

INFORMATION SYSTEMS (MS)

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

NYSED: 19142 HEGIS: 0702.00 CIP: 11.0401

Program Description

The MSIS Program is a master's degree combining computer science courses at Courant (Graduate School of Arts and Science {GSAS}) and business courses at the Stern School of Business.

Given today's ubiquitous computing, organizations have a critical need for people who understand, in depth, both computers and business. Many influential technology leaders today are those with deep expertise in technology and business strategy. Successful new technology products and information systems always combine technical quality and smart business strategy. Developing these systems requires extensive communications among technical developers, business managers and users.

The Master of Science in Information Systems (MSIS) program focuses on training students in the core concepts of computing and business so graduates can develop successful careers in management positions that require deep technical skills.

For example, MSIS graduates have excelled in the following careers:

- At software vendors:
 - Product manager
 - Requirements analyst
 - Programming team leader
- In Information Technology (IT) departments:
 - CIO
 - VP IT operations
 - Systems architect
 - Internal requirements analyst
 - Development team leader
- At consulting companies:
 - Strategic technology consultant

MSIS students draw from the same courses as Courant GSAS Computer Science graduate students and Stern MBA students. The MSIS program offers the academic equivalent of an abbreviated combined Computer Science Master's and MBA degree.

NYU does not provide financial aid to MSIS students.

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 Computer Science (<https://gsas.nyu.edu/admissions/arc/programs/computer-science.html>) for admission requirements and instructions specific to this program.

Program Requirements

| Course | Title | Credits |
|--|------------------------|-----------|
| Major Requirements | | |
| CSCI-GA 1170 | Fundamental Algorithms | 3 |
| Select two of the following: | | 6 |
| CSCI-GA 2262 | Data Comm & Networks | |
| CSCI-GA 2250 | Operating Systems | |
| CSCI-GA 2433 | Database Systems | |
| Complete six credits of Stern COR1-GB General Business Core courses | | 6 |
| Complete nine credits of Stern TECH-GB Information Systems courses | | 9 |
| Capstone | | |
| CSCI-GA 3812 | Info Tech Projects | 3 |
| Electives | | |
| Complete six credits of computer science electives | | 6 |
| Complete six credits of electives either from the Computer Science Department or NYU Stern | | 6 |
| Total Credits | | 39 |

Sample Plan of Study

| Course | Title | Credits |
|---------------------------------|--|-----------|
| 1st Semester/Term | | |
| CSCI-GA 1170 | Fundamental Algorithms | 3 |
| CSCI-GA 2262 | Data Comm & Networks | 3 |
| Stern TECH-GB or COR1-GB course | | 3 |
| Credits | | 9 |
| 2nd Semester/Term | | |
| CSCI-GA 2433 or CSCI-GA 2250 | Database Systems or Operating Systems | 3 |
| Stern TECH-GB or COR1-GB course | | 3 |
| Stern TECH-GB or COR1-GB course | | 3 |
| Credits | | 9 |
| 3rd Semester/Term | | |
| Computer Science Elective | | 3 |
| Computer Science Elective | | 3 |
| Stern TECH-GB or COR1-GB course | | 3 |
| Credits | | 9 |
| 4th Semester/Term | | |
| Stern TECH-GB or COR1-GB course | | 3 |
| Stern or CS elective | | 3 |
| Stern or CS elective | | 3 |
| Credits | | 9 |
| 5th Semester/Term | | |
| Capstone course | | 3 |
| Credits | | 3 |
| Total Credits | | 39 |

Learning Outcomes

Upon successful completion of the program, graduates will:

1. Analyze the mathematical complexity of a wide range of algorithms and be able to choose the most appropriate algorithm to use for a given programming task. Graduates will also demonstrate a detailed understanding of the design and implementation of business solutions in two of the following three areas: Data Communications and Networks, Operating Systems, and Database Systems.
2. Have the general business knowledge required to manage and operate an organization and understand the effects of economic forces on business dynamics. Graduates will also have a deep understanding of the inner-workings of information systems and how they can best be leveraged to support mainstream business capabilities and meet business objectives.
3. Demonstrate their ability to interact with business executives and work as part of a team, following the various phases of the information technology (IT) project life cycle and applying deep technical skills learned in the MSIS program, to develop an IT solution that solves a real world business problem for a corporation, a non-profit organization, or a government agency.

Policies

Program Policies

Transfer Credit Policy

A maximum of 9 credits may be transferred from previous graduate study in computer science at another university. The approval of the Director of Graduate Studies is required for transfer credits, and internships. MSIS students may do no more than 6 credits of Independent Study and Internships combined.

Degree Time Limit

The MS in information systems must be completed within five years.

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/>).