

Informatics, MPS (Online)

A rapidly evolving area, informatics is increasingly used to solve today's problems through IT innovations across many industries including healthcare, business consulting, education, finance, and social media. This master's degree is well suited to students and working professionals with diverse backgrounds who wish to learn and improve their IT technical and management skills, highlighted by our curriculum on information security management, as well as cloud computing application and management. Students also have the opportunity to acquire technical training in data analytics, user-centered design and web development, and managing technical projects.

Program Requirements

Complete all courses and requirements listed below unless otherwise indicated.

Required Courses

Code	Title	Hours
ITC 6105	Foundations of Informatics	3
ITC 6150	Database Application and Management	3
ITC 6205	IT Strategy and Governance	3
ITC 6250	Interactive System Design and Web Development	3
PJM 6440	Leading and Managing Technical Projects	2
Capstone		
ITC 6980	Informatics Capstone	4

Concentrations or Electives Option

A concentration is not required. Students may complete the [electives option](#) in [lieu of a concentration](#).

- AI Systems and Data Management (p. 1)
- Analytics (p. 1)
- Cloud Computing Application and Management (p. 2)
- Human-Centered Informatics (p. 2)
- Information Security Management (p. 2)
- Project Management (p. 2)
- Electives Option (p. 2)

Program Credit/GPA Requirements

34 total semester hours required

Minimum 3.000 GPA required

AI SYSTEMS AND DATA MANAGEMENT

Code	Title	Hours
ITC 6711	Foundations of AI System and Data Management	3
ITC 6721	Data Engineering for Intelligent Systems	3
ITC 6730	Operations and LLM Operations for Scalable AI	3
ITC 6670	Cloud Data Architecture, Engineering, and Analytics	3
Complete 4 semester hours from Restricted Electives list below. (p. 2)		4

ANALYTICS CONCENTRATION

Code	Title	Hours
ALY 6105	Introduction to Applied Statistics	3
ALY 6115	Foundations of Data Analytics	3
ALY 6145	Communication and Visualization with Data	3
Complete 3 semester hours from the following:		3
ALY 6125	Intermediate Analytics	
ALY 6610	Data Mining Applications	

ALY 6620	Big Data and Cloud Computing	
Complete 4 semester hours from Restricted Electives list below. (p. 2)		4

CLOUD COMPUTING APPLICATION AND MANAGEMENT CONCENTRATION

Code	Title	Hours
ITC 6630	Cloud Security Planning and Design	3
ITC 6650	Cloud Computing Fundamentals, Applications, and Management	3
ITC 6660	Enterprise Information Architecture	3
ITC 6670	Cloud Data Architecture, Engineering, and Analytics	3
Complete 4 semester hours from Restricted Electives list below. (p. 2)		4

HUMAN-CENTERED INFORMATICS CONCENTRATION

Code	Title	Hours
DGM 5060	Visual Design Foundations	2
DGM 6115	Data Collection, Analysis, and Visualization	3
DGM 6255	Usability and Human Interaction	3
DGM 6600	Information Design for Digital Media	3
DGM 6610	Prototyping and Usability Testing	3
Complete 2 semester hours from Restricted Electives list below.		2

INFORMATION SECURITY MANAGEMENT CONCENTRATION

Code	Title	Hours
ITC 6610	Foundations of Information Security	3
ITC 6620	Information Security Risk Management	3
ITC 6630	Cloud Security Planning and Design	3
ITC 6640	Security Operations and Analytics	3
Complete 4 semester hours from Restricted Electives list below. (p. 2)		4

PROJECT MANAGEMENT CONCENTRATION

Code	Title	Hours
PJM 6100	Foundations of Project Management ¹	3
PJM 6120	Project Scope, Schedule and Cost Planning	3
PJM 6200	Project Risk Management	3
PJM 6300	Project Quality Management	3
Complete 4 semester hours from Restricted Electives list below. (p. 2)		4

¹ Foundations of Project Management (PJM 6100) is for students with fewer than three years of experience directing or leading project tasks. Students who do not complete Foundations of Project Management (PJM 6100) may substitute project management electives to satisfy the required program hours.

ELECTIVES OPTION

Code	Title	Hours
Complete 16 semester hours of coursework as follows:		16
Complete 12 semester hours any College of Professional Studies graduate-level courses or unused courses in the program (or a combination of both).		
Complete 4 semester hours from the Restricted Electives list below. (p. 2)		

Restricted Electives

Code	Title	Hours
INT 6940	Experiential Learning Projects for Professionals	
ITC 6405	Systems and Network Administration	
ITC 6415	IT Policy, Ethics, and Social Responsibility	
ITC 6435	Ethical Hacking	
ITC 6480	Amazon Web Service (AWS) Cloud Architecting	
ITC 6680	CISSP Preparation	
ITC 6983	Special Topics in Informatics	