INFORMATION SYSTEMS, MS

Northwestern University's MS in Information Systems (MSIS) program prepares graduates to advance their careers in IT management or to move into an IT career and progress to management level. Distinct from traditional computer science programs, the MSIS curriculum puts an emphasis on the development and management of software projects existing in the workplace. It is designed for professionals who seek a hands-on, laboratory-based experience that will broaden and deepen their knowledge of new and emerging IT. The MSIS degree requires 11 graduate units of credit. In addition to the general Information Systems track, there are seven specializations to focus on your area of interest and build the skills you need to advance your career. Artificial Intelligence (https://catalogs.northwestern.edu/sps/graduate/information-systems/information-systems-ms-artificial-intelligence-specialization/), Data Science (https://catalogs.northwestern.edu/sps/graduate/information-systems/information-systems-ms-data-science-specialization/), Database and Internet Technologies (https://catalogs.northwestern.edu/sps/graduate/information-systems/information-systems-ms-database-internet-technologies-specialization/), Digital Transformation (https://catalogs.northwestern.edu/sps/graduate/information-systems/information-systems-ms-digital-transformation-specialization/), Health Informatics (https://catalogs.northwestern.edu/sps/graduate/information-systems/information-systems-ms-health-informatics-specialization/), Information Systems Management, (https://catalogs.northwestern.edu/sps/graduate/information-systems/information-systems-ms-management-specialization/) Information Systems Security, (https://catalogs.northwestern.edu/sps/graduate/information-systems/information-systems-ms-security-specialization/) and Project Management (https://catalogs.northwestern.edu/sps/graduate/information-systems/information-systems-ms-project-management-specialization/).

Curriculum

Core Courses (4 units)

Course	Title
CIS 413-DL	Telecommunications and Computer Networks
CIS 414-DL	Object Oriented Programming
or MSDS 430-DL	Python for Data Analysis
CIS 417-DL	Database Systems Design & Implementation
CIS 498-DL	Computer Information Systems Capstone Project
or CIS 590-DL	Capstone Research

Electives (7 units)

Course	Title
CIS 419-DL	Web Application Development
CIS 431-DL	Database Administration
CIS 435-DL	Practical Data Science Using Machine Learning
CIS 436-DL	Data and Digital Platforms
CIS 452-DL	Cybersecurity Attacks and Counter Measures
CIS 453-DL	Enterprise Security Strategy
CIS 455-DL	Disaster Recovery and Continuity
CIS 457-DL	Management of Information Security
CIS 459-DL	Innovation with Blockchain Technology
CIS 460-DL	Information Technology Management
CIS 465-DL	Information Technology Strategy
CIS 471-DL	Digital Transformation: Strategy and Planning
CIS 473-DL	Digital Technologies
CIS 475-DL	Leading Digital Transformation Execution
CIS 477-DL	Enterprise Architecture
CIS 494-DL	Project Management Concepts
CIS 495-DL	Enterprise Agility Frameworks
CIS 496-DL	Business Writing and Communication
CIS 497-DL	Information Technology Finance

About the Final Project

Students may pursue their capstone experience independently or as part of a team. As their final course, students take either the individual research project in an independent study format or the classroom final project class in which students integrate the knowledge they have gained in the core curriculum in a project presented by the instructor. In both cases, students are guided by faculty in exploring the body of knowledge on information systems while contributing research of practical value to the field. The capstone independent project and capstone class project count as one unit of credit.

Course	Title
Choose one	
CIS 498-DL	Computer Information Systems Capstone Project
CIS 590-DL	Capstone Research