

MASTER OF SCIENCE IN INFORMATION TECHNOLOGY AND MANAGEMENT

At the conclusion of their studies, graduates of the Master of Science in Information Technology and Management should be able to:

- Deliver optimal technical and policy technology solutions for the problems of business, industry, government, non-profit organizations, and individuals in each student's particular area of focus.
- Work with, lead, and manage teams in an enterprise environment to collaboratively arrive at optimal technology solutions.
- Manage and deploy information resources applicable to each student's particular area of focus in an enterprise setting..
- Conduct and report on significant research in the areas of information technology and related management topics.

Students are required to complete three core courses. These courses will ensure an ability to develop software applications at a competent level using a contemporary programming language, the capability to employ and deploy appropriate system technologies, and a grasp of business development knowledge appropriate to the discipline.

Students may choose from two research options to complete the degree:

Thesis Option

The thesis option requires coursework and five to eight credit hours of master's thesis work (ITMT 591). The result is a master's thesis. A student must successfully defend a thesis to apply ITMT 591 credit hours toward a degree. Students who complete both a project and a thesis can apply a maximum combined total of eight credit hours of ITMT 591 and ITMT 594 or ITMT 597 toward the degree.

Master's Project Option

The master's project option requires coursework and five to eight credit hours of ITMT 594 or ITMT 597 for a total of 32 credit hours. The result is a project meeting requirements as published by the Department of Information Technology and Management.

Master of Science in Information Technology and Management (Thesis Option)

Code	Title	Credit Hours
Required Core Courses		(9)
Select three credit hours of Software Development		3
Select three credit hours of System Technologies		3
Select three credit hours of Business Development		3
Research Courses		(5-8)
ITMT 591	Independent Study/Research	5-8
Elective Courses		(15-18)
15 to 18 hours of 500-level ITM or TECH courses selected with the student's adviser		15-18

A limited number of elective courses from other departments may be selected with adviser approval.

Master of Science in Information Technology and Management (Project Option)

Code	Title	Credit Hours
Required Core Courses		(9)
Select three credit hours of Software Development		3
Select three credit hours of System Technologies		3
Select three credit hours of Business Development		3
Research Courses		(5-8)
ITMT 594 or ITMT 597	Special Projects in IT Special Problem in IT	5-8
Elective Courses		(15-18)
15 to 18 hours of 500-level ITM or TECH courses selected with the student's adviser		15-18

A limited number of elective courses from other departments may be selected with adviser approval.

Graduate Core Courses by Subject and Topic

The following courses comprise the graduate core courses:

Subject: Software Development

Topic: Programming

Code	Title	Credit Hours
ITMD 510	Object-Oriented Application Development	3
ITMD 512	Structured and Systems Programming	3
ITMD 513	Open Source Programming	3
ITMD 515	Advanced Software Programming	3

Subject: System Technologies

Topic: Application Development

Code	Title	Credit Hours
ITMD 553	Enterprise Intelligent Device Applications	3
ITMD 554	Mass-Market Intelligent Device Applications	3
ITMD 555	Open-Source Intelligent Device Applications	3
ITMD 565	Rich Internet Applications	3
ITMD 566	Service-Oriented Architectures	3
ITMT 593	Embedded Systems	3

Topic: Information Systems Technologies

Code	Title	Credit Hours
ITMO 533	Enterprise Server Administration	3
ITMO 553	Open Source System Administration	3
ITMO 556	Introduction to Open Source Software	3
ITMS 558	Operating Systems Security	3

Topic: Information Technology Architectures

Code	Title	Credit Hours
ITMO 540	Introduction to Data Networks and the Internet	3
ITMO 554	Operating Systems Virtualization	3
ITMS 548	Cyber Security Technologies	3
ITMT 535	Data Center Architecture	3

Subject: Business Development

Topic: Design

Code	Title	Credit Hours
ITMD 511	Application Development Methodologies	3
ITMD 532	UML-Based Software Development	3
ITMD 534	Human and Computer Interaction	3
ITMT 531	Object-Oriented System Analysis, Modeling, and Design	3

Topic: Management

Code	Title	Credit Hours
ITMM 537	Vendor Management and Service Level Agreements	3
ITMM 570	Fundamentals of Management for Technology Professionals	3
ITMM 571	Project Management for Information Technology Management	3
ITMM 574	Information Technology Management Frameworks	3
ITMM 575	Networking and Telecommunications Management	3
ITMS 578	Cyber Security Management	3

Topic: Innovation

Code	Title	Credit Hours
ITMM 581	Information Technology Entrepreneurship	3
ITMM 582	Business Innovation	3
ITMD 535	Human-Computer Interaction Design	3