INFORMATION TECH AND MGMT (ITM)

ITM 100  
Introduction to Information Technology as a Profession  
Introduces students to the profession of information technology, beginning with concepts of systems, systems theory and modeling, information systems, and system integration. Examines the steps necessary to analyze a business problem and identify and define the computing and information requirements appropriate to its solution, with a focus on how to design, implement, and evaluate a technology-based system to meet desired needs. Students learn to analyze the local and global impact of computing on individuals, organizations, and society. Leads students to recognize the need for continuing professional development, and imparts an understanding of professional, ethical, legal, security and social issues and responsibilities in information technology. Students write and present, building their ability to communicate effectively with a range of audiences, and using standard planning methodologies design an information system to meet the information needs of a small business.  
Prerequisite(s): ITM 301 and (ITM 311 or ITM 312)  
Lecture: 3 Lab: 0 Credits: 3  
Satisfies: Communications (C)

ITM 300  
Communication in the Workplace  
Review, analyze and practice verbal and written communication formats found in the workplace. Emphasis on developing skills in technical writing and oral presentations using electronic and traditional media. Credit not granted for both ITM 300 and COM 421.  
Lecture: 3 Lab: 0 Credits: 3  
Satisfies: Communications (C)

ITM 301  
Introduction to Contemporary Operating Systems and Hardware I  
Students study the basics of computer architecture and learn to use a contemporary operating system. Hardware requirements, hardware components, software compatibility, and system installation topics are covered along with post-installation, storage, security and system diagnosis, and repair. Topics also include discussion of current and future technology industry trends.  
Lecture: 2 Lab: 2 Credits: 3

ITM 312  
Introduction to Systems Software Programming  
Introduces basic concepts of systems programming. Students learn to apply basic programming concepts toward solving problems, create source files and implement header files, work with and effectively use basic data types, abstract data types, control structures, code modularization and arrays. Students will be introduced to object paradigm including, classes, inheritance, and polymorphism applications.  
Lecture: 2 Lab: 2 Credits: 3

ITM 313  
Introduction to Open Source Application Development  
Introduces basic concepts of systems programming using a modern open source language. Students learn to apply basic programming concepts toward solving problems, writing pseudocode, working with and effectively using basic data types, abstract data types, control structures, code modularization and arrays. They will learn to detect errors, work with variables and loops, and discover how functions, methods, and operators work with different data types. Students will be introduced to the object paradigm including classes, inheritance, and polymorphism.  
Lecture: 2 Lab: 2 Credits: 3

ITM 311  
Introduction to Software Development  
A broad introduction to object-oriented programming and the related knowledge necessary to program in a contemporary programming language. This would include coverage of an Application Development Kit, a standard integrated Development environment, and the use of GUI components.  
Lecture: 2 Lab: 2 Credits: 3

ITM 312  
Introduction to Systems Software Programming  
Introduces basic concepts of systems programming. Students learn to apply basic programming concepts toward solving problems, create source files and implement header files, work with and effectively use basic data types, abstract data types, control structures, code modularization and arrays. Students will be introduced to object paradigm including, classes, inheritance, and polymorphism applications.  
Lecture: 2 Lab: 2 Credits: 3

ITM 313  
Introduction to Open Source Application Development  
Introduces basic concepts of systems programming using a modern open source language. Students learn to apply basic programming concepts toward solving problems, writing pseudocode, working with and effectively using basic data types, abstract data types, control structures, code modularization and arrays. They will learn to detect errors, work with variables and loops, and discover how functions, methods, and operators work with different data types. Students will be introduced to the object paradigm including classes, inheritance, and polymorphism.  
Lecture: 2 Lab: 2 Credits: 3

ITM 497  
Independent Study  
Special projects.  
Credit: Variable

ITM 498  
Undergraduate Research Immersion: Team  
This course provides a faculty-mentored immersive research experience as a part of a student team. Research topics are determined by faculty mentor’s area of research.  
Lecture: 0 Lab: 6 Credits: 3