Course Descriptions
Information Technology
ITEC

ITEC 2000 Computer Concepts. An introduction to computer science: Exposure to system architecture, data structures, operating systems, storage and data retrieval are included ..... 4 s.h.

ITEC 2010 Programming for STEM. Most organizations use computer technologies extensively in day-to-day operations and research. This course focuses on core concepts of computer science beyond the introductory level, including Python programming and Linux/UNIX shell commands..... 4 s.h.

ITEC 2020 Introduction to Programming. An introduction to problem solving, algorithm development, and algorithm analysis implemented in a high level, block structured programming language (such as C++ or Java) ..... 4 s.h.
Prerequisite: ITEC 2000

ITEC 2700 Foundations of Information Technology. An introduction to information technology fundamentals. Includes basic input/output processes, storage, and file management; fundamentals of webpage design; basic networking principles; rudimentary information security; basic database concepts; introductory programming and logic; exposure to systems development ..... 4 s.h.

ITEC 3450 Database Management. A study of techniques for designing and maintaining large data bases..... 4 s.h.

ITEC 3460 Systems Analysis. Describes the role of the systems analyst in information systems. Presents the concepts of systems analysis, design, and implementation in the system development life cycle. Considers the current modeling tools of the systems analyst, including data flow diagrams, entity-relation diagrams, decision support systems, and project management..... 4 s.h.

ITEC 3500 Network Management. Local area networks, wide area networks, and internets are discussed. Protocols and the ISO Open Systems Interconnect reference model. Design, analysis, and performance evaluation. Emphasis on data link, network, and transport protocols. ..... 4 s.h.

ITEC 3510 Wireless Network Management. An overview of wireless networking fundamentals including designing, implementing and managing wireless hot spots and infrastructure with an emphasis on security and data protection. ..... 4 s.h.
Perquisite: ITEC 3500

ITEC 3520 Mobile Network Management. This course provides an overview of cellular telephony and mobile computing devices. Students will research and evaluate available cellular mobile devices and technologies. Security issues associated with mobile computing will be addressed. ..... 4 s.h.
Perquisite: ITEC 3500

ITEC 3530 Enterprise & Wide Area Networks. Overview of the protocols, equipment, and best practices for Enterprise and Wide Area Networks. Emphasis on structuring and managing networks in large enterprise and organizations requiring multi-site connectivity. ..... 4 s.h.
Perquisite: ITEC 3500

ITEC 3655 Introduction to Internet Programming. A study of web programming concepts and techniques, including advanced JavaScript, PHP, and database integration, and application programming. Focus will be on a systems approach and will include the development of a comprehensive application project from concept to final product..... 4 s.h.
Prerequisite: ITEC 2000

ITEC 3710 Cloud Computing. This course covers cloud computing from an end-user perspective. Students will learn to utilize open source and readily available applications, collaboration tools, and storage options housed on the Internet. The focus of this course is cloud computing from a business or managerial point of view rather than a network or software engineering viewpoint. Students will be exposed to legal, ethical, and privacy issues associated with cloud computing. ..... 4 s.h.

ITEC 3755 Current Issues in Technology. Capstone seminar dealing with new technologies, ethics, and other issues ..... 2 s.h.
Co-requisite: ITEC 3780

ITEC 3760 Introduction to Cybersecurity. This course introduces the threats to information resources and appropriate security measurement. Topics include cryptography, identification and authentication, access control models and mechanisms, steganography, Internet security, and intrusion detection and prevention..... 4 s.h.

ITEC 3761 Cybersecurity Policy. This course introduces the concepts of risk assessment, acceptable use and enforcement of information technology security policies. Students will develop a comprehensive information technology security policy using SANS (System Administration, Audit, Networking and Security) guidelines..... 4 s.h.

ITEC 3762 Computer Forensics. Students will investigate computer network intrusions including gathering evidence, chain of custody, detection systems, and incident reporting. This course makes extensive use of hands-on techniques used by computer forensics professionals. ..... 4 s.h.

ITEC 3763 Cybersecurity for Mobile Devices. This course covers the unique security issues surrounding mobile devices including cell phones and tablets. Students will explore vulnerabilities and risks and learn to mitigate those risks through a variety of technical and policy measures. ..... 4 s.h.

ITEC 3780 Final Portfolio Presentation and Assessment.* The purpose of this course is to allow student candidates for the degree of Bachelor of Science in Information Technology to demonstrate their major field achievements through constructing and presenting a final portfolio of their work. The portfolio presentation is submitted online during ITEC 3780, at the end of the semester in which the student intends to graduate. Any student who does not meet the requirements of the assessment of the portfolio will not graduate until the requirements have been met..... 2 s.h.
Co-requisite: ITEC 3755
*Not designed for transfer

ITEC 4990 Comprehensive Assessment ..... 0 s.h.