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. INTM 301 may be substituted for this course.
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 303
Introduction to Contemporary Operating Systems and Hardware II
Introduces features of an advanced operating system, including basic commands, file and directory manipulation, security, and suitability for server applications. Popular and business-focused desktop and mobile device operating systems will be examined, as well as enterprise and open-source server implementations.
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

ITM 691
Research and Thesis Ph.D.
Instructor permission required.
Credit: Variable

ITM 695
Doctoral Seminar
Doctoral Seminar.
Credit: Variable
ITM 701
Introduction to Contemporary Operating Systems and Hardware 1a
In this introductory industry-focused undergraduate course, students study the basics of computer architecture and learn to use a contemporary operating system. Hardware requirements and hardware components are covered. Topics also include discussion of current and future technology industry trends.
Lecture: 1 Lab: 0 Credits: 1

ITM 702
Introduction to Contemporary Operating Systems and Hardware 1b
In this introductory industry-focused undergraduate course, students study software compatibility and system installation, along with concepts of client virtualization, cloud computing, and network fundamentals.
Prerequisite(s): ITM 701* with min. grade of B, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 1 Lab: 0 Credits: 1

ITM 703
Introduction to Contemporary Operating Systems and Hardware 1c
In this introductory industry-focused undergraduate course, students study system installation topics along with post-installation, security and system diagnosis, and repair. Topics also include discussion of current and future technology industry trends.
Prerequisite(s): ITM 702* with min. grade of B, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 1 Lab: 0 Credits: 1

ITM 705
Hardware and Operating System Foundations I
In this introductory graduate course, students will explore the basics of computer architecture and use of contemporary operating systems and networking. Covers hardware requirements, components, software compatibility, and system configuration and administration as well as other key operating systems functions. Popular and business-focused desktop and mobile device operating systems will be examined, as well as enterprise and open-source server implementations.
Lecture: 1 Lab: 0 Credits: 1

ITM 706
Hardware and Operating System Foundations II
In this introductory graduate course, students will explore the basics of computer architecture and use of contemporary operating systems and networking. Covers system installation topics as well as other key operating systems functions. Networking, virtualization, cloud computing, and security concepts are introduced. Popular and business-focused desktop and mobile device operating systems will be examined, as well as enterprise and open-source server implementations.
Prerequisite(s): ITM 705*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 1 Lab: 0 Credits: 1

ITM 707
Hardware and Operating System Foundations III
Explores the basics of computer architecture and use of contemporary operating systems and networking. Covers software troubleshooting, security implementation, and operational procedures and best practices. Documentation, communication, and professionalism are addressed. Popular and business-focused desktop and mobile device operating systems will be examined, as well as enterprise and open-source server implementations.
Prerequisite(s): ITM 706*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 1 Lab: 0 Credits: 1