INFORMATION TECHNOLOGY MANAGEMENT

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

Business Analytics and Information Systems
Fall, Spring, Summer. 3(3-0) P: CSE 101 R: Open to sophomores in the Eli Broad College of Business and The Eli Broad Graduate School of Management and open to undergraduate students in the Information Technology Minor. SA: BUS 309, ITM 309
Use of business processes, information technologies, and analytics in creating value and enabling improvements in global business performance.

Systems Analysis and Design
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 open to graduate students in the Marketing Research major. SA: MISC 412
Structured analysis and design of information systems. Understanding of the system development process, and organizational issues associated with the design and implementation of information systems.

Marketing Technology and Analytics
Spring. 3(3-0) Interdepartmental with Marketing. Administered by Marketing. P: MKT 300 or MKT 327 and ITM 317 and ITM 309 R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management and open to master's students in the Marketing Research major. SA: BUS 309
Collection and analysis of information from the web, including web-based surveys, web analytics, online communities, blog scraping, and web spiders.

Information Technology Project Management
Spring. 3(3-0) Interdepartmental with Computer Science and Engineering and Media and Information. Administered by Information Technology Management. P: ITM 311 R: Open to students in the Information Technology Minor.
Practical training and experiences in design, testing, and launch of new information technologies and systems.

Introduction to Business Analytics
Fall, Spring. 3(3-0) P: CSE 201 or CSE 231 or MKT 317 RB: Other courses in the IT minor or statistics R: Open to undergraduate students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or in the Information Technology Minor or approval of department.

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.

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.

Introduction to Business Analytics
Fall. 3(3-0) R: Open to graduate students. Approval of department.
Importance of digitized business processes and data analytics are essential to the performance and competitive advantage of a modern corporation. Different approaches for strategic data management and business analytics. Real-world cases of successes and failures with analytics-based business strategies.

Enterprise Database Systems
Fall. 3(3-0) Interdepartmental with Accounting. Administered by Accounting. Open to master's students in the Accounting major or approval of department. Not open to students with credit in ACC 321.

Information Systems Project Management
Fall, Spring. 1 to 3 credits. Interdepartmental with Accounting. Administered by Accounting. R: Open to graduate students in the Accounting major or open to MBA students or approval of department.

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 approval of department.

Governance and Control of Enterprise Systems
Fall, 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 and communication technologies, frameworks for assessing information system risk, information system auditing, and international standards for information technology governance and control.

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 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 specifications, and XML tag sets for transactions and reporting.

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.
Enterprise resource planning (ERP) systems. ERP implementation issues and success factors. Use of enterprise systems, and exploring future directions in ERP systems.

Network Analytics
Fall, Spring, Summer. 1 to 3 credits. P: MKT 829 or MBA 820 R: Open to master's students in the Business Analytics Major or approval of department.
Application of network analysis in business contexts. Basic methods and terminology associated with network analysis and text analytics leading to broad-based applications. Applications of these techniques span a broad range of business contexts including human resource management, customer relationship management systems, supplier networks, and online networks.

Analytics Practicum
Summer. 3 credits. R: Approval of department.
Supervised analytics practicum. The design, analysis, execution, and presentation of an analytics project.

Capstone: Business Analytics
Fall. 3(3-0) R: Approval of department.
Practicum in the development and delivery of predictive data analysis for strategic decision making in organizations. Application of the principles and tools of analytics to real-world problems in research and development, marketing, supply chain, accounting, finance, and human resources management. Development and presentation of analytical insights and recommendations.

Independent Study
Fall, Spring. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate students in the Eli Broad College of Business and The Eli Broad Graduate School of Management. Approval of department.
Faculty-supervised independent study.

Special Topics in Information Technology
Fall. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Approval of department. Selected topics in current and emerging issues related to information technology management.

ITM—Information Technology Management
Information Technology Management—ITM

893  Business Analytics Internship
Summer. 1 to 3 credits. R: Open to master's students in the Business Analytics Major or approval of department.
Professional internship in a public, industrial, or governmental organization where one or more business analytics projects are performed under faculty supervision.

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.

912  Information Technology Transactional Perspectives
Spring of even years. 3(3-0) Interdepartmental with Media and Information. 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.

915  Seminar in Information Systems and Networks
Spring of odd years. 3(3-0) RB: ITM 911 R: Open to doctoral students in the Eli Broad College of Business and The Eli Broad Graduate School of Management.
Research in social networks in information systems.

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.