Naveen Jindal School of Management

Master of Science in Information Technology and Management

36 semester credit hours minimum

Faculty

Clinical Professors: Abhijit Biswas, Forney Fleming III, Peter Lewin, Radha Mookerjee, Daniel Rajaratnam, Kelly Slaughter
Associate Professors: Norris Bruce, Huseyin Cavusoglu, Jianqing Chen, Xianjun Geng, Surya N. Janakiraman, Nanda Kumar, Syam Menon, Orlando C. Richard, Young U. Ryu, Gil Sadka, Kelsey D. Wei, Zhiqiang (Eric) Zheng
Clinical Associate Professors: Sonia Leach, Mark Thouin
Assistant Professors: Mehmet Ayvaci, Bernhard Ganglmair, Atanu Lahiri, Arzu Ozoguz, Harpreet Singh, Shaojie Tang, Malcolm Wardlaw, Jieying Zhang
Clinical Assistant Professors: Hans-Joachim Adler, Moran Bluestein, Ravi Narayan, Dawn Owens
Senior Lecturers: Judd Bradbury, Carol Flannery, Maria Hasenhuttl, Jeffery (Jeff) Hicks, Mark Salamasick, Avanti P. Sethi, Luell (Lou) Thompson

Degree Requirements

The Master of Science in Information Technology Management (MS ITM) degree requires a minimum of 36 semester credit hours, consisting of basic business courses, IT foundation courses, IT elective courses, and free electives. The business core courses are designed to provide incoming students with the context to better appreciate and understand the complex issues that occur at the interface between IT and business. The IT foundation courses cover the essentials of IT knowledge that any student must possess. The IT elective courses provide in-depth knowledge of the technology and technology management issues. In addition, students may choose approved electives that maximize their individual educational and professional goals. The program also offers opportunities for students to concentrate in specific tracks such as 'Enterprise Systems,' 'Business Intelligence and Analytics,' 'IT Consulting and Services Management,' 'Healthcare Systems,' and 'Cybersecurity Management' depending on their interests and goals. Students can contact the advising office for the recommended courses for these tracks. Students must maintain a 3.0 grade point average in both core courses and in aggregate courses to qualify for the MS degree.

Course Requirements

Basic Business Core Courses: minimum of 9 semester credit hours from the following

ACCT 6305 Accounting for Managers
FIN 6301  Financial Management
MECO 6303  Business Economics
MKT 6301  Marketing Management
OPRE 6301  Quantitative Introduction to Risk and Uncertainty in Business
OPRE 6302  Operations Management
OB 6301  Organizational Behavior

IT Foundation Courses: 12 semester credit hours

MIS 6316  Data Communications
MIS 6323  Object Oriented Programming
MIS 6326  Data Management
MIS 6308  Systems Analysis and Project Management

IT Electives: 9 semester credit hours
Choose 9 semester credit hours from the following list of courses that have an MIS prefix, excluding MIS 6204 and MIS 6320.

MIS 6302  Information Technology Strategy and Management
MIS 6309  Business Data Warehousing
MIS 6311  Cybersecurity Fundamentals
MIS 6317  Healthcare Informatics
MIS 6319  Enterprise Resource Planning
MIS 6324  Business Intelligence Software and Techniques
MIS 6330  Information Technology Security
MIS 6332  Advanced ERP: Sales and Distribution
MIS 6334  Advanced Business Intelligence
MIS 6338  Accounting Systems Integration and Configuration
MIS 6344  Web Analytics
MIS 6352  Web Systems Design and Development
MIS 6360  Agile Project Management
MIS 6363  Cloud Computing
MIS 6364  Enterprise IT Architecture
MIS 6369  Supply Chain Software
MIS 6372  IT Services Management
MIS 6373  Social Media and Business
**MIS 6378** Enterprise Systems and CRM  
**MIS 6380** Data Visualization  
**BUAN 6390** Analytics Practicum  
**MIS 6V98** Information Systems Internship

**Free Electives: 6 semester credit hours**  
Any course from the set of IT electives may be used as a free elective. In addition, any course from the set of business core courses, or any other graduate level business course, except **MIS 6204** and **MIS 6320** may be used as a free elective.

**Graduate Certificate in Healthcare Information Technology**  
**9 semester credit hours**

**Faculty**  
**Assistant Professor:** Atanu Lahiri  
**Senior Lecturers:** Judd Bradbury, Eugene (Gene) Deluke, Mary Beth Goodrich, Luell (Lou) Thompson

**Overview**  
The graduate certificate in health information technology emphasizes practical concepts in healthcare IT and hands on experience gained using electronic medical records (EMR) software. The focus will be on identification and understanding the key information required for managing and working with healthcare information systems. It also demonstrates the use of analytics and software tools related to healthcare information to develop sound healthcare decisions, particularly the core functionalities the EMR software platform, including how to support clinical information workflows in a paperless environment, and the interconnectivity with other clinical and business systems.

**Courses required for graduate certificate in health information technology (9 semester credit hours)**

- **HMGT 6323** Health Informatics  
- **HMGT 6327** Information and Knowledge Management in Healthcare  
- **HMGT 6334** Healthcare Analytics

**Graduate Certificate in Enterprise Systems**  
**9 semester credit hours**

**Faculty**  
**Assistant Professor:** Atanu Lahiri  
**Senior Lecturers:** Judd Bradbury, Eugene (Gene) Deluke, Mary Beth Goodrich, Luell (Lou) Thompson
Overview

The graduate certificate in enterprise systems emphasizes theoretical concepts in enterprise resource planning and hands on experience using the SAP software. It provides broad exposure to various SAP functional modules such as Sales and Distribution, Supply Chain Management, Customer Relationship Management, Procurement, Human Capital Management, Accounting, and Data Warehousing. Furthermore, the certificate program provides students with an opportunity to get an in-depth knowledge of two of these modules.

The graduate certificate in enterprise systems is awarded after completion of MIS 6319 Enterprise Resource Planning, and two of the courses listed below.

- **MIS 6309** Business Data Warehousing
- **MIS 6332** Advanced ERP: Sales and Distribution
- **MIS 6338** Accounting Systems Integration and Configuration
- **MIS 6369** Supply Chain Software
- **MIS 6378** Enterprise Systems and CRM

Graduate Certificate in Business Intelligence and Data Mining

12 semester credit hours

Faculty

**Professor:** John J. Wiorkowski  
**Clinical Professor:** Radha Mookerjee  
**Associate Professors:** Huseyin Cavusoglu, Xianjun Geng, Syam Menon, Zhiqiang (Eric) Zheng  
**Clinical Associate Professor:** Sonia Leach  
**Assistant Professor:** Atanu Lahiri  
**Senior Lecturers:** Judd Bradbury, Monica E. Brussolo, Carol Flannery, Avanti P. Sethi

Overview

The graduate certificate in business intelligence provides students with an understanding of how to analyze large complex data sets in order to solve business problems. It emphasizes theoretical concepts and clinical knowledge associated with the design, delivery and use of business intelligence and data mining techniques in organizations.

Required courses: 12 semester credit hours

- **OPRE 6301** Quantitative Introduction to Risk and Uncertainty in Business
- **MIS 6324** Business Intelligence Software and Techniques
- **MIS 6334** Advanced Business Intelligence (with SAS)
- **MIS 6309** Business Data Warehousing (ITM Majors Only)
- or **MIS 6320** Database Foundations (non-ITM Majors Only)