Information Systems

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 30 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 24-month extension on their optional practical training (OPT).

English Language Proficiency		
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.		
Courses in Specialization (31.5 credits)		
Required (13.5 credits)		
BUS 9551	Business Communication I	1.5 credits
CIS 9000*+	Information Technology Strategy	3 credits
CIS 9340	Principles of Database Management Systems	3 credits
CIS 9490	Systems Analysis and Design	3 credits
CIS 9590	Information Systems Development Project	3 credits
Electives (18 credits)		
Choose 12-18 credits **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.**		
BUS 9801, 9802, 9803	Graduate Internships I, II, and III (in IS)	3 credits
CIS 9230	Globalization and Technology	3 credits
CIS 9240	Sustainability and Information Technology	3 credits
CIS 9310	Object-Oriented Programming I	3 credits
CIS 9350	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 (STA 9660)	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 CIS 9771)	Special Topics in Information Technologies	3 credits
CIS 9795	Special Topics in Information Systems Strategy	1.5 credits
CIS 9797 (formerly CIS 9775)	Special Topics in Information Systems Strategy	3 credits
Business Electives: Choose 0-6 credits from the list below:		
ACC 9110	Financial Accouning	3 credits
ACC 9810	Current Topics in Financial Accounting	3 credits
ACC 9993	Special Topics in Accountancy	3 credits
FIN 9770	Financial Decision Making	3 credits
MGT 9700++	Managing Business Operations	3 credits
OPR 9721	Introduction to Quantitative Modeling	3 credits
STA 9708	Managerial Statistics	3 credits

*Students may take CIS 9000 along with other specialization courses for which CIS 9000 is the pre-or co-requisite in their first semester. +CIS 9001 and CIS 9002, which have been phased out of the curriculum, may be used in lieu of CIS 9000 to satisfy degree requirements. ++MGT 9702 and MGT 9704, which have been phased out of the curriculum, may be used in lieu of MGT 9700 to satisfy degree requirements.		
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	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