

# 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 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

### Specialization Courses (7 units)

Course	Title
MSDS 475-DL	Project Management
<b>Any two of the following</b>	
CIS 495-DL	Enterprise Agility Frameworks (Required)
CIS 496-DL	Business Writing and Communication
CIS 497-DL	Information Technology Finance
<b>Any four electives</b>	
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

## 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
<b>Choose one</b>	
CIS 498-DL	Computer Information Systems Capstone Project
CIS 590-DL	Capstone Research