

MANAGEMENT AND ANALYTICS (MS)

Department Website (<https://www.sps.nyu.edu/homepage/academics/masters-degrees/ms-in-management-and-systems.html>)

NYSED: 90193 **HEGIS:** 0506.00 **CIP:** 11.1099

Notice: *Students in the Management and Systems (MS) (<https://bulletins.nyu.edu/archive/2023-2024/graduate/professional-studies/programs/management-systems-ms/>) program should consult the 2023-2024 edition of the bulletin for program requirements.*

Program Description

The Master of Science in Management and Analytics degree provides students with a solid foundation of management and technical knowledge in the core curriculum. Students select a concentration to ensure depth of knowledge and skill-building in a content area that will be a differentiator in the workplace. The Data Analytics concentration equips students with the analytical skills to interpret complex data and drive informed decisions across various functions and industries. In the Risk Analytics concentration, students focus on assessing and managing potential risks in order to safeguard and optimize operations and services. Students in the Business Analysis concentration gain leadership and strategic thinking skills for managing technical projects to direct and propel organizational change. Lastly, the Applied Research concentration offers students strategies and techniques to apply research methods to solve real-world business challenges.

Students may complete the Master of Science in Management and Analytics on-site, hybrid, or through a combination of these formats. With courses offered conveniently at many times of day and evening by experienced and engaging faculty, the degree may be completed in two years of full-time study or in up to five years of part-time study. This allows maximum flexibility for both busy senior managers and directors, as well as for recent college graduates who are just beginning their careers. The program combines rigorous coursework with real-world challenges, industry case studies, and simulations to provide students with a variety of valuable learning opportunities and experiences.

Admissions

All applicants to the School of Professional Studies (SPS) are required to submit the general application requirements (<https://www.sps.nyu.edu/homepage/admissions/admissions-criteria-and-deadlines/general-graduate-admissions-criteria.html>), which include:

- Application Fee
- College/University Transcripts
- Résumé
- Statement of Purpose
- Degree Requirements
- Recommendations
- Kira Talent Assessment
- Degree-Specific Requirements
- English Language Assessment
- Pearson Versant English Placement Test

- International Transcript Evaluation
- International Student Visa Requirements

See degree specific application requirements (<https://www.sps.nyu.edu/homepage/admissions/admissions-criteria-and-deadlines/graduate-programs.html>) for instructions specific to this program.

Program Requirements

The program requires the completion of 36 credits, comprised of the following:

Course	Title	Credits
Management Core		
MASY1-GC 1015	Quantitative Methods for Business Analysis	3
MASY1-GC 1115	Management Skills for Technology Professionals	3
MASY1-GC 1215	Data-Driven Decision-Making	3
MASY1-GC 1315	Managing Change and Innovation	3
Technical Core		
MASY1-GC 1500	Database Design and Management	3
MASY1-GC 1600	Managing Technical Projects	3
MASY1-GC 1700	Organizational Risk Management and Information Security	3
MASY1-GC 1800	Emerging Technology	3
Concentration		
Students are required to select one of the following concentrations:		6
<i>Data Analytics</i>		
MASY1-GC 2000	Foundations of Data Analytics	
MASY1-GC 2100	Advanced Data Analytics	
<i>Risk Analytics</i>		
MASY1-GC 2200	Foundations of Risk Analytics	
MASY1-GC 2300	Advanced Risk Analytics	
<i>Business Analytics</i>		
MASY1-GC 2400	Foundations of Business Analysis	
MASY1-GC 2500	Advanced Business Analysis	
<i>Applied Research</i>		
MASY1-GC 2600	Research Process and Methods	
MASY1-GC 2700	Applied Research Thesis	
Electives		
Select one of the following: ¹		3
MASY1-GC 3415	Special Topics in Management and Analytics	
MASY1-GC 3910	Internship	
MASY1-GC 3030	Programming in Python	
MASY1-GC 3100	Advanced Programming in R	

MASY1-GC 3260	Advanced SQL and Data Warehousing	
Capstone		
MASY1-GC 4115	Applied Technical Project	3
Total Credits		36

¹ Students select one elective course. They may select a foundational course from any of the other concentrations or from any of the courses listed in this elective category, including the Internship course. Additionally, students may select a course offered within other graduate programs within the Division of Programs in Business, or the Real World Course (RWLD1-GC 3050).

Sample Plan of Study

Data Analytics

Course	Title	Credits
1st Semester/Term		
MASY1-GC 1015	Quantitative Methods for Business Analysis	3
MASY1-GC 1500	Database Design and Management	3
MASY1-GC 1600	Managing Technical Projects	3
MASY1-GC 1700	Organizational Risk Management and Information Security	3
Credits		12
2nd Semester/Term		
MASY1-GC 1115	Management Skills for Technology Professionals	3
MASY1-GC 1215	Data-Driven Decision-Making	3
MASY1-GC 1315	Managing Change and Innovation	3
MASY1-GC 2000	Foundations of Data Analytics	3
Credits		12
3rd Semester/Term		
MASY1-GC 1800	Emerging Technology	3
MASY1-GC 2100	Advanced Data Analytics	3
MASY1-GC 3100	Advanced Programming in R	3
MASY1-GC 4115	Applied Technical Project	3
Credits		12
Total Credits		36

Risk Analytics

Course	Title	Credits
1st Semester/Term		
MASY1-GC 1015	Quantitative Methods for Business Analysis	3
MASY1-GC 1500	Database Design and Management	3
MASY1-GC 1600	Managing Technical Projects	3
MASY1-GC 1700	Organizational Risk Management and Information Security	3
Credits		12
2nd Semester/Term		
MASY1-GC 1115	Management Skills for Technology Professionals	3
MASY1-GC 1215	Data-Driven Decision-Making	3
MASY1-GC 1315	Managing Change and Innovation	3
MASY1-GC 2200	Foundations of Risk Analytics	3
Credits		12
3rd Semester/Term		
MASY1-GC 1800	Emerging Technology	3
MASY1-GC 2300	Advanced Risk Analytics	3
MASY1-GC 3030	Programming in Python	3

MASY1-GC 4115	Applied Technical Project	3
Credits		12
Total Credits		36

Business Analytics

Course	Title	Credits
1st Semester/Term		
MASY1-GC 1015	Quantitative Methods for Business Analysis	3
MASY1-GC 1500	Database Design and Management	3
MASY1-GC 1600	Managing Technical Projects	3
MASY1-GC 1700	Organizational Risk Management and Information Security	3
Credits		12
2nd Semester/Term		
MASY1-GC 1115	Management Skills for Technology Professionals	3
MASY1-GC 1215	Data-Driven Decision-Making	3
MASY1-GC 1315	Managing Change and Innovation	3
MASY1-GC 2400	Foundations of Business Analysis	3
Credits		12
3rd Semester/Term		
MASY1-GC 1800	Emerging Technology	3
MASY1-GC 2500	Advanced Business Analysis	3
MASY1-GC 3260	Advanced SQL and Data Warehousing	3
MASY1-GC 4115	Applied Technical Project	3
Credits		12
Total Credits		36

Applied Research

Course	Title	Credits
1st Semester/Term		
MASY1-GC 1015	Quantitative Methods for Business Analysis	3
MASY1-GC 1500	Database Design and Management	3
MASY1-GC 1600	Managing Technical Projects	3
MASY1-GC 1700	Organizational Risk Management and Information Security	3
Credits		12
2nd Semester/Term		
MASY1-GC 1115	Management Skills for Technology Professionals	3
MASY1-GC 1215	Data-Driven Decision-Making	3
MASY1-GC 1315	Managing Change and Innovation	3
MASY1-GC 2600	Research Process and Methods	3
Credits		12
3rd Semester/Term		
MASY1-GC 1800	Emerging Technology	3
MASY1-GC 2700	Applied Research Thesis	3
MASY1-GC 3100	Advanced Programming in R	3
MASY1-GC 4115	Applied Technical Project	3
Credits		12
Total Credits		36

Learning Outcomes

Upon successful completion of the program, graduates will:

1. Integrate analytics and measurement to support the business strategy.
2. Create data frameworks to drive business decisions.
3. Analyze organizational risk management environment needs.
4. Design technology solutions to manage organizational risk.

5. Apply project management practices to manage technical projects.
6. Manage stakeholder involvement in business processes.

Policies

NYU Policies

University-wide policies can be found on the New York University Policy pages (<https://bulletins.nyu.edu/nyu/policies/>).

School of Professional Studies Policies

Additional academic policies can be found on the School of Professional Studies academic policy page (<https://bulletins.nyu.edu/graduate/professional-studies/academic-policies/>)e (<https://bulletins.nyu.edu/graduate/professional-studies/academic-policies/>).