



Brief course description- Course Plan Development and Updating Procedures\Department	QFXX/0409-3.0E
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Faculty		Academic Department	Computer Science\Computer Network	Number of the course plan ()
Number of Major requirement courses		Date of plan approval		

This form is just for the major requirement courses

Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0122344	3	Network Management	Analysis & Design Of Networks Systems

Brief description

This course covers the technological foundations of network management used to operate large-scale networks and services. Management functions and management architectures, management building blocks (information models, management communication, protocols. The course emphasizes "learning by doing", and requires students to conduct a series of lab exercises. Through these labs, students can enhance their understanding of the principles, and be able to apply those principles to solve real problems.

Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0122481	3	Networks Monitoring & Documenting	Network Management

Brief description

This course covers standard information that a network administrator can use to monitor, analyze, and troubleshoot a group of distributed local area networks (LANs) and interconnecting T-1/E-1 and T-2/E-3 lines from a central site. The course emphasizes "learning by doing", and requires students to conduct a series of lab exercises. Through these labs, students can enhance their understanding of the principles, and be able to apply those principles to solve real problems.

Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0122447	3	Network Security	Information security

Brief description

In this course, student will learn the fundamental principle of network and mobile security by studying attacks on mobile, network, and web site. Students will learn how those attacks work and how to prevent and detect them. This course will cover the design and analyze secure networked systems, develop secure programs with basic cryptography, perform vulnerability scanning, and secure networked systems with Firewall and IDS. The course emphasizes "learning by doing", and requires students to conduct a series of lab exercises. Through these labs, students can enhance their understanding of the principles, and be able to apply those principles to solve real problems.

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0122383	3	Networks Design and Simulation 2	Networks Design and Simulation 1
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Brief description

This course teaches student how to install, operate, configure, and verify a basic IPv4 and IPv6 network, including configuring an IP router, identifying basic security threats, understanding redundant topologies, troubleshooting common network issues, connecting to a WAN, configuring RIP, EIGRP and OSPF, understanding wide-area network technologies, securing wired and wireless networks, implementing First hop redundancy protocols to improve reliability and load balancing, building virtual lab by GNS3 emulator. The course emphasizes "learning by doing", and requires students to conduct a series of lab exercises. Through these labs, students can enhance their understanding of the principles, and be able to apply those principles to solve real problems.

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Approved by department council		Date of approval	
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