

# QUANTITATIVE ECONOMICS (MS)

Department Website (<http://as.nyu.edu/econ/>)

NYSED: 41911 HEGIS: 0506.00 CIP: 45.0603

## Program Description

NYU's Master of Science in Quantitative Economics is a cutting-edge program for students with research-oriented ambitions in economics, such as a demanding doctoral program, or employment in technology, finance and research in both the private or public sectors. Drawing on the combined resources of the Economics Departments of the Faculty of Arts and Science and NYU's Stern School, the MS in Quantitative Economics is streamlined and sequenced to get you where you need to go with maximal stimulation, speed and efficiency.

Our ten month program starts with the fundamentals of microeconomics, macroeconomics and econometrics, supplemented by the mathematical and data science tools needed for investigating and applying each of those fields. Then game theory, applied microeconomics, finance and open economy considerations are introduced. The final two modules include a "capstone experience" in which students choose one of two paths toward original research (see the FAQ (<https://as.nyu.edu/departments/quantitative-economics/faq.html>)).

If you are ultimately headed for a top doctoral program in economics, the timing of our program was designed for you. Starting in July and ending in May, it offers a wealth of challenging material while moving you toward beginning the PhD in one academic year. Our STEM certified MS in Quantitative Economics is taught in intensive six-week modules. It allows you to interact with over 20 leading faculty members through coursework alone. By the time you are looking for recommendation letters at the end of November, you will have completed eight courses with eight instructors who can write the kind of informative letters that doctoral admissions committees (and prospective employers) take seriously. NYU's MS in Quantitative Economics is a superb program in an exciting university, in one of the world's greatest cities.

If you feel driven to do research, or seek out a demanding career that will use your analytical skills, consider applying to the MS in Quantitative Economics at NYU.

## Admissions

All applicants to the Graduate School of Arts and Science (GSAS) are required to submit the general application requirements (<https://gsas.nyu.edu/nyu-as/gsas/admissions/arc.html>), which include:

- Academic Transcripts (<https://gsas.nyu.edu/nyu-as/gsas/admissions/arc/academic-transcripts.html>)
- Test Scores (<https://gsas.nyu.edu/nyu-as/gsas/admissions/arc/test-scores.html>) (if required)
- Applicant Statements (<https://gsas.nyu.edu/nyu-as/gsas/admissions/arc/statements.html>)
- Résumé or Curriculum Vitae
- Letters of Recommendation (<https://gsas.nyu.edu/nyu-as/gsas/admissions/arc/letters-of-recommendation.html>), and
- A non-refundable application fee (<https://gsas.nyu.edu/admissions/arc.html#fee>).

See Economics (<https://gsas.nyu.edu/admissions/arc/programs/economics.html>) for admission requirements and instructions specific to this program.

## Program Requirements

Course	Title	Credits
<b>Major Requirements</b>		
ECON-GA 4011	Mathematical Methods for Economists I	1.5
ECON-GA 4012	Mathematical Methods for Economists II	1.5
ECON-GA 4021	Data and Computation I	1.5
ECON-GA 4022	Data and Computation II	1.5
ECON-GA 4031	Microeconomics I	1.5
ECON-GA 4032	Microeconomics II	1.5
ECON-GA 4041	Macroeconomics I	1.5
ECON-GA 4042	Macroeconomics II	1.5
ECON-GA 4043	Macroeconomics III	1.5
ECON-GA 4044	Macroeconomics IV	1.5
ECON-GA 4051	Game Theory I	1.5
ECON-GA 4052	Game Theory II	1.5
ECON-GA 4061	Applied Microeconomics I	1.5
ECON-GA 4062	Applied Microeconomics II	1.5
ECON-GA 4071	Econometrics I	1.5
ECON-GA 4072	Econometrics II	1.5
ECON-GA 4121	Research Practicum I	1.5
ECON-GA 4122	Research Practicum II	1.5
<b>Electives</b>		
Other Elective Credits		6
<b>Total Credits</b>		<b>33</b>

## Sample Plan of Study

Course	Title	Credits
<b>1st Semester/Term</b>		
ECON-GA 4011	Mathematical Methods for Economists I <sup>1</sup>	1.5
ECON-GA 4012	Mathematical Methods for Economists II <sup>1</sup>	1.5
ECON-GA 4021	Data and Computation I <sup>1</sup>	1.5
ECON-GA 4031	Microeconomics I <sup>1</sup>	1.5
<b>Credits</b>		<b>6</b>
<b>2nd Semester/Term</b>		
ECON-GA 4032	Microeconomics II	1.5
ECON-GA 4041	Macroeconomics I	1.5
ECON-GA 4042	Macroeconomics II	1.5
ECON-GA 4051	Game Theory I	1.5
ECON-GA 4061	Applied Microeconomics I	1.5
ECON-GA 4071	Econometrics I	1.5
ECON-GA 4072	Econometrics II	1.5
ECON-GA 4121	Research Practicum I	1.5
<b>Credits</b>		<b>12</b>
<b>3rd Semester/Term</b>		
ECON-GA 4022	Data and Computation II <sup>2</sup>	1.5
ECON-GA 4052	Game Theory II <sup>2</sup>	1.5
<b>Credits</b>		<b>3</b>
<b>4th Semester/Term</b>		
ECON-GA 4043	Macroeconomics III	1.5
ECON-GA 4044	Macroeconomics IV	1.5
ECON-GA 4062	Applied Microeconomics II	1.5
ECON-GA 4073	Econometrics III	1.5

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ECON-GA 4082	Industrial Organization II	1.5
ECON-GA 4091	Computational Dynamics	1.5
ECON-GA 4111	Financial Economics	1.5
ECON-GA 4122	Research Practicum II	1.5
<b>Credits</b>		<b>12</b>
<b>Total Credits</b>		<b>33</b>

1

This course is taken in the summer of the first year.

2

This course is taken in January (J-term).

## Learning Outcomes

The main purpose of the program is to develop strong analytical and conceptual skills that can be applied to a subsequent PhD in economics or finance, or conceivably to top-level placements in a quantitative industry or policy position.

Additionally, graduates will:

1. Be provided with a strong quantitative economics training and skill development in preparation for advanced research in Economics, with emphasis on the acquisition of analytical techniques in economic theory, econometrics, and mathematics.
2. Develop deep skills in modern computational and econometric tools and management of economic data at the graduate level.
3. Be familiarized with the research frontier in applied economics, developing skills to apply their research by working on research projects and in diverse teams throughout the program.

## Policies

### NYU Policies

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

### Graduate School of Arts and Science Policies

Academic Policies for the Graduate School of Arts and Science can be found on the Academic Policies page (<https://bulletins.nyu.edu/graduate/arts-science/academic-policies/>).