

**INFORMATION  
TECHNOLOGY  
MANAGEMENT**

**ITM**

**Department of Accounting  
and Information Systems  
The Eli Broad College of Business  
and The Eli Broad Graduate  
School of Management**

**309 Business Information Systems and Technology**

Fall, Spring, Summer. 3(3-0) P: CSE 101 or concurrently R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management and not open to students in the School of Hospitality Business. SA: BUS 309

Role of information technology in shaping and supporting business processes in a global marketplace. Effects on organizations and individuals.

**311 Systems Analysis and Design**

Fall. 3(3-0) R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management or in Information Technology Specialization and not open to students in the School of Hospitality Business.

Structured analysis and design of information systems. Use of computer-aided software engineering tools. Consulting issues associated with the design and implementation of information systems.

**322 Technological Entrepreneurship**

Fall. 3(3-0) R: Open to juniors or seniors in the Information Technology Specialization and open to students in the Entrepreneurship Specialization.

Models of technological innovation. Principles and hands-on practice for entrepreneurial ventures using technology, particularly the Internet and information technologies.

**412 Marketing Technology and E-Commerce**

Fall, Spring. 3(3-0) Interdepartmental with Marketing and Supply Chain Management. Administered by Marketing and Supply Chain Management. P: MSC 300 and MSC 317 and ITM 309 RB: Programs in which MSC 412 is a catalog-listed requirement. R: Open only to juniors or seniors in the Eli Broad College of Business.

Enabler technologies and their role in creating marketing opportunities, efficiencies, and innovations. Tools, applications, platforms, and infrastructures. Determination of business configurations that foster value creation from enabler technologies.

**413 Fundamentals of Database Information Systems**

Fall, Spring. 3(3-0) R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management and not open to students in the School of Hospitality Business. C: ITM 311 concurrently.

Semantic and syntactic modeling of business requirements for databases. Specificational and navigational processing of databases. Database design parameters for business use.

**414 Enterprise Resource Planning Systems**  
Spring. 3(3-0) P: ITM 311 and ITM 309 R: Open to students in the Eli Broad College of Business and The Eli Broad Graduate School of Management.

Analysis, design and use of enterprise systems. Importance of enterprise system fit and re-engineering of the enterprise. Implementation risks and organizational returns. Use of enterprise software.

**444 Information Technology Project Management**

Spring. 3(3-0) Interdepartmental with Computer Science and Engineering and Telecommunication. Administered by Information Technology Management. P: ITM 311 R: Open to seniors in the Information Technology Specialization.

Practical training and experiences in design, testing, and launch of new information technologies and systems.

**490 Independent Study in Information Technology**

Fall, Spring, Summer. 1 to 4 credits. P: ITM 309 R: Open to students in the Eli Broad College of Business and The Eli Broad Graduate School of Management.

Directed study in information technology under faculty supervision.

**491 Special Topics in Information Technology**

Fall, Spring. 1 to 4 credits. P: ITM 309 R: Open to students in the Eli Broad College of Business and The Eli Broad Graduate School of Management.

Current topics in information technology.

**814 Decision Support Systems in Business**

Fall. 3(3-0) Interdepartmental with Marketing and Supply Chain Management. Administered by Information Technology Management. P: MBA 823 or ITM 309

Computer-based managerial decision support systems (DSS). Basic system architectures for DSS. Individual and group systems. Data-driven and intelligence (model) driven systems. Project analysis of a globally distributed system.

**821 Enterprise Database Systems**

Fall. 3(3-0) Interdepartmental with Accounting. Administered by Accounting. R: Open only to MBA students and master's students in the Accounting major or approval of department. Not open to students with credit in ACC 321.

Management of information in business organizations. Conceptual modeling of transaction processing systems, workflow systems, and enterprise-wide networks of value-added activities. Integration of decision support and policy level systems with economic event processing systems. Information system implementation.

**822 Analysis and Design of Enterprise Systems**

Fall. 3(3-0) Interdepartmental with Accounting. Administered by Accounting. R: Open to graduate students in the Accounting major or in the Master of Business Administration in Business Administration or approval of department. Not open to students with credit in ITM 311.

Structured analysis and design of enterprise information systems. Use of computer-aided software design tools. Consulting issues associated with the design and implementation of information systems. Information systems (IS) project and program management.

**823 Advanced Enterprise Database Systems**

Spring. 3(3-0) Interdepartmental with Accounting. Administered by Accounting. P: ACC 321 or ACC 821 or ITM 821 R: Open to graduate students in the Accounting major or in the Master of Business Administration in Business Administration or approval of department.

Enterprise information architectures. Semantic and syntactic modeling of enterprise economic phenomena. Relational database technology and database design for business systems. Business process analysis patterns and implementation compromises.

**824 Governance and Control of Enterprise Systems**

Spring. 3(3-0) Interdepartmental with Accounting. Administered by Accounting. R: Open to graduate students in the Accounting major or in the Master of Business Administration in Business Administration or approval of department.

Governance and control of information technologies. Identification and valuation of key information technologies. Frameworks for managing risk in acquiring, implementing, delivering and monitoring information technologies.

**825 Object-Oriented Business Information Systems**

Fall. 3(3-0) Interdepartmental with Accounting. Administered by Accounting. P: ACC 321 or ACC 821 R: Open to graduate students in the Accounting major or in the Master of Business Administration in Business Administration or approval of department.

Analysis and design of object-oriented business systems. Unified modeling language descriptions of business phenomena and rules. Object-oriented programming. Use-case analysis and specification. XML tag sets for transactions and reporting.

**826 Enterprise Information Systems**

Spring. 3(3-0) Interdepartmental with Accounting. Administered by Accounting. R: Open to graduate students in the Accounting major or in the Master of Business Administration in Business Administration or approval of department. Not open to students with credit in ITM 414.

Analysis, design and use of enterprise systems. Importance of enterprise system fit and reengineering of the enterprise. Implementation risks and organizational returns. Use of enterprise software.

**911 Doctoral Seminar in Information Systems**

Fall. 3(3-0) RB: Master's degree in business, computer science, telecommunication or engineering.

Seminar in management information systems for new doctoral students and researchers new to the field.

## Information Technology Management—ITM

### 912 Information Technology Transactional Perspectives

Spring of even years. 3(3-0) Interdepartmental with Telecommunication. Administered by Information Technology Management. RB: Graduate level microeconomics course R: Open to doctoral students.

Multiple perspectives on relationships between organizations and information technology. Information processing, communications and management strategy approaches. Economic perspectives.

### 913 Seminar in Information Systems Design Science

Spring of odd years. 3(3-0) RB: ITM 911

Research in design science in information systems. Ontological issues in design science research.

### 914 Behavioral Aspects of Information Systems

Fall. 3(3-0) RB: Two prior courses in information systems. R: Open to graduate students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or approval of college.

Information systems theory from a behavioral and social science perspective.

### 917 Research Methods in Information Systems

Fall. 3(3-0) RB: (MSC 905) or graduate courses in Philosophy of Science, Intermediate Statistics. R: Open to graduate students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or in the College of Communication Arts and Sciences or approval of college.

Research methodologies utilized to study information systems phenomena from social science, computational science, and clinical approaches. Critique information systems literature from various methodological perspectives.