ITS - INFORMATION TECHNOLOGY SYSTEMS

ITS 161 MS Windows 7 Configuration.

3 Credits

Lecture Hours 3

Department: Computer Technologies - COT

ITS 162 Wndws Srvr 08 Actv Drctry Cnfg.

3 Credits

Lecture Hours 3

Department: Computer Technologies - COT

ITS 166 Configuring MS Windows 10.

3 Credits

Term Typically Offered: Fall Prerequisite(s): CAPP 120.

Provides students with the knowledge and skills required to set up and administer a computer running Microsoft Windows 10 operating system as a single workstation and a member of a domain. The course provides the skills required to perform basic installation, configuration tasks, and day-to-day administration tasks in a Windows-based network. The course also teaches students how to troubleshoot basic installation, configuration, and administration problems.

Lecture Hours 2, Lab Hours 2

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ITS 212 Network Operating Sys-Server A.

3 Credits

Term Typically Offered: Fall Prerequisite(s): ITS 166.

(2 lec/2lab/wk.) Provides students with the knowledge and skills required to set up and administer a computer running Microsoft Server 2016 operating system in a single domain environment. The course provides the skills required to perform basic installation, configuration tasks, and day-to-day administration tasks in a Microsoft-based network. The course also teaches students how to troubleshoot basic installation, configuration, and administration problems. The course content applies to the Windows 2016 Server network operating system and the Windows client operating system.

Lecture Hours 2, Lab Hours 2

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ITS 217 Network OS - Server Admin/Apps.

3 Credits

Term Typically Offered: Fall Prerequisite(s): ITS 161 & ITS 162.

Provides students with the knowledge and skills to configure and troubleshoot a Windows Server 2008 network infrastructure. Students will learn to implement and configure secure network access and implement fault tolerant storage technologies. Students will gain an understanding of the networking technologies most commonly used with Windows Server 2008 and IP-enabled networks. Students will also learn how to secure servers and maintain update compliance.

Lecture Hours 3

Department: Computer Technologies - COT

ITS 221 Project Management.

3 Credits

Term Typically Offered: Fall

Prerequisite(s): ITS 166, ITS 212, CSCI 100.

3cr. Investigation of topics in project management including scope, definition, risk, procurement and the RFP, management of time, cost, quality, and human resources. Concepts are reinforced with PM software.

Lecture Hours 1, Lab Hours 4

Department: Computer Technologies - COT

ITS 224 Introduction to Linux.

Term Typically Offered: Fall, Spring

3 Credits

Provides students with the knowledge and skills required to set up and administer a computer running a Linux operating system. The course provides the skills required to perform basic installation, configuration tasks, and day-to-day administration tasks in a Linux network. The course also teaches students how to troubleshoot basic installation problems and perform system maintenance.

Lecture Hours 3

Department: Computer Technologies - COT

ITS 226 Advanced Linux.

3 Credits

Term Typically Offered: Fall Prerequisite(s): ITS 224.

3cr. Provide students with a working knowledge of Linux networking and security. Students will be exposed to file sharing technologies such as the Network File System (NFS), samba, and the File Transfer Protocol (FTP). Network security includes concepts such as firewalls, encryption, and network intrusion detection. In order to reinforce the material, the course provides a range of laboratory and hands-on assignments that puts the student in the role of a problem solver, requiring the student to apply concepts presented into situations that might occur in a real-life work environment.

Lecture Hours 3

Department: Computer Technologies - COT

ITS 233 Introduction to Dev-Ops.

3 Credits

Term Typically Offered: Fall

Prerequisite(s): ITS 166, CSCI 100, CSCI 127.

3cr. Explores Dev-Ops using scripting, Application Programmer Interface (API) libraries, and a variety of tools to automate and administer local, remote, and virtual systems. DevOps is the art of automation and Infrastructure as Code (IaC) used to build powerful, dynamic, systems.

Lecture Hours 1, Lab Hours 4

Department: Computer Technologies - COT

ITS 245 Computer Forensics. Term Typically Offered: Spring 3 Credits

3cr. Explore computer forensics using the skills and knowledge acquired to perform computer forensics. Apply that knowledge to computers and mobile forensic concepts in forensic investigations procedures.

Lecture Hours 3

Department: Computer Technologies - COT

ITS 246 Cybersecurity Operations.

3 Credits

Term Typically Offered: Fall

Prerequisite(s): CAPP 120 or ITS 166 or ITS 224.

Introduces the core security concepts and skills needed to monitor, detect, analyze, and respond to cybercrime, cyberespionage, insider threats, advanced persistent threats, regulatory requirements, and other cybersecurity issues facing organizations. It emphasizes the practical application of the skills needed to maintain and ensure security operational readiness of secure networked systems.

Lecture Hours 2, Lab Hours 2

Department: Computer Technologies - COT

ITS 256 CCNA Security.

Term Typically Offered: Fall Prerequisite(s): NTS 105.

3 Credits

Provides students with the technical knowledge required of foundation-level security practitioners. Provides a foundation level of skill and knowledge in general security concepts, communication security, infrastructure security, basics of cryptography, and operational/organizational security.

Lecture Hours 3

Department: Computer Technologies - COT

ITS 257 Intro to Comp Virtualization.

Term Typically Offered: Spring

Prerequisite(s): ITS 212, ITS 224.

Introduces operating system virtualization and shared storage. Emphasis is placed on virtualization terminology, virtual machine storage, virtual networking, and access control. Students will install, configure, and troubleshoot a computing environment that includes virtualization software from multiple software vendors. Upon completion, students should be able to perform tasks related to installation, configuration, and management of virtual machines. Students should explain the role of shared storage in OS virtualization.

Lecture Hours 3

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ITS 274 Adv Hrdwr/Sftwr Trbl & Spprt.

3 Credits

3 Credits

Term Typically Offered: Spring Prerequisite(s): ITS 162 & ITS 280.

Studies advanced software applications in order to solve in-depth business cases. Provides students with the skills necessary to troubleshoot computers, networks, and peripheral devices. Students complete software and hardware installation projects to increase competency and hands-on skills and then learn how to troubleshoot

Lecture Hours 3

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common problems associated with each stage of the project.

ITS 276 Ethical Hacking & Network Def.

3 Credits

Term Typically Offered: Spring

Prerequisite(s): ITS 233, ITS 246, NTS 105.

3cr. Expands students' understanding of issues related to cybersecurity. Students learn more advanced skills, such as ethical hacking/penetration testing, security testing, and systems/network defense. Students learn how to protect networks utilizing the techniques that attackers use to compromise network and systems security.

Lecture Hours 1, Lab Hours 4

Department: Computer Technologies - COT

ITS 280 Computer Repair & Maintenance.

3 Credits

Prerequisite(s): CAPP 120 or Instructor Approval.

Provides students with the skills necessary to install and troubleshoot hardware devices. Topics include system setup, RAM, hard and floppy drives, data buses, power supplies, IO cards, and diagnostic tools.

Lecture Hours 3

Department: Computer Technologies - COT

ITS 283 Health Information Networking.

3 Credits

Term Typically Offered: Spring

Prerequisite(s): CAPP 120, NTS 104, and NTS 105.

Equips students with the knowledge and skills that can be applied toward entry-level specialist careers in healthcare networking. Health Information Networking is a blended curriculum with both online and classroom learning. Health Information Networking aims to develop an in-depth understanding of principles and practicalities needed for information technology professionals wishing to specialize in healthcare network implementations.

Lecture Hours 2, Lab Hours 2

Department: Computer Technologies - COT

ITS 284 Network Storage.

3 Credits

Term Typically Offered: Spring

Prerequisite(s): ITS 217 or consent of instructor.

Provides students with the knowledge and skills required to set up and administer digital information in traditional media, network media storage devices, and virtual media storage devices.

Lecture Hours 3

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ITS 289 Professional Certification.

Term Typically Offered: Spring

Prerequisite(s): NTS 205.

Pass/No Pass

Prepares students to successfully pass the Cisco CCNA exam by reviewing current exam requirements and topics and building students' self-confidence as they prepare for the exam.

1 Credit

Lecture Hours 1

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ITS 291 Special Topics. 1-4 Credits

Lecture Hours 1-4

Department: Computer Technologies - COT

ITS 292 Independent Study. 1-6 Credits

Department: Computer Technologies - COT

ITS 294 Seminar/Workshop. 0.5-5 Credits

Prerequisite(s): CAPP 120.

Investigates intensively topics pertaining to an area of data processing.

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ITS 298 Cooperative Educ/Internship. 1-9 Credits

Department: Computer Technologies - COT

ITS 299 Capstone. 3 Credits

Prerequisite(s): All 100-level courses in the program or consent of instructor. Strives to grant students real-world experience by requiring that they create a fully functioning network that meets specified criteria. This course will cover most every aspect of networking from requirements gathering to design to actual application and testing of the network.

Lecture Hours 1, Lab Hours 4

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