

INFORMATION TECH AND MGMT (ITM)

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 501

Research Methods for Information Technology

This course prepares graduate students to undertake independent research inquiry by providing an in-depth examination of applied research methods across a range of information technology disciplines. Students receive training in major research paradigms, principles of research design, research ethics, research theories and quantitative and qualitative methodologies as well as tools and techniques for data collection and analysis. Students will be encouraged to develop their own research agenda and design a research methodology to undertake their research.

Lecture: 3 **Lab:** 0 **Credits:** 3

ITM 601

Research Methods for Information Technology

This course prepares doctoral students to undertake independent research inquiry by providing an in-depth examination of applied research methods across a range of information technology disciplines. Students receive training in major research paradigms, principles of research design, research ethics, research theories and quantitative and qualitative methodologies as well as tools and techniques for data collection and analysis. Students will be encouraged to develop their own research agenda and design a research methodology to undertake their research.

Lecture: 3 **Lab:** 0 **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.

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.

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.

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.

Lecture: 1 **Lab:** 0 **Credits:** 1