QUANTITATIVE FINANCE (M.S.)

Our students appreciate the challenge. Their employers appreciate the results.

Students in the Gabelli School Master of Science in Quantitative Finance (M.S.Q.F.) program are asked to work hard, and when they get their first job, they come back and thank us for it.

That's when they realize just how well our coursework has prepared them to excel in the challenging and fast-paced finance industry.

But don't just take our word for it. The Global Association of Risk Professionals (GARP) calls the Gabelli School M.S.Q.F. "a highly rigorous program provided by top-notch faculty with strong connections to the financial community." Chris Donohue, managing director of GARP's research and educational programs, writes that "upon completing this program, its students will be well-positioned to pursue the FRM designation and for the global risk management profession in general."

Gabelli School students benefit from our partnerships with GARP and the Chartered Financial Analyst (CFA) Institute.

Learning Competencies

1. Students will demonstrate understanding of fundamental finance theory.
2. Students will demonstrate understanding of derivatives and derivative pricing.
3. Students will demonstrate understanding of econometric analysis.
4. Students will demonstrate the ability to model theories and analyze data.
5. Students will demonstrate the ability to clearly present results of their analysis.

To learn more about the M.S. in Quantitative Finance, visit the Gabelli School of Business website.

CIP Code

27.0305 - Financial Mathematics.

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

Students can complete the program in as few as 12 months, but most choose an 18- to 24-month schedule, because additional time greatly enhances the M.S.Q.F. experience and allows time for employment. From September to May of the first year, students are expected to enroll full-time. After that, students can take classes in the evenings while maintaining a full-time job or internship.

Prerequisites

We'll take a look at your background and decide if you would benefit from some foundational coursework before pursuing the M.S.Q.F. Some students may be asked to take the courses below prior to the start of the program.

Students whose examination results do not meet the minimum standards will be required to take relevant foundation course(s) first and postpone core courses.

Course	Title	Credits
QFGB 8901	Foundations of Accounting	1
QFGB 8902	Foundations of Economics	1
QFGB 8903	Foundations of Finance	1
QFGB 8905	Math for Quantitative Finance	1.5
QFGB 8906	Probability and Statistics	1.5

These courses can be taken through the Gabelli School.

Curriculum

Course	Title	Credits
QFGB 8911	Financial Markets and Modeling	2
QFGB 8914	Derivatives	2
QFGB 8923	Machine Learn & Econometrics	2
QFGB 8933	Time Series Econometrics	2
QFGB 8946	Financial Programming	2
QFGB 8951	Internship and Project Report[1]	2
QFGB 8952	Business Comm for Quants A[2]	1
QFGB 8953	Research Seminar 1	1
QFGB 8954	Research Seminar 2	1
Electives[3]		24
Total Credits		**39**

1 Students are required to take QFGB 8951 Internship and Project Report once, but may take it one additional time as an elective (no more than 4 credits of QFGB 8951 may apply towards the degree).

2 This course can be waived if the student demonstrates the appropriate background. Students waived from this course complete one additional elective credit and must still complete 39 credits to earn the degree.

3 Please note:

- Quantitative Finance electives include any course with the subject code QFGB numbered 8000-8999. A full list of QFGB courses can be found on the courses tab.
- A minimum of 24 elective credits must be taken.

In addition to the available Quantitative Finance electives, up to two of the below courses can be taken to fulfill M.S.Q.F. electives, with approval from the Faculty Program Director and/or Assistant Dean.

Course	Title	Credits
GFGB 8011	Blockchain	1.5
GFGB 8012	Digital Currencies	1.5
ISGB 7967	Machine Learning for Business	3

ISGB 7978	Web Analytics	3
ISGB 7990	Cloud Computing	3
ISGB 799Z	Deep Learning	3
ISGB 79AA	Advanced Python with AI	3