ITEC COURSES

Opposite each course title are three numbers such as 3-2-4. The first number indicates the number of regular classroom hours for the course each week; the second number indicates the number of laboratory hours per week; and the third number indicates the hours of credit awarded for the successful completion of the course. Listed in parentheses at the end of each course description is the term(s) that the course is normally offered. F=Fall, S=Spring, and M=Summer.

The college reserves the right to cancel or delete any course with insufficient enrollment.

Courses

ITEC 1390. Intro to Cybersecurity. 3-0-3 Units.
Covers foundational knowledge in all aspects of security in the cyber world, including information security, systems security, network security, mobile security, physical security, ethics and laws. Students gain skills in related technologies, procedures, defense and mitigation techniques used in protecting business assets and interests. Prerequisite: MATH 1101 or MATH 1111

ITEC 1400. IoT: Connecting Things. 3-0-3 Units.
This course allows students to create IoT solutions with sensors, network connections, and display the ability to process and analyze the gathered data. Students will learn how a product or a process or a business can be improved with the instrumentation and the collection of data from a sensor to a gateway and from there to the network and the cloud. (F, S). Prerequisites: MATH 1101 or MATH 1111.

ITEC 3251. Linux II. 3-0-3 Units.
Develops additional skills in Linux systems and increases knowledge of Linux commands. Introduces system architecture, Linux installation, and the Linux file system hierarchy. Upon completion of this course, students will have a knowledge of how to maintain the integrity of Linux file systems, manipulate disk layouts, use package management systems, and manage shared libraries. This course also prepares students to take the LPIC-1 101 certification exam.
Prerequisites: CAPS 1152.

ITEC 3276. Advanced Enterprise Routing. 3-0-3 Units.
This course provides students with the knowledge and skills needed to install, configure, and operate a dual stack enterprise network on a specialist level of expertise. By the end of this course, students will be able to install advanced configurations for several router options including OSPF, EIGRP, BGP, policy-based routing, and route redistribution. (F)
Prerequisites: CAPS 1276.

ITEC 3361. CCNP R&S ROUTE. 3-0-3 Units.
Provides students with deeper knowledge of routing processes within a network environment. Students who take this course will have advanced knowledge of networking protocols including RIP, EIGRP, OSPF, and BGP with a focus on both IPv4 and IPv6. Students will also learn how to secure routing solutions to support branch offices and teleworkers. This course prepares students to take the CCNP R&S ROUTE certification exam.
Prerequisites: CAPS 1276.

ITEC 3362. CCNP R&S SWITCH. 3-0-3 Units.
Provides students with deeper knowledge of the implementation of multilayer switching in complex network environments. Students who take this course will have advanced knowledge of monitoring and maintaining enterprise routed and switched IP networks. Students will also learn secure integration of VLANs, WLANs, voice, and video in campus networks. This course prepares students to take the CCNP R&S SWITCH certification exam.
Prerequisites: CAPS 1276.

ITEC 3390. Management of IS Security. 3-0-3 Units.
Cross-listed with MGIS 3390. Provides a managerial overview of IS security and basic IS security principles while examining operational, technical, and administrative aspects of the topic. This course enables students to improve their IS security management skills and software proficiencies through a thorough investigation of the major concepts and techniques used in enterprise architecture and IS security. It also covers much of the common Body of Knowledge of the CISSP Exam.
Prerequisites: MGIS 3351.

ITEC 3400. IoT: Security. 3-0-3 Units.
This course allows students to conduct vulnerability assessments on all aspects of the IoT system from the device layer to the application layer. Students will use the vulnerability assessments to evaluate and assess risk in a business context. Students will learn the importance of including security at all phases of designing, implementing, and maintaining IoT systems and will also learn how to conduct a threat model analysis of the system. (F) Prerequisites: ITEC 1400

ITEC 3500. Cybersecurity Operations. 3-0-3 Units.
Provides students with content to develop practical, relevant, and job-ready knowledge and skills required of cybersecurity analysts employed in a Security Operations Center. Students will learn how to detect and respond to security threats using the latest technologies. This course aligns to the CCNA CyberOps certification. Prerequisites: ITEC 1390 or Permission of Instructor

ITEC 3510. Ethical Hacking. 3-0-3 Units.
This course provides introductory ethical hacking and network security knowledge. Students will earn how to gather information for IT security purposes, secure information systems, launch and prevent attacks, and perform investigations. Ethical hacking topics include exploiting systems, vulnerability assessments, network intrusion, and penetration testing. (F)
Prerequisite: ITEC 3500

ITEC 4361. CCNP R&S SHOOT. 3-0-3 Units.
Provides students with deeper knowledge of troubleshooting complex LAN and WAN environments. Students who take this course will have advanced knowledge of troubleshooting best practices and industry recognized approaches to network problem solving. This course prepares students to take the CCNP R&S TSHOOT certification exam.
Prerequisites: ITEC 3361 and ITEC 3362.

ITEC 4700. Python Programming. 3-0-3 Units.
Develops a knowledge of the Python language and file structures for computer-based business applications. Students will write computer programs on individual and/or team projects. Prequisite: MATH 1111.

ITEC 4800. Special Topics in ITEC. 1-0-1-4 Unit.
Examines current, relevant topics in field of Information Technology. Course may be repeated for credit when topic differs.
Prerequisites: Permission of Instructor.

ITEC 4900. Internships in ITEC. 0-0-1-4 Unit.
Provides students with work experience in information technology through a coordinated academic internship with a pre-approved employer. Repeatable for a maximum of 4 credit hours.
Prerequisites: Permission of Instructor.

ITEC 4960. Research in ITEC. 0-0-1-4 Unit.
Research project conducted by a student under guidance of a faculty member. Variable 1-4 hours. Repeatable for a maximum of 4 hours.(F,S,M)