

INFORMATION SYSTEMS, MS PROJECT MANAGEMENT SPECIALIZATION

This specialization is designed for IT professionals who want to acquire the skills and competencies for IT project management. The project management specialization provides the students with the managerial and technical skills that are applicable to information systems software development lifecycle (SDLC) including requirements, analysis/design, implementation, and testing. The student applies the fundamental concepts and techniques of project management like schedule and budget estimation, resource allocation, progress monitoring, risk mitigation and contingency planning to IT projects in the software industry. The student acquires hands-on experience with traditional project management methodologies and modern project management methodologies like Agile project management. Standards for quality assurance and quality control, like ISO 9000 family of standards, will be discussed and explained to assess the maturity of the development organizations and the development processes for the IT projects. Business Communication and IT budgeting moves projects and innovation forward, focusing on application to real-world initiatives.

Curriculum

Core Courses (4 units)

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

Specialization Courses (7 units)

Course	Title
CIS 494-DL	Project Management Concepts
CIS 495-DL	IT Project Management
CIS 496-DL	Information Technology Business Writing and Communication

Any four electives

CIS 419-DL	Web Application Development
CIS 431-DL	Database Administration
CIS 435-DL	Practical Data Science Using Machine Learning
CIS 436-DL	Big Data Management and Analytics
CIS 452-DL	Fundamentals of Network Security
CIS 453-DL	Advanced Cyber Security
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 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	Information Systems Project
CIS 590-DL	Capstone Research