Informatics, MPS (Boston)

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 attracts students and working professionals with a diverse background to learn and improve IT technical and management skills, highlighted by our strengthened 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 6000	Database Management Systems	3
ITC 6010	Information Technology Strategy and Governance	3
ITC 6020	Information Systems Design and Development	3
ITC 6035	Information Technology Project Management	3
ITC 6400	Foundations of Informatics	3
Capstone and Experiential Learning		
ITC 6040	Informatics Capstone	3
INT 6940	Experiential Learning Projects for Professionals	1-4

The remaining quarter hours may be completed by a combination of completing a concentration and additional electives or by selecting any courses listed in the concentrations and electives lists.

Concentrations or Electives

Complete one of the following concentrations or complete the required hours by selecting any courses listed in the concentrations and electives lists:

- Analytics (p. 1)
- Cloud Computing Application and Management (p. 1)
- Human-Centered Informatics (p. 2)
- Information Security Management (p. 2)
- Leading and Managing Technical Projects (p. 2)

ANALYTICS CONCENTRATION

Code	Title	Hours
ALY 6000	Introduction to Analytics	3
ALY 6010	Probability Theory and Introductory Statistics	3
ALY 6015	Intermediate Analytics	3
ALY 6070	Communication and Visualization for Data Analytics	3
Complete one of the following:		3
ALY 6020	Predictive Analytics	
ALY 6030	Data Warehousing and SQL	
ALY 6040	Data Mining Applications	
ALY 6110	Data Management and Big Data	

CLOUD COMPUTING APPLICATION AND MANAGEMENT CONCENTRATION

Code	Title	Hours
ITC 6015	Enterprise Information Architecture	3
ITC 6420	Introduction to Cloud Computing Applications and Management	3
ITC 6450	Advanced Cloud Computing Applications and Management	3
ITC 6460	Cloud Analytics	3
ITC 6520	Network Protection and Cloud Security	3
Complete one of the following:		3-4
ITC 6355	Web Application Design and Development	

ITC 6470		
ITC 6480	Amazon Web Service (AWS) Cloud Architecting	

HUMAN-CENTERED INFORMATICS CONCENTRATION

Code	Title	Hours
DGM 6168	Usability and Human Interaction	4
DGM 6268	Usable Design for Mobile Digital Media	4
DGM 6461	Interactive Information Design 1	4
ITC 6410	Fundamentals of Human Behaviors for Interactive Systems	3
Complete one of the following:		3-4
ALY 6070	Communication and Visualization for Data Analytics	
DGM 6463	Interactive Information Design 2	
ITC 6355	Web Application Design and Development	

INFORMATION SECURITY MANAGEMENT CONCENTRATION

Code	Title	Hours
ITC 6300	Foundations of Information Security	3
ITC 6305	IT Infrastructure (Systems, Networks, Telecom)	3
ITC 6315	Information Security Risk Management	3
ITC 6520	Network Protection and Cloud Security	3
ITC 6530	Security Analytics	3
Complete one of the following:		3
ITC 6330	CISSP Preparation	
ITC 6490	Ethical Hacking	

LEADING AND MANAGING TECHNICAL PROJECTS CONCENTRATION

Code	Title	Hours
PJM 5900	Foundations of Project Management [1]	4
PJM 6205	Leading and Managing Technical Projects	3
PJM 6210	Communication Skills for Project Managers	3
PJM 6215	Leading Remote Project Teams	3
PJM 6810	Principles of Agile Project Management	3

[1]   *Note:* Foundations of Project Management (PJM 5900) 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 5900) may substitute an elective from the following list to satisfy the required program hours:
- Project Evaluation and Assessment (PJM 6125)
- Project Quality Management (PJM 6135)
- Managing Troubled Projects (PJM 6140)
- Introduction to Program and Portfolio Management (PJM 6710)

ELECTIVES

Code	Title	Hours
ALY 6015	Intermediate Analytics	
ALY 6030	Data Warehousing and SQL	
ALY 6050	Introduction to Enterprise Analytics	
ALY 6060	Decision Support and Business Intelligence	
ALY 6110	Data Management and Big Data	
ALY 6120	Leadership in Analytics	
ALY 6130	Risk Management for Analytics	
DGM 6501	Web Creation Boot Camp	
DGM 6145	Information Technology and Creative Practice	
DGM 6521	Web Creation for Content Management Systems	
EDU 6184		
GIS 5103	Foundations of Geographic Information Science	
GIS 6340	GIS Customization	

GIS 6360	Spatial Databases
ITC 6030	Computer Systems and Networks
ITC 6080	
ITC 6082	Network Protection
ITC 6345	Systems and Network Administration
ITC 6045	Information Technology Policy, Ethics, and Social Responsibility
PJM 5900	Foundations of Project Management
PJM 6205	Leading and Managing Technical Projects
TCC 6110	

Program Credit/GPA Requirements

45 total quarter hours required
Minimum 3.000 GPA required