Management Information Systems

**MIS 3100** Professional Development (1 semester hour) This course is required for all students majoring in Management Information Systems in the Naveen Jindal School of Management. This course is designed to enhance the student's experience in the Naveen Jindal School of Management. Students will work on networking skills, verbal and written communication skills, business etiquette training, and learn how to increase their human capital. Students will also work on projects geared towards career management and overall professional development as a business major. The goal of this class is to make the student a more marketable and valuable professional to the global economy. Students will learn and attend class using hybrid system of online training and on campus training. Only one professional development course (credit) may be applied toward your degree plan. Not repeated for credit. (1-0) S

**MIS 3300** Introduction to Management Information Systems (3 semester hours) Examines key business processes in organizations and how information systems support the execution and management of these processes. The course also deals with how to structure and manipulate data that might typically be found in an information system using the database management system, MS Access, and spreadsheet software, MS Excel, to make business decisions. (3-0) S

**MIS 3310** Introduction to Social Network Technology (3 semester hours) The course helps students apply the latest Internet-based technologies in both their personal and academic lives. Further, it explores how consumer-oriented businesses utilize these technologies. The course is a hands-on, interactive course where the students can share their current knowledge with others in the class and learn the latest applications of various online technologies. Finally, the course introduces students to the application and use of advanced technology on the UT Dallas campus. (3-0) Y

**MIS 3320** Business Analytics Using Excel (3 semester hours) A focus on practical IT skills required to model and solve business problems. It is an interdisciplinary course that draws upon problems from accounting, finance, marketing, production, and human resource fields. The course emphasizes learning-by-doing using Excel and its add-ons as the primary tool. Students taking this class are required to have a laptop. Prerequisite: **MIS 3300**. (3-0) Y

**MIS 4300** Database Fundamentals (3 semester hours) Introduces the basic concepts for the design and development of relational databases and database management. Topics include entity-relationship data model, logical database design, data administration, Structured Query Language, and database management issues, such as concurrency control, data security, and integrity. A database management system software package is used to implement working database systems. Prerequisites: **MIS 3300** and (MATH 1325 or MATH 2413 or MATH 2417). (Same as **ACCT 4300**) (3-0) Y

**MIS 4301** Database Systems (3 semester hours) Introduces the basic concepts of relational databases. The emphasis is on relational database structure and the use of relational databases for query retrievals and report generation. Structured Query Language (SQL) will be covered extensively. Applications of databases for accounting, finance, marketing, and other areas of business will be discussed. Cannot be used to satisfy the requirements of BS in MIS degree. Prerequisites: (**ACCT 2301** and **ACCT 2302** and **MIS 3300**) and (MATH 1325 or MATH 2413 or MATH 2417). (3-0) Y
MIS 4310 Programming in Java (3 semester hours) Business application development using Java. Topics include the fundamentals of Java programming, applets programming for web-based systems, and object-oriented programming concepts. Prerequisites: (MIS 3300 and MATH 1326) and (MATH 2333 or OPRE 3333 or MATH 2418 or MATH 2415 or CS 2305). (3-0) Y

MIS 4312 Mobile Web Application Development (3 semester hours) Provides an introduction to mobile web application development. A mobile web application is developed using a combination of CSS, HTML5, JavaScript, and PHP. Emphasis is given to hands on application of course material through development of a web application prototype under conditions simulating a business environment. Prior programming knowledge is highly recommended. (3-0) Y

MIS 4320 Introduction to Healthcare Information Systems (3 semester hours) Examines key processes in healthcare organizations and how information systems support the delivery of healthcare services. The course also deals with issues surrounding the selection, implementation, and use of electronic medical records (EMR) and provides opportunities to work hands-on with EMR software. Prerequisites: HMG 4301 and MIS 3300. (Same as HMG 4321) (3-0) Y

MIS 4330 Systems Analysis and Design (3 semester hours) An overview of systems development methodologies will be presented. In addition to concepts in systems analysis and design, the students will be exposed to concepts in project management, and information gathering techniques. Projects focusing on the use of CASE tools will also be an integral part of the course. Prerequisites: (MIS 4310 or MIS 4312) and (MIS 4300 and MATH 1326) and (MATH 2333 or OPRE 3333 or MATH 2418 or MATH 2415 or CS 2305). (3-0) Y

MIS 4340 Enterprise Resource Planning (3 semester hours) This course provides an understanding of the practical use of enterprise resource planning systems in modern business. The course provides an understanding of integrated business processes in ERP systems, project management approaches, ERP development methodologies, and ERP architectures. ERP concepts are reinforced with hands on transaction experience in the SAP ERP system. Topics associated with creating an information systems implementation proposal for an executive team are discussed. Prerequisites: (MIS 3300 and MATH 1326) and (MATH 2333 or OPRE 3333 or MATH 2418 or MATH 2415 or CS 2305). (3-0) Y

MIS 4342 Analysis and Design of Accounting Systems (3 semester hours) Students are introduced to accounting system analysis and design tools and methods. The course emphasizes business processes, accounting transaction flows, internal control and accounting information systems as part of enterprise systems. Prerequisites: (ACCT 3331 with a minimum grade of C) and (Prerequisite or corequisite: ACCT 3332). (Same as ACCT 4342) (3-0) S

MIS 4350 Introduction to Business Intelligence and Data Mining (3 semester hours) This course will introduce various data mining techniques to extract business intelligence from firms' business data for various applications, including association, customer segmentation, classification, customer relationship management (CRM), personalization, online recommendation systems and web mining. Students will also be exposed to various business intelligence software such as XLMiner, SAS EnterpriseMiner or SQL Server 2008 (depending on availability). Prerequisites: (MIS 4300 and MATH 1326) and (MATH 2333 or OPRE 3333 or MATH 2418 or MATH 2415 or CS 2305). (3-0) T

MIS 4351 Enterprise Data Warehouses (3 semester hours) Data warehouses enable firms to effectively
consolidate, arrange and analyze vast amounts of data. This course will explore the theory and practice of
data warehouses for enterprises. The course will examine the components of an enterprise data
warehouse, model the relational database required for an enterprise data warehouse, extract, cleanse,
consolidate, and transform heterogeneous data into a single enterprise data warehouse, and run queries
using a data warehouse. The course currently uses SAP BW and Business Objects as the tools for hands-on
experience. Prerequisite: (MIS 4300 and MATH 1326) and (MATH 2333 or OPRE 3333 or MATH 2418 or MA
TH 2415 or CS 2305). (3-0) Y

MIS 4352 Introduction to Web Analytics (3 semester hours) Introduces technologies and tools used to
realize the full potential of web sites. The course focuses on collection and use of web data such as web
traffic and visitor information to design web sites that will enable firms to acquire, convert, and retain
customers. Online advertising such as paid search and web analytics tools will also be included.
Prerequisites: (MIS 3300 and MATH 1326) and (MATH 2333 or OPRE 3333 or MATH 2418 or MATH 2415 or
CS 2305). (3-0) Y

MIS 4360 Network and Information Security (3 semester hours) With the advances in information
technology, security of information assets has become a keenly debated issue for organizations. While
much focus has been paid to technical aspects of the problem, managing information security requires
more than technology. Effective information security management demands a clear understanding of
technical as well as socio-organizational aspects of the problem. The purpose of this course is to prepare
business decision makers who recognize the threats and vulnerabilities present in current information
systems and who know how to design and develop secure systems. Prerequisites: (MIS 3300 and MATH 13
26) and (MATH 2333 or OPRE 3333 or MATH 2418 or MATH 2415 or CS 2305). (3-0) Y

MIS 4361 Business Data Communications (3 semester hours) The course will focus on currently observed
industry trends, including the digital convergence of voice, video and data, enterprise wide connectivity,
distributed computing environments, and the massive demand for Internet-based open systems.
Prerequisites: (MIS 3300 and MATH 1326) and (MATH 2333 or OPRE 3333 or MATH 2418 or MATH 2415 or
CS 2305). (3-0) Y

MIS 4370 Information Systems Management (3 semester hours) Management of the information
technology within an organization is a critical activity. Students will be introduced to issues relating to IT
investment, management of IT, and using IT for competitive advantage. Prerequisites: (MIS 3300 and MATH
1326) and (MATH 2333 or OPRE 3333 or MATH 2418 or MATH 2415 or CS 2305). (3-0) Y

MIS 4390 Information Systems Capstone (3 semester hours) Project-based capstone course. Student
groups apply management information systems principles and techniques to analyze, design and test
information systems. They also analyze organizational impacts associated with acquiring, designing,
developing and delivering information systems solutions. As a designated communication-enhanced
course, MIS 4390 also focuses on the refinement of students' business communications skills and their use
of writing as a critical-thinking and learning tool. Prerequisite: MIS 4330. (3-0) Y

MIS 4v81 Individual Study in MIS (1-3 semester hours) May be repeated for credit as topics vary (9 hours
maximum). ([1-3]-0) R

MIS 4v90 MIS Internship (1-3 semester hours) This course is designed to further develop a student's MIS
knowledge through appropriate developmental work experiences in a real MIS environment. Students are
required to identify and submit specific business learning objectives (goals) at the beginning of the semester. At the end of the semester students must prepare an oral presentation, reflecting on the knowledge gained in the work experience. Student performance is evaluated by the work supervisor. May be repeated for credit (6 hours maximum). Credit/No Credit. ([1-3]-0) S

**MIS 4V95** Seminar Series in Information Systems (1-3 semester hours) Discussion of selected topics and theories in information systems. May be repeated for credit as topics vary (9 hours maximum). ([1-3]-0) R