MIT-MANAGEMENT INFORMATION TECHNOLOGY

MIT 5012   Programming Fundamentals   2 Credit Hours
Prerequisite: Graduate standing and MIT 5602 corequisite. This course will introduce programming concepts used for business data analysis. (F, Sp)

MIT 5032   Analytics Programming   2 Credit Hours
Prerequisite: graduate standing. Programming in languages used for data extraction and preparation of data for data analytics and data mining. Can be repeated with change of content; maximum credit 6 hours.

MIT 5052   Programming Concepts for Business Data Analysis   2 Credit Hours
Prerequisite: Graduate standing. This course will introduce programming concepts used for business data analysis. It is intended to get students comfortable with programming and to give them insight into how data is used in an application. (F)

MIT 5302   E-Business Architectures   2 Credit Hours
Prerequisite: Graduate standing in the Price College of Business and MIT 5602 or concurrent enrollment. A study of the basic concepts of telecommunications and distribution processing and their applications to e-business. Focus is on managerial issues related to telecommunications. (Irreg.)

MIT 5352   Digital Innovation   2 Credit Hours
Prerequisite: Graduate standing and MIT 5602. Digital innovation, enabled by various information and communication technologies, is quickly changing the world around us. This course will provide an understanding of digital innovation-enabled transformations in the business environment, and how individuals and teams leverage such innovations to create value and gain competitive advantage for organizations. (Irreg.)

MIT 5432   Machine Learning   2 Credit Hours
Prerequisite: Graduate standing and MIT 5032 (Python) or equivalent. This course will introduce machine learning and artificial intelligence techniques applied in business scenarios. Natural language processing as a tool to enable organizational problem-solving capability will be introduced. The course will assist students in enhancing their computational thinking and skills. (Irreg.)

MIT 5602   Management Information Systems   2 Credit Hours
Prerequisites: graduate standing; departmental permission. This course examines the role of information technology, and its management, in supporting an organization's (internally- and externally-focused) operations and strategies. Particular attention is given to issues associated with the funding and building of business and technology architectures to enable efficient, effective, and adaptable operational, tactical and strategic actions. (Irreg.)

MIT 5612   Database Design and Administration   2 Credit Hours
Prerequisite: graduate standing. This course is concerned with the design and governance of organizational data and its use. In this module, students will learn about the roles of database designers and administrators. Along the way, students will learn about the modeling techniques used by database designers to develop organizational databases and the standard language used to interface with databases. (Irreg.)

MIT 5642   Emerging Topics in Information Technology   2 Credit Hours
Prerequisite: Graduate standing and MIT 5602. Examines current issues and approaches to information technology. Students will examine issues involved in the management and understanding of emerging topics in IT. (Irreg.)

MIT 5662   Project Management   2 Credit Hours
Prerequisite: MIT 5602 or MIT 5622 and graduate standing. Focus on managing projects, including their implementation within an organization. A project is a complex, non-routine, one-time effort limited by time, budget, resources, and performance specifications designed to meet customer needs. The characteristics make project management a particularly challenging management task. Project management concepts apply to many other types of organizational activities, e.g., managing task forces and committees. Planning, organizing, staffing and controlling projects require traditional management skills, an understanding of quality assurance techniques, and an appreciation of the unique challenges of managing projects. (Irreg.)

MIT 5672   ERP Business Processes   2 Credit Hours
Prerequisite: Graduate standing in the Price College of Business and MIT 5602. This course covers key issues and trends of business strategies and technologies associated with Enterprise Resource Planning (ERP) systems. (Irreg.)

MIT 5682   Business Data Analysis   2 Credit Hours
Prerequisite: graduate standing. Surveys analysis tools available in Excel relevant to business decision-making. The objective of the course is to be aware and comfortable with analytical techniques used for knowledge discovery, and to understand the power and potential of these tools in business settings. Also examines illustrations and applications across different functional areas. (Irreg.)

MIT 5692   Managing ERP Systems   2 Credit Hours
Prerequisite: Graduate standing in the Price College of Business and MIT 5602. Enterprise Resource Planning (ERP) introduces students to enterprise systems and provides an overview of the managerial and technical issues in planning, designing, implementing, and extending enterprise systems and technologies. Focus of the course is managerial with some technical content and several hands-on exercises involving enterprise software from the industry leader SAP. (Irreg.)

MIT 5702   Social Analytics   2 Credit Hours
Prerequisite: MIS 5682 or instructor permission. Introduce students to analytic and visualization techniques required for processing social and social media data. (Sp)

MIT 5722   Cyber Security   2 Credit Hours
Prerequisite: Graduate standing. The course covers the essentials of information security using a hands-on approach. Students will learn how computer security breaches occur and apply concepts learned in an isolated lab environment. (F)

MIT 5732   Management of Business Intelligence   2 Credit Hours
Prerequisites: graduate standing, MIT 5602; MIT 5612 or MIT 5772, or permission of instructor. This course will adopt a managerial perspective to recognizing the role of Business Intelligence and provide practical hands-on experience. Course sessions will help students understand how organizations could develop strategies to discover patterns in data and use this to compete in the global marketplace. (F, Sp)

MIT 5742   Data Science and Analytics   2 Credit Hours
Prerequisite: graduate standing, MIT 5602 and MIT 5612, or permission of instructor. Students will compare and experience data science tools along with the newer tools and methods of analytics, with the goal of becoming knowledgeable in both sets of tools. (Sp)

MIT 5752   Cloud Computing   2 Credit Hours
Prerequisite: graduate standing and departmental permission. Offers detailed discussion and hands-on exploration of technologies used to process, manage and store 'big data'. The ecosystem of products we will be focusing on surrounds Hadoop, including the Hadoop File System, MapReduce, and others. This course involves many labs and familiarity with SQL is helpful. Programming expertise is not required but optional materials will be provided. (F, Sp)

MIT 5762   Enterprise Modeling   2 Credit Hours
Prerequisite: graduate standing; MIT 5602 and MIT 5742; or permission of instructor. An in-depth study of enterprise modeling techniques using an industry standard data mining technology suite. Students will develop a conceptual understanding of the major concepts used in data analytics along with in-depth use of corresponding computer software. (Sp)

MIT 5772   Principles of Data Warehousing   2 Credit Hours
Prerequisite: Departmental permission, graduate standing, and MIT 5612. This class will introduce students to concepts relating to a data warehouse (DW), considered a core component of business intelligence and data analytics in an organization. Students will learn to use current tools to develop requirements and create and maintain a DW. Students will also learn to manipulate data in the DW to extract and generate analytical reports for employees. (Irreg.)

MIT 5802   Advanced Database Management   2 Credit Hours
Prerequisite: Graduate standing; MIT 5612 and MIT 5602. This course covers the principles of design, use, and management of database technology, including data warehouses from a manager's perspective. Involves a number of exercises using a multi-user relational database management system and associated tools to address typical business problems. (F)

MIT 5812   Cyberanalytics   2 Credit Hours
Prerequisite: MIT 5602, graduate standing, and departmental permission. The course introduces analytical methods and concepts focused on the use of cyber-analytics for security management. Topics of coverage span organizational strategies and policies, network and data management, plus internal and operational controls. (F, Sp)

MIT 5822   Health Information Technologies   2 Credit Hours
Prerequisite: graduate standing, MIT 5602, or departmental permission. This course examines the application of health information technologies. It explores human computer interactions and emerging technologies for their impact on patient care and safety. The course also discusses the role of legal, regulatory, ethical, and security issues as they apply to clinical and consumer information technologies. (F)

MIT 5832   Healthcare Information Systems   2 Credit Hours
Prerequisite: graduate standing, MIT 5602, or departmental permission. Students will apply project management and information systems development principles in developing an electronic health record software application to support healthcare decision-making. Students will also explore data manipulation and analytics using structured query language (SQL) and healthcare data analytics tools. (Irreg.)

MIT 5842   Healthcare Analytics I   2 Credit Hours
Prerequisite: Graduate standing and MIT 5602 or concurrent enrollment. This course covers data management and presentation appropriate to understanding healthcare data.

MIT 5852   Healthcare Analytics 2   2 Credit Hours
Prerequisite: Graduate standing and MIT 5602 or concurrent enrollment. This course covers various methods for analyzing and predicting outcomes from healthcare data using modern data modeling tools and systems. (Irreg.)

MIT 5960   Directed Readings   1-3 Credit Hours
Prerequisite: graduate standing. 1 to 3 hours. May be repeated with change of topic; maximum credit six hours. Topics in management of information technology. (Irreg.)

MIT 5970   Special Topics/Seminar   1-3 Credit Hours
1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)

MIT 5980   Research for Master's Thesis   2-9 Credit Hours
Prerequisite: MIS 5622 and instructor permission, graduate standing. Variable enrollment, two to nine hours; maximum credit applicable toward degree, three hours. Acquaints students with the research process. Students propose research project, and then conduct the research including but not limited to, performing a literature review, collecting and analyzing data, and writing the thesis prior to the end of the semester. (F, Sp)

MIT 5990   Independent Study   1-3 Credit Hours
1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)

MIT 6713   Cognition and Decision Making in Management Information Systems   3 Credit Hours
Prerequisite: graduate standing. May be repeated; maximum credit nine hours. Ph.D. seminar addressing issues of cognition and decision making in information technology enabled settings. The course focuses on these issues in an organizational setting and considers cognition and decision making at the individual, group, and organizational levels. Topics may include: fundamental theories of cognition and decision making; technology support and influence on decision making and cognition; mechanisms to coordinate cognition across individuals, groups and organizations. (Irreg.)

MIT 6733   Governance and Control   3 Credit Hours
Prerequisite: PhD program, Price College of Business. Examines theories and empirical research regarding the governance and control (G&C) in organizations, with special attention to the role of technology in G&C equations. The assigned readings sample the arena of governance and control and should provide students with the range of topics that are informed and influenced by the arena as well as exposure to the state-of-the-art in theory and empirics of governance and control. (Irreg.)

MIT 6753   The Science and Analytics of Human-Technology Interactions   3 Credit Hours
Prerequisite: Graduate Standing. Attention will be focused on research relating to interactions between Humans and Information Technology (IT) artifacts, to identify facets that make these interactions productive and enjoyable. The course goals will be to get familiar on the theory foundations that help the science of HTI, become skilled in the use of data analytics tools, and complete a limited research study. Class discussions will span a broad range of topics that include among others, the science of human-technology interactions, visualization of data, designs of visual displays, support for employee's learning of IT, and gamification of HTI interactions. (F)

MIT 6960   Directed Readings in MIT   1-3 Credit Hours
1 to 3 hours. Prerequisite: graduate standing and permission of instructor. May be repeated as needed by Ph.D. students; maximum credit twelve hours. A study of current research and practice in information technology. (F, Sp, Su)

MIT 6970   Special Topics/Seminar   1-3 Credit Hours
1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)

MIT 6973   Seminar in Management Information Systems 3 Credit Hours
Prerequisite: graduate standing. Covers topics from current research in information systems. May be repeated three time with change of content. (Irreg.)

MIT 6980   Research for Doctoral Dissertation   2-16 Credit Hours
2 to 16 hours. Prerequisite: Graduate standing and permission of instructor; may be repeated. Directed research culminating in the completion of the doctoral dissertation. (F, Sp, Su)

MIT 6990   Independent Study   1-3 Credit Hours
1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)