ITON Operating Sys/Networking (ITON)

ITON 1070 Operating Systems: Skills and Techniques **(CTAG) 1 Credit**
Prerequisite: ITIS 1000 or ITIS 1005 or ITIS 1007 (can be taken concurrently) or ENGR 1000; or permission of instructor.
This course provides students with an overview of using a client operating system to manage and interact with the microcomputer and mobile devices. Topics include file management techniques, customizing the environment, managing hardware devices, backup and restore strategies, using administrative and management tools, protecting your computer, and using the O/S command line.
(1.5 contact hours: 0.5 lecture, 1 lab)

ITON 1205 Network+ and Networking Essentials **2 Credits**
Prerequisite: ITIS 1005 or ITIS 1007 (can be taken concurrently) or ENGR 1000 or permission of instructor.
This course provides an introduction to local area networking concepts including current networking technology for LANs and WANs (Local and Wide Area Networks), and the Internet. It also helps students prepare for CompTIA's Network+ certification.
(2.5 contact hours: 1.5 lecture, 1 lab)

ITON 1310 Cloud Computing **3 Credits**
Prerequisite: ITON 1205 or CNET 1100; or permission of instructor.
This course provides students with an introduction to cloud computing. Topics covered include a review of virtualization technologies, cloud deployment and service models, infrastructure, performance and capacity planning, and security.
(5 contact hours: 2 lecture, 3 lab)

ITON 1735 Cisco Cyber Operations **3 Credits**
Prerequisite: ITON 1748, CNET 1100; or permission of instructor.
This course introduces students to the tasks, and responsibilities of an associate-level security analyst working in a security operations center (SOC). Topics will include cyber security specific features of both Windows and Linux operating systems, an overview of network infrastructure, as well as descriptions of various attack vectors. Also included are principles of cryptography, security monitoring, and intrusion data analysis. This course will help to prepare students to pass the Implementing Cisco Cybersecurity Operations Exam. This course is cross-listed as CNET1735 Cisco Cyber Operations. Students who have taken the course under the alternative course ID should not take this course.
(5 contact hours: 1 lecture, 4 lab)

ITON 1748 Linux Administration I **3 Credits**
Prerequisite: ITIS 1005 or ITIS 1007 or ENGR 1000, ITON 1205 or CNET 1100 ; or permission of instructor.
This course provides students with basic knowledge of Linux in the use of basic commands, file systems, users and groups, bash shell, process management, text editors, network applications, searching and organizing data, and graphical applications.
(5 contact hours: 2 lecture, 3 lab)

ITON 1758 Linux Administration II **3 Credits**
Prerequisite: ITON 1748 or permission of instructor.
This course provides students with the additional skills necessary to administer Linux systems. Topics include process management, advanced user and file access configuration, working with logical volumes and network storage, SELinux security, firewalls, additional command-line tools, and troubleshooting.
(5 contact hours: 2 lecture, 3 lab)

ITON 2080 Supporting Client Operating Systems **2 Credits**
Prerequisite: ITON 1070, ITON 1205 or CNET 1100; or permission of instructor.
This course provides a technical level of understanding and experience in the areas of installing, configuring, implementing, supporting and maintaining client operating systems. Topics include: file systems, installation and upgrading operating systems, configuring I/O and storage devices, virtualization and cloud computing fundamentals, configuring network connections, sharing resources and working with accounts, and operating systems management and maintenance.
(4 contact hours: 1 lecture, 3 lab)

ITON 2250 Installation, Storage, and Compute with Windows Server 2016 **2 Credits**
Prerequisite: ITON 1205 or CNET 1100; or permission of instructor.
This course provides a technical level of understanding and experience in the areas of installing and configuring Microsoft's Windows Server 2016. Topics include installation, configuring, virtualization, networking, security, and administration. This course helps students prepare for one of the Microsoft Certified Professional exams.
(4 contact hours: 1 lecture, 3 lab)

ITON 2251 Networking with Windows Server 2016 **2 Credits**

Prerequisite: ITON 2250 or permission of instructor.
This course provides a technical level of understanding and experience in the administration tasks necessary to maintain a Windows Server 2016 infrastructure, such as user and group management, network access, and data security. This course helps students prepare for one of the Microsoft Certified Solution Associate (MCSA) exams.
(4 contact hours: 1 lecture, 3 lab)

ITON 2252 Identity with Windows Server 2016 **2 Credits**

Prerequisite: ITON 2251 or permission of instructor.
This course provides a technical level of understanding and experience in the areas of deployment, configuration, and troubleshooting of identity services such as Active Directory Domain Services (AD DS) and Group Policy in Windows Server 2016. This course will also cover the deployment and installation of other Active Directory server roles. This course helps students prepare for one of the Microsoft Certified Professional exams.
(4 contact hours: 1 lecture, 3 lab)

ITON 2768 Linux Administration III **3 Credits**

Prerequisite: ITON 1748, ITON 1758 or CNET 2720; or permission of instructor.
This course is focused on deployment and management of network services and security running on Linux servers. It is intended to help students broaden their ability to administer Linux systems at an enterprise level.
(5 contact hours: 2 lecture, 3 lab)

ITON 2769 Linux Administration III: Automation **3 Credits**

Prerequisite: ITON 1748; or permission of instructor.
This course is focused on skills needed to manage large numbers of systems and applications efficiently and consistently. Students will learn the techniques needed to use Ansible® to automate provisioning, configuration, application deployment, and orchestration.
(5 contact hours: 2 lecture, 3 lab)