Naveen Jindal School of Management

Master of Science in Information Technology and Management

36 semester credit hours minimum

Faculty

**Professors:** Indranil R. Bardhan, Theodore E. Day, David L. Ford Jr., Varghese S. Jacob, Stanley Liebowitz, Sumit K. Majumdar, Vijay S. Mookerjee, B. P. S. Murthi, Hasan Pirkul, Srinivasan Raghunathan, Sumit Sarkar, John J. Wiorkowski

**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
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)