

MANAGEMENT INFORMATION SYSTEMS (MISY)

MISY 1173 Intro to ERP 1 Credit

Department: College of Business

Computers are an integral part of all business activities and careers. This course is designed to introduce potential business majors to enterprise resource planning software. Students will be introduced to basic business transactions using SAP enterprise resource planning software.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 1373 Introduction to Business Technologies 3 Credits

Department: College of Business

Computers are an integral part of all business activities and careers. This course is designed to introduce potential business majors to the understanding of the roles of computers in business information systems and to learn the basic skills of business software which are essential to support business activities. Students will obtain valuable information technology knowledge and skills needed in all areas of business. Students will be introduced to spreadsheets, databases, and basic business transactions using SAP enterprise resource planning software.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 3300 Database Foundations 3 Credits

Department: College of Business

Students will learn database design techniques, to design databases using a modeling tool and will be introduced to SQL to implement and query databases using hands-on, engaging activities.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 3310 Principles of MIS 3 Credits

Department: College of Business

This course gives an overview of why information systems are so important today and how they are transforming organizations and management. The students will understand the relationship between the various types of information systems. They will learn to analyze the relationship between information systems and organizations. Also, students will learn how a database management system organizes information. Students would compare the various types of telecommunications networks and network services and become knowledgeable about new business applications, such as Enterprise Resource Planning (ERP), Supply Chain Management (SCM), Customer Relationship Management (CRM), and Knowledge Management (KM). The course also covers how the internet can be used for electronic commerce and for electronic business, how the internet is becoming the foundation for new business models, new business processes, and new ways of distributing knowledge. The students will develop proficiency in using application tools such as spreadsheet and database for development of Information Systems. In addition, the students are introduced to basic business transactions using SAP- a widely used Enterprise Resource Planning (ERP) software among the Fortune 500 companies.

Restriction(s):

Students with a class of Freshman or Sophomore may **not** enroll.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 3321 Spreadsheets for Business Analytics 3 Credits

Department: College of Business

this hands-on course will teach students the art of modeling to build, refine and analyze problems for decision-making. Students will use industry standard spreadsheet software for creation and analysis. topics include forecasting, linear and nonlinear optimizations and decision analysis. Projects from all business fields will be used for extensive practice and real-world applications.

Restriction(s):

Enrollment limited to students with a class of Junior, Post Baccalaureate or Senior.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 3330 Database Design 3 Credits

Department: College of Business

This course engages students to analyze complex business scenarios and create a data model which is a conceptual representation of an organization's information. The students will learn to design a database solution for a business organization.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 3340 IS Infrastructure 3 Credits

Department: College of Business

This course provides an introduction to IT infrastructure issues for students majoring in Information Systems. This course covers topics related to both computer and systems architecture and communication networks, with an overall focus on the services and capabilities that IT infrastructure solutions enable in an organizational context. It gives the students the knowledge and skills that they need for communicating effectively with professionals whose special focus is on hardware and systems software technology and for designing organizational processes and software solutions that require in depth understanding of the IT infrastructure capabilities and limitations. The course also prepares the students for organizational roles that require interaction with external vendors of IT infrastructure components and solutions. This course focuses strongly on internet based solutions, computer and network security, business continuity, and the role of infrastructure in regulatory compliance.

Prerequisite(s): MISY 3310

Restriction(s):

Students with a class of Freshman or Sophomore may **not** enroll.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 3341 Data Visualization 3 Credits

Department: College of Business

This course provides a comprehensive introduction and hands-on experience in basic data visualization, visual analytics and visual data storytelling. It introduces students to design principles for creating meaningful displays of quantitative and qualitative data to facilitate managerial decision-making in the field of business analytics. Many organizations are using analytics and visualization to make better decisions and improve customer and shareholder value. this is deemed a critical skill in business today.

Restriction(s):

Enrollment limited to students with a class of Junior, Post Baccalaureate or Senior.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 3350 Programming for Business Analytics 3 Credits

Department: College of Business

This course will provide the student with fundamental programming knowledge that is used in everyday business analytics. The student will work with a high-end programming language that is well-suited for data retrieval and data analysis using data libraries. The student will first learn the fundamentals of programming such as variable declaration, language syntax, decision structures, iteration techniques, method construction, data structures and file input/output. The student will then move forward with these programming skills to work with other data manipulation libraries within that language. In addition to the technical knowledge gained, the student will also focus on how to apply these techniques to business analytics. The course will work with datasets taken from various industries including healthcare, security, entertainment, social platforms and government. the student will apply this new skill set by analyzing business issues in an individual capacity as well as working on a capstone project within a team environment in which they can showcase their analytic skills for future employers. No previous programming knowledge is required for this course.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 3360 Fundamentals of Software Development 3 Credits

Department: College of Business

This course will provide the students with the fundamentals of software development using a high-level programming language. The course will focus on programming in a windows environment along with the use of a popular integrated development environment. the programming concepts that will be covered include language syntax, variable declaration, decision and iteration processing, method construction and development, data structures, object-oriented programming techniques, file I/O and database integration. Students will construct various small applications to learn the fundamentals of development leading up to a capstone project. Little or no programming experience is required for this course.

Restriction(s):

Students with a class of Freshman or Sophomore may **not** enroll.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 3370 IS Analysis and Design 3 Credits

Department: College of Business

This course serves two audiences: (1) those who want to be an information systems analyst; and (2) those who will be users or managers involved in systems development projects, an active member of a project team, or the client for a system request. Since systems development is central to the IS field, this is a basic course for training you for your career. Information systems concepts, systems analysis and design methodologies and techniques and tools used during the development of information systems will be covered. Students will be exposed to both classic methods and emerging methods of systems analysis and design. The topics necessary for changing environment for systems development will be covered along with a renewed focus on agile methodologies including SCRUM.

Prerequisite(s): MISY 3310

Restriction(s):

Students with a class of Freshman or Sophomore may **not** enroll.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 3380 Database Programming 3 Credits**Department:** College of Business

In this course, students implement database designs by creating physical databases using SQL. Basic SQL syntax and the rules of constructing valid SQL statements are introduced.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS**MISY 3390 Data Mining 3 Credits****Department:** College of Business

This course provides students with an applied approach to data mining and predictive analytics with hands-on exercises and real-world examples. Students will be introduced to the concepts, methods and techniques of data mining. Students will learn to develop predictive models and obtain business value from Big Data using specialized data mining software.

Restriction(s):

Enrollment limited to students with a class of Junior, Post Baccalaureate or Senior.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS**MISY 3395 E-Commerce Design and Dev 3 Credits****Department:** College of Business

this course covers both the principles and practices of conducting business with the help of technologies providing an overview of the past and future of the discipline, business models, traditional and disruptive technologies, marketing strategies and various business systems. In addition, some of the major issues associated with e-commerce, such as security and privacy, will be explored. Also, students will conduct hands-on projects on the latest version of SAP platform, experiencing business processes on the cloud.

Restriction(s):

Students with a class of Freshman or Sophomore may **not** enroll.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS**MISY 4340 Business Intelligence and Analytics 3 Credits****Department:** College of Business

The purpose of this course is to introduce students to Business Intelligence and Analytics. business Intelligence refers to the use of computers to analyze complex information about an organization and its competitors for use in business planning and decision-making. The objective is to create timelier and higher-quality input to the decision process. This course will also provide a comprehensive overview of analytics concepts and hands-on approach to practicing those concepts with latest enterprise software solutions.

Prerequisite(s): MISY 3310**Restriction(s):**

Students with a class of Freshman, Junior or Sophomore may **not** enroll.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS**MISY 4350 Project Management & Practice 3 Credits****Department:** College of Business

The student who successfully completes this course should be able to understand the genesis of project management and its importance to ensure the success of information technology projects. Students will be exposed to project management concepts and techniques such as: the triple constraint of project management, project management knowledge areas, project life cycle, tools and techniques of project management (for example: project selection criteria, work breakdown structures, network diagrams, critical path analysis, cost estimates, and schedule management). Students will learn the essentials of using Primavera P6 to plan and manage IT projects.

Prerequisite(s): MISY 3310**Restriction(s):**

Students with a class of Freshman, Junior or Sophomore may **not** enroll.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS**MISY 4370 ERP Overview 3 Credits****Department:** College of Business

This course introduces students to SAP, an enterprise application software that runs on large database systems, which is widely used by large corporations. In this overview course, students will learn business processes in different modules of SAP with a focus on supply-chain processes; purchasing, materials management, production planning, and sales and distribution. Students will have ample opportunity to perform business transactions on SAP servers to gain a deeper understanding of business process integration.

Prerequisite(s): MISY 3310**Restriction(s):**

Students with a class of Freshman, Junior or Sophomore may **not** enroll.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS**MISY 4380 IS Development 3 Credits****Department:** College of Business

This Capstone course covers information systems design and implementation within a database management system environment. Students will learn to develop the detailed design and construction of a physical system using database software such as MS Access and Oracle-SQL (Structured Query Language).

Prerequisite(s): MISY 3370**Restriction(s):**

Students with a class of Freshman, Junior or Sophomore may **not** enroll.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS**MISY 4390 Spec Topics In MISY 3 Credits****Department:** College of Business

Intensive investigation of topics in management information systems. Library and/or laboratory research and conferences with supervising faculty member. May be repeated when area of study differs.

May be Repeated for a maximum of 6 hours

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 5300 Database Management Systems 3 Credits

Department: College of Business

This course covers design, implementation and management of database systems. Students will learn: 1. Database design concepts 2. The physical implementation of a database design with software such as MS Access, Oracle and Structured Query Language (SQL) 3. DBMS functions, database administration and database management approaches.

Restriction(s):

Undergraduate level students may **not** enroll.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 5310 Information Technology Project Management 3 Credits

Department: College of Business

The student who successfully completes this course should understand the genesis of project management and its importance to improving the success of information technology projects. Students must demonstrate knowledge of project management terms and techniques such as: the triple constraint of project management, project management knowledge areas and process groups, project life cycle, tools and techniques of project management (for example: project selection methods, work breakdown structures, network diagrams and critical path analysis, cost estimates and earned value analysis). Students would learn to use the current version of Primavera P6 Professional Project Management software to help plan and manage an IT project.

Restriction(s):

Undergraduate level students may **not** enroll.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 5315 Introduction to Programming for Business Solutions 3 Credits

Department: College of Business

This is an introduction to programming fundamentals, computational thinking and problem solving. Students will apply elementary programming concepts including the use of variables, loops, decision logic, functions, data types and simple object-oriented concepts. Students will learn to use a high-level computing language to create programs to solve business problems.

Restriction(s):

Undergraduate level students may **not** enroll.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 5320 Information Assurance and Security 3 Credits

Department: College of Business

This course will provide the student the opportunity to learn about the element comprising Information Assurance and Security. Information Assurance and Security is a topic of increasing importance for many organizations as threats to computer and network systems continues to increase and evolve. It is imperative that the information organization store in their systems be protected from unauthorized disclosure, modification or destruction. This course provides an in-depth presentation of information assurance concepts, terminologies, models and practices. The topics covered in this course include but not limited to: Organizational Security Management, Cryptography, Physical Security, Infrastructure Security, Intrusion Detection Systems, Network Security and Risk.

Restriction(s):

Undergraduate level students may **not** enroll.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 5325 Cybersecurity Management 3 Credits

Department: College of Business

Students will acquire knowledge necessary to implement cybersecurity programs and policies to protect an organization's systems and data. This course covers topics such as cybersecurity policy and governance, policy organization, format and style, cybersecurity frameworks, asset management and data loss prevention, cybersecurity incident response and business continuity management.

Restriction(s):

Undergraduate level students may **not** enroll.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 5330 Healthcare Info Systems 3 Credits

Department: College of Business

This course prepares students to understand and apply the concepts related to the emerging trends in IT-enabled healthcare and to understand the role of analytics in healthcare and clinical decision-making. Students will learn to evaluate the effectiveness of various healthcare information systems.

Restriction(s):

Undergraduate level students may **not** enroll.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not use FS

MISY 5340 ERP Overview 3 Credits**Department:** College of Business

This course provides students with an understanding of fundamental business processes and enterprise systems. Students will learn how to integrate these business processes into an enterprise resource planning (ERP) system, specifically SAP. Students gain hands-on experience using SAP for the fulfillment, procurement, production, financial accounting and management of business processes. The course includes an ERP simulation (ERPsim) strategy game.

May be Repeated for a maximum of 9 hours

Restriction(s):Undergraduate level students may **not** enroll.**Grade Mode(s):** Standard Letter, Registrar do not use FN, Registrar do not use FS**MISY 5350 ERP-E-Commerce 3 Credits****Department:** College of Business

This course focuses on the principles of electronic commerce from a business perspective, including technology innovations, business models, virtual value chains and marketing strategies. In addition, as a potential disruptive technology, blockchain and its possible applications are explored. The course provides students with the conceptual foundations as well as hands-on experience in utilizing some of the SAP HANA modules.

May be Repeated for a maximum of 9 hours

Restriction(s):Undergraduate level students may **not** enroll.**Grade Mode(s):** Standard Letter, Registrar do not use FN, Registrar do not use FS**MISY 5360 Business Intelligence 3 Credits****Department:** College of Business

This course introduces students to business intelligence (BI), which is the user-centered process of exploring data, data relationships and trends - thereby helping to improve overall decision-making. Students will use a major enterprise software application for business intelligence, analytical reporting and Data Warehousing solutions. Application of data visualization software is also included.

May be Repeated for a maximum of 9 hours

Restriction(s):Undergraduate level students may **not** enroll.**Grade Mode(s):** Standard Letter, Registrar do not use FN, Registrar do not use FS**MISY 5370 Data Mining and Predictive Analysis 3 Credits****Department:** College of Business

This course introduces students to the concepts of Business Analytics to help professionals make informed decisions based on data. Besides learning Excel functions, students will use data visualization and data mining techniques to discover hidden trends in data sets. Students will also use the latest predictive analytical tools from SAP to anticipate future behavior that will help make better managerial decisions.

May be Repeated for a maximum of 9 hours

Restriction(s):Undergraduate level students may **not** enroll.**Grade Mode(s):** Standard Letter, Registrar do not use FN, Registrar do not use FS**MISY 5380 Enterprise Systems/CRM 3 Credits****Department:** College of Business

This course introduces students to the concepts, capabilities and benefits of Customer Relationship Management (CRM), the use of CRM by companies for customer acquisition, retention and development, and the implementation of CRM using concurrent technologies. The course covers various aspects of operational, strategic and analytical CRM. Students access CRM platforms such as SAP and Salesforce to learn how to enable marketing, sales and service transactions related to the CRM processes.

Restriction(s):Undergraduate level students may **not** enroll.**Grade Mode(s):** Standard Letter, Registrar do not use FN, Registrar do not use FS**MISY 5390 Current Topics in Management Information Systems 3 Credits****Department:** College of Business

This course is designed to cover new technologies and current trends in the design, development and implementation of Information Systems in a business environment.

May be Repeated for a maximum of 12 hours

Restriction(s):Undergraduate level students may **not** enroll.**Grade Mode(s):** Standard Letter, Registrar do not use FN, Registrar do not use FS