

# Information Systems (MS)\*

For additional program information see the [Zicklin School website](#)

Today's competitive business environment requires that companies leverage Information Technology to gain a competitive edge and to operate efficiently. The Master of Science in Information Systems provides students with the managerial and technological skills that support these goals. The focused program consists of 31.5 credits in IS-related courses and an abbreviated business core (waivable based on prior academic background). Students take core courses in key topics such as database management systems, global issues in IT, systems analysis and design, and IS strategy and may customize their degree by selecting from diverse elective courses. Graduates of the program are employed in diverse industries in positions such as project managers, system developers, technology leads, IT managers, and systems analysts. The MS program conforms with the DHS - STEM program so that international students who graduate from the MS program may be eligible for an additional 17-month extension on their optional practical training (OPT).

<b>English Language Proficiency **</b>		
Students who completed their undergraduate education in a non-English speaking country will be required to take non-credit bearing modules in Grammar Troubleshooting and American English Pronunciation offered by the Division of Continuing and Professional Studies. These modules may be waived based on a waiver exam. The modules are not required for students who completed a four-year degree in an English-speaking country.		
<b>Courses in Specialization (31.5 credits)</b>		
<b>Required (13.5 credits)</b>		
<a href="#">BUS 9551**</a>	Business Communication I	1.5 credits
<a href="#">CIS 9001***</a>	Information Systems for Managers I (with CIS 9002 formerly CIS 9000)	1.5 credits
<a href="#">CIS 9002</a>	Information Systems for Managers II (with CIS 9001 formerly CIS 9000)	1.5 credits
<a href="#">CIS 9340</a>	Principles of Database Management Systems	3 credits
<a href="#">CIS 9490</a>	Systems Analysis and Design	3 credits
<a href="#">CIS 9590</a>	Information Systems Development Project	3 credits
<b>Electives (18 credits)</b>		
<b>Choose 12-18 credits</b>		
<b>Students may select courses, according to preference, from the list below, or alternatively may select from a focused list (below) constituting a concentration in Data Analytics.</b>		
<a href="#">BUS 9801, 9802, 9803</a>	Graduate Internships I, II, and III (in IS)	3 credits
<a href="#">CIS 9230</a>	Globalization and technology	3 credits
<a href="#">CIS 9240</a>	Sustainability and Information Technology	3 credits
<a href="#">CIS 9310</a>	Object-Oriented Programming I	3 credits
<a href="#">CIS 9350</a>	Networks and Telecommunications	3 credits

CIS 9355	Cybersecurity	3 credits
CIS 9375	Social Technology and Business	
CIS 9410	Object-Oriented Programming II	3 credits
CIS 9440	Data Warehousing and Analytics	3 credits
CIS 9444	E-Business Principles and Technologies	3 credits
CIS 9445	Digital Media Management	3 credits
CIS 9467	Business Modeling with Spreadsheets	3 credits
CIS 9480	Information Technology Project Management	3 credits
CIS 9550	Emerging Trends in Information Technology	3 credits
CIS 9555	Information Technology in Financial Markets	3 credits
CIS 9556	Risk Management Systems	3 credits
CIS 9557	Business Intelligence	3 credits
CIS 9650	Programming for Analytics	3 credits
CIS 9655	Data Visualization	3 credits
CIS (STA) 9660	Data Mining for Business Analytics ( <a href="#">STA 9660</a> )	3 credits
CIS 9700	Integrating Information Technology and Business Processes	3 credits
CIS 9791	Special Topics in Information Systems Technologies	1.5 credits
CIS 9793 (formerly <a href="#">CIS 9771</a> )	Special Topics in Information Technologies	3 credits
CIS 9795	Special Topics in Information Systems Strategy	1.5 credits
<b>Business Electives: Choose 0-6 credits from the list below:</b>		
<a href="#">ACC 9110</a> <sup>+</sup>	Financial Reporting	3 credits
<a href="#">ACC 9810</a>	Current Topics in Financial Accounting	3 credits
<a href="#">ACC 9993</a>	Special Topics in Accountancy	3 credits
<a href="#">FIN 9770</a> <sup>++</sup>	Corporate Finance	3 credits
<a href="#">MGT 9702</a>	Service Operations Management I	1.5 credits
<a href="#">MGT 9704</a>	Service Operations Management II	1.5 credits
<a href="#">OPR 9721</a>	Introduction to Quantitative Modeling	3 credits
<a href="#">STA 9708</a>	Managerial Statistics	3 credits

\*\*Students may take CIS 9001 along with other specialization courses for which CIS 9001 is the pre-or co-requisite in their first semester

#### **New Concentration in Data Analytics**

Students will take all required courses(13.5 credits), and will select 9-12 credits from the following list of electives. To complete the remaining 6-9 elective credits, students will select from the information systems and business electives listed above.

CIS 9310	Object-Oriented Programming I	3 credits
or		
CIS 9650	Programming for Analytics	3 credits
CIS 9440	Data Warehousing and Analytics	3 credits
CIS 9655	Data Visualization	3 credits
CIS/ STA 9660	Data Mining for Business Analytics	3 credits

\*The requirements below are pending approval of the New York State Department of Education, effective Spring 2017.

\*\* Effective for all MS-Information Systems students admitted in Spring 2016 or later. Students admitted prior to Spring 2016 should consult their preliminary course evaluation and/or waiver exam results, since other requirements and conditions apply.

\*\*\*Students may take CIS 9001 along with other specialization courses for which CIS 9001 is the pre- or corequisite in their first semester.

+Formerly ACC 9110 Financial Accounting; new course title effective spring 2017.

++Formerly FIN 9770 Financial Decision Making; new course title effective Spring 2017.