

INFORMATION TECHNOLOGY (M.S.)

The Gabelli School's M.S. in Information Technology (MSIT) program provides skills in:

- Business data analytics and data management
- Cybersecurity
- Digital Transformation
- Enterprise computing, with a focus on application development
- IT in specific industry sectors and functional areas such as accounting, financial technologies, and healthcare.

The Gabelli School's Master of Science in Information Technology (MSIT) curriculum is focused on creating value through technology. You'll learn how to develop innovative new processes, products, and business models while helping to integrate new technology into your company's culture.

The program allows students to specialize in one of four career-oriented tracks, according to their interests:

- *Business Analytics*: this track centers around the processes of collecting, cleaning, structuring, integrating, and analyzing data to drive management insight, informed decision-making, and superior business performance.
- *Cybersecurity*: in this emerging track, students can specialize in cybersecurity management in business.
- *Digital Transformation*: this track addresses the transformational role of contemporary information technologies and their applications.
- *Enterprise Computing*: this track is for students who wish to delve deeper into solution delivery activities of enterprise applications.

These career tracks were chosen for their exceptional employment opportunities in today's job market, as well as their relevance to a wide range of industries.

The MSIT has two schedule choices, a one-year full-time program and a part-time program spread over a longer time frame, ideal for professionals who don't want to leave their jobs while they pursue the degree.

The Gabelli School Edge

Gabelli School MSIT graduates hit the job market with a keen understanding of the transformational role of technology and all the skills needed to find and exploit value opportunities for organization.

Ideal Candidates

Our MSIT program is designed for students who are interested in exploring the intersection of technology and business.

If you are fascinated by analytics, coding, cybersecurity, DevOps engineering, digital transformation, and others, this degree would be a good fit. A tech background is not necessary, but it is helpful to have a basic awareness of the role of IT in supporting organizational processes and strategy.

To learn more about the M.S. in Information Technology, visit the Fordham website.

CIP Code

11.0103 - Information Technology.

You can use the CIP code to learn more about career paths associated with this field of study and, for international students, possible post-graduation visa extensions. Learn more about CIP codes and other information resources.

Requirements

The MSIT degree requires 10 graduate-level courses for a total of 30 credits. Students must take six core courses (18 credits) and four elective courses (12 credits). The program allows students to specialize in one of four career-oriented tracks, according to their interests. They can choose from tracks in Business Analytics, Cybersecurity, Digital Transformation, and Enterprise Computing.

Prerequisites

Students who completed a non-business undergraduate major are required to do a self-study module on IT and business to ensure that they have a basic understanding of the material covered in our Business IT course. In addition, data mining and other data analytics courses may require an understanding of basic statistics.

Curriculum

Students who have advanced experience or a deep academic background may substitute up to two of the core courses with advanced information systems electives, with permission from the area chair.

Students may choose elective courses that meet their individual interests and career aspirations. Conversations with the program director and academic adviser will help in this process.

Course	Title	Credits
ISGB 7902	System Analysis & Design	3
ISGB 7973	Database Management	3
ISGB 7955	Project Management	3
ISGB 7905	Web Applications Development	3
ISGB 7967	Data Mining for Business	3
ISGB 7910	Info Systems Strategy & Mgmt	3
Four elective courses, for example: ¹		12
<i>Three courses from one of the following tracks:</i> ²		
	Business Analytics	
	Cybersecurity	
	Digital Transformation	
	Enterprise Computing	
Total Credits		30

¹ For a full list of courses that fulfill the MSIT elective requirement, see the below list.

² For details on the four MSIT tracks, see the Tracks (p. 2) tab.

Electives

Courses in this group have the ISEL attribute.

Course	Title	Credits
ACGB 7185	Derivatives and Analytics for Accounting	3
ACGB 719G	Audit Data Analytics	3

ACGB 719H	IT Audit and Information Assurance	3
DGGB 6820	Statistics	3
DGGB 7844	Stat Methods and Comp I	3
ISGB 6910	Business Tech & Analytics	3
ISGB 7901	E Business Strategies & Appl	3
ISGB 7922	Healthcare IT	3
ISGB 7924	Mobile E-Commerce and Apps	3
ISGB 7932	Accounting Info System	3
ISGB 7933	Audit Data Analytics	3
ISGB 7934	Artificial Intelligence	3
ISGB 7942	Optimization Models in Bus	3
ISGB 7943	Programming with Python	3
ISGB 7944	Sports Analytics	3
ISGB 7945	IT and Sustainability	3
ISGB 7975	Business Analytics for Managers	3
ISGB 7977	Text Analytics	3
ISGB 7978	Web Analytics	3
ISGB 7980	Bus Modeling w/Adv Sprdsheets	3
ISGB 7985	Data Warehousing	3
ISGB 7988	Business Performance and Risk Management	3
ISGB 7990	Big Data Analytics	3
ISGB 799D	Cybersecurity for Business	3
ISGB 799L	Study Tour: Germany	3
ISGB 799R	IT Audit and Information Assurance	3
ISGB 799S	C++ Programming	3
ISGB 799V	R Statistical Programming	3
ISGB 799W	Java Programming	3
ISGB 799X	Fintech -An Introduction	3
ISGB 799Y	Blockchain Tech & App Dev	3
ISGB 799Z	Deep Learning	3
ISGB 79AA	Advanced Python for Financial Programming	3
ISGB 79AC	Cybersecurity Analytics for Business	3
ISGB 79AD	Digital Forensics	3
ISGB 79AE	Robotic Process Automation	3
MKGB 779I	Data-Driven Marketing Decisions	3
MKGB 879X	Applied CRM	1.5
OPGB 6627	Operations and Supply Chain Management	3
QFGB 8968	Blockchain Technology and Application Development	3
SDGB 7851	Measurement and Data Visualization	3

Students seeking special permission to count a course without the BYGB or ISGB subject code as an elective must follow the below, three-step approval process.

Only 6000-level or above courses may be considered for electives to count towards MSIT.

1. The student should send a detailed petition to the MSIT Program Director explaining why they are considering a non-BYGB or ISGB subject code course as an elective.
2. The student should request permission from the instructor of the relevant course to join the elective, who should then send an

email to the student authorizing the student's enrollment in the course. The student should forward that email to the MSIT Program Director and MSIT Advising Dean.

3. The MSIT Program Director and MSIT Advising Dean will discuss the request, giving it due consideration, and render a decision on whether the non-BYGB or ISGB subject code course may be accepted as an elective.

Note: all advanced ISGB courses with prerequisites must be met (please discuss with the Program Director/Advising Dean).

Tracks

For students who are not interested in any of the below tracks, another option is to create an optimal mix of electives across the tracks, in consultation with the program director and area chair.

Business Analytics Track

This track centers around the processes of collecting, cleaning, structuring, integrating, and analyzing data to drive management insight, informed decision-making, and superior business performance. *Courses in this group have the ISBA attribute.*

Course	Title	Credits
ISGB 7933	Audit Data Analytics	3
ISGB 7934	Artificial Intelligence	3
ISGB 7942	Optimization Models in Bus	3
ISGB 7944	Sports Analytics	3
ISGB 7975	Business Analytics for Managers	3
ISGB 7977	Text Analytics	3
ISGB 7978	Web Analytics	3
ISGB 7980	Bus Modeling w/Adv Sprdsheets	3
ISGB 7985	Data Warehousing	3
ISGB 7988	Business Performance and Risk Management	3
ISGB 7990	Big Data Analytics	3
ISGB 799Z	Deep Learning	3
ISGB 79AA	Advanced Python for Financial Programming	3

Cybersecurity Track

In this emerging track, students can specialize in cybersecurity management in business. *Courses in this group have the ISCY attribute.*

Course	Title	Credits
ISGB 6910	Business Tech & Analytics	3
ISGB 799D	Cybersecurity for Business	3
ISGB 79AC	Cybersecurity Analytics for Business	3
ISGB 79AD	Digital Forensics	3

Digital Transformation Track

This track addresses the transformational role of contemporary information technologies and their applications. *Courses in this group have the ISDT attribute.*

Course	Title	Credits
ISGB 6910	Business Tech & Analytics	3
ISGB 7901	E Business Strategies & Appl	3

ISGB 7922	Healthcare IT	3
ISGB 7924	Mobile E-Commerce and Apps	3
ISGB 7932	Accounting Info System	3
ISGB 7945	IT and Sustainability	3
ISGB 7988	Business Performance and Risk Management	3
ISGB 799L	Study Tour: Germany	3
ISGB 799R	IT Audit and Information Assurance	3
ISGB 799X	Fintech -An Introduction	3
ISGB 799Y	Blockchain Tech & App Dev	3
ISGB 79AA	Advanced Python for Financial Programming	3
ISGB 79AE	Robotic Process Automation	3

Enterprise Computing Track

This track is for students who wish to delve deeper into solution delivery activities of enterprise applications. *Courses in this group have the ISEC attribute.*

Course	Title	Credits
ISGB 6910	Business Tech & Analytics	3
ISGB 7932	Accounting Info System	3
ISGB 7943	Programming with Python	3
ISGB 7985	Data Warehousing	3
ISGB 799S	C++ Programming	3
ISGB 799V	R Statistical Programming	3
ISGB 799W	Java Programming	3
ISGB 799X	Fintech -An Introduction	3
ISGB 799Y	Blockchain Tech & App Dev	3
ISGB 79AA	Advanced Python for Financial Programming	3
ISGB 79AE	Robotic Process Automation	3