis

Attain fluency with survey questionnaire design, sampling, data collection and aggregation, and survey data analysis to gain insights and to test hypotheses about the nature of human and social behavior and interaction

Develop core leadership competencies that are essential for high-impact management as well as changing the behavior and the culture of organizations with an emphasis on how to introduce analytic methods and results

Enter the job market with a profile that aligns with employers needs by building a comprehensive understanding of theoretical, analytical, and applied skills to work in politics today

Flexible Options

Program Option	Recommended Experience	Course Formats	Time Commitment
Master of Science (Full-Time)	Recent graduates of political science, quantitative science, public administration, public affairs, or social science programs	On-campus with select online classes	3 consecutive terms
Master of Science (Part-Time)	Mid-career working professionals or career pivoters	On-campus with select online classes	6 consecutive terms

"One of the key goals of this program is to narrow the gap between substantive political professionals and those involved on the technical analytic side. The program teaches analytics in an explicitly political context, facilitating crosswalk with nontechnical professionals and decision-makers."

Gregory J. Wawro, Ph.D.
Professor of Political Science

Apply Online **sps.columbia.edu/politicalanalytics**

Core Coursework

12 credits, plus 3-credit capstone, online

Introduction to Political Analytics
2 CREDITS

Strategic Thinking
2 CREDITS

Experiments
2 CREDITS

Program Evaluation
2 CREDITS

Survey and Polling Methodology
2 CREDITS

Leadership
2 CREDITS

Capstone
3 CREDITS

The 3-credit capstone course will be a group project advised by a faculty member for a client.

Sample Selective Courses

Divided among 3 fields (21 credits), New York City

FIELD 1
Quantitative Political Science
9 CREDITS • REQUIRED 2–3 COURSES

Electoral Data & Predictive Modeling
3 CREDITS

Big Data & Political Strategy
3 CREDITS

Fundraising Analytics & Campaign Finance
3 CREDITS

Principles of Quantitative Political Research 1
4 CREDITS

Principles of Quantitative Political Research 2
4 CREDITS

Design & Analysis of Sample Surveys
4 CREDITS

Data Science for Political Analytics
3 CREDITS

FIELD 2
Cognate Quantitative Methods
6 CREDITS • REQUIRED 2–3 COURSES

Qualitative Research Design
3 CREDITS

Data Mining for Social Science
3 CREDITS

Natural Language Processing
3 CREDITS

Data Visualization
3 CREDITS

Machine Learning for Social Science
3 CREDITS

Social Network Analysis
3 CREDITS

Modern Data Structures
3 CREDITS

Applied Data Science
3 CREDITS

Machine Learning: Concepts and Applications
3 CREDITS

Data Analytics using SQL and Relational Databases
3 CREDITS

Python for Data Analysis
3 CREDITS

GIS and Spatial Analysis for Social Science
3 CREDITS

FIELD 3
Topics in Politics
6 CREDITS • REQUIRED 2–3 COURSES

Elections
4 CREDITS

State and Local Politics
4 CREDITS

Governing the 21st Century City
3 CREDITS

Political Psychology
4 CREDITS

Urban Politics and Policy
3 CREDITS

Political Communication
3 CREDITS

Campaign Management
3 CREDITS

Data Driven Approaches for Campaigns and Advocacy
3 CREDITS

Who Should Apply

This nonpartisan program is designed for students from diverse political and professional backgrounds.

The **full-time program** is tailored to recent graduates of public administration or political science programs who aspire to advance in a data-oriented career in all levels of government or NGOs, think tanks, and organizations for research, consulting, or lobbying. The **part-time program** is designed for mid-career working professionals or career pivoters who aspire to advance their careers by strengthening their quantitative data analysis skills.

Required courses are largely in person, but a number of core courses will be offered online to provide maximum flexibility.

Career pathways may include—but are not limited to—campaign management, consulting, lobbying, public and governmental affairs, policy analysis, political fundraising, and media.