

INFORMATION SYSTEMS, MS

Campus: NYC, Westchester

Global companies gain a competitive advantage through the methods they use to collect, process, transmit, and disseminate data and information. For now and the foreseeable future, the fastest-growing jobs in our economy come from the field of Information Systems. The skills, knowledge, and talents of IS personnel separate great companies from their competitors. A 30-credit Pace Master of Science in Information Systems prepares you to deliver these advantages. You'll benefit whether you are new to Information Systems or if you have an undergraduate degree in the field.

The program's foundation and core programs consist of offerings in systems design and development, project management, organizational structure, networks and telecommunications, and relevant topics associated with software, hardware, and telecommunications infrastructure.

After completion of foundation and core coursework, you will select a 9-credit knowledge area of specialization in either Database Management, Data Science, Business Intelligence, User Experience, Telecommunications Management, Health Information Systems, and Security and Information Assurance. The program culminates in a capstone project that integrates all you have learned while pursuing your degree.

Code	Title	Credits
Foundation Courses ¹		
IS 612	Introduction to Coding	3
IS 613	Database Management Systems	3
IS 617	Information Systems Principles	3
IS 623	Information Systems Design and Development	3
IS 632	Business Data Communications	3
IS 692	Research Project Seminar	3
Concentrations and Electives		
Select one of the following concentrations:		9
Database Management (p. 1)		
Data Science Concentration (p. 1)		
Business Intelligence Concentration (p. 1)		
User Experience Concentration (p. 2)		
Telecommunications Management Concentration (p. 2)		
Health Information Systems Concentration (p. 2)		
Security and Information Assurance Concentration (p. 2)		

¹ Courses for students who have limited or no previous background in the field of information systems or computing. These courses are required unless specifically waived by the Department Chair or Academic Advisor.

Database Management Concentration

Code	Title	Credits
IS 664	Database Programming	3
IS 667	Database Design and Development of Web Applications	3
IS 669	Big Data and Information Systems	3

Data Science Concentration

Code	Title	Credits
IS 680	Data Science I: Programming for Data Analysis	3
IS 682	Data Mining II: Data Mining Algorithms and Applications	3
IS 684	Web Mining	3
IS 678	Location Analytics and Web GIS	3
IS 669	Big Data and Information Systems	3

Business Intelligence Concentration

Code	Title	Credits
IS 637	Information Systems Project and Change Management	3
IS 675	Customer Relationship Management: Process and Technologies	3

IS 664	Database Programming	3
IS 678	Location Analytics and Web GIS	3

User Experience Concentration

Code	Title	Credits
Select three of the following:		9
IS 638	Introduction to User Experience Design	
IS 690E	Topic: Information Architecture	
IS 628	Research Methods for User Experience	
IS 627	Visual Design for Technology	

Telecommunications Management Concentration

Code	Title	Credits
Select three of the following:		9
IS 635	Distributed Information Systems	
IS 650	Telecommunications Management	
IS 652	Telecommunications Policy and Environment	
IS 654	Cases in Telecommunication Systems	
IS 656	Networks: Routing & Switching	

Health Information Systems Concentration

Code	Title	Credits
Public Administration Courses		
PAA 665	Seminar in Health Services Management	3
Select one of the following:		3
PAA 602	Organization Theory and Management	
PAA 604	Budgeting and Financial Analysis	
PAA 650	The United States Health Care System	
PAA 652	Health Policy Studies	
PAA 661	Hospital and Health Services Administration	
PAA 662	Health Planning	
PAA 666	Health Care Economics	
Information Systems Course		
Select one of the following:		3
IS 637	Information Systems Project and Change Management	
IS 665	Introduction to Data Mining and Visualization	
IS 668	Foundation of Geographic Information Systems	
IS 672	Healthcare Innovation and Technology: Industry Trends, Challenges and Opportunities	
IS 674	Digital Health Technologies	

Security and Information Assurance Concentration

Prerequisite: Please discuss with your advisor which course(s) are required.

Code	Title	Credits
Select three of the following:		9
IT 603	Overview of Information Security	
IS 641	Information Security and Controls	
IT 660	Network Security	
IT 662	Web and Internet Security	
IT 664	Computer and Internet Forensics	

Recommended Electives (15-30 credits)*

Code	Title	Credits
IS 620	Information Systems and Organizational Strategy	3
IS 631	Operating Systems Principles	3
IS 639	Information Systems Planning and Policy	3
IS 647	Legal Issues in Information Systems	3
IS 648	Cyber and Professional Ethics	3
IS 662	Issues in Information Systems	3
IS 665	Introduction to Data Mining and Visualization	3
IS 668	Foundation of Geographic Information Systems	3
IS 671	Strategies for e-Commerce Technologies	3
IS 673	Managerial Issues in Information Systems	3
IS 676	Foundations of Social and Mobile Technologies	3

*Students can take up to 2 non-IS graduate-level Seidenberg or Lubin MBA Foundation courses as Elective courses, with approval of Academic Advisor or Department Chair.

Total Credits: 30