

ACADEMIC SENATE PROPOSAL TRACKING SHEET

(Document To Be Originated By Academic Senate Secretary On Canary Color Paper)

All proposals MUST have their originating college faculty body (Ex. Arts & Sciences, Education and Nursing; Technical Sciences) approval and must be signed by the submitter and the college dean before being submitted to the Academic Senate Secretary.

1. Submit all proposals (using the appropriate Academic Senate program/degree and/or course revision forms) to the Academic Senate Secretary.
2. The Academic Senate Secretary logs and numbers items and forwards them to the appropriate Academic Senate subcommittee(s): Teacher Education (if applicable), General Education (if applicable), or Curriculum.
3. The Academic Senate subcommittee(s) consider(s) the proposal. If approved, the proposal is forwarded to the next committee. If a committee disapproves the proposal, the originator may request that the item be forwarded to the next body for consideration. The committee will provide written rationale to the originator when a proposal is disapproved and the proposal is returned to the originator.
4. The Academic Senate considers the proposal and approves or disapproves. If approved, the proposal is forwarded to the Full Faculty for consideration. If the Academic Senate disapproves the proposal, the originator may request that the item be forwarded to the Full Faculty for consideration. The Academic Senate will provide written rationale to the originator when proposals are disapproved and the proposal is returned to the originator.
5. The Full Faculty considers Academic Senate approved proposals. If faculty approve, the proposal will then be forwarded to the Provost. The Provost approves or disapproves the proposal. If approved, the proposal is then forwarded to the Chancellor.
7. The Chancellor approves or disapproves the proposal.

Subcommittee and Academic Senate college representatives will notify their respective colleges' of the progress of submitted proposals or the proposal may be tracked via the web page --

<http://www.msun.edu/admin/provost/asproposals.htm>

Documentation and forms for the curriculum process is also available on the web page:

<http://www.msun.edu/admin/provost/asforms.htm>

***** (If a proposal is disapproved at any level, it is returned through the Academic Senate secretary to the Dean of the submitting college who then notifies the originator.)

Proposal # 08-18	Title: Combining the old 335 & 435 into one course (4xx), dropping 435.
(proposal explanation, submitter and college dean signatures on attached program/degree or course revision form)	
Date _____	

Received by ACAD Senate Forwarded to Teacher Ed Council	Date 12-22-08	Approved _____	Disapproved _____
Forwarded to Gen Ed Committee	Date 2/6/09	Signature _____ Approved <input checked="" type="checkbox"/> _____	Disapproved _____ Signature _____ Date _____
Returned to ACAD Senate Forwarded to Curriculum Committee	Date 2-19-09 2-20-09	Approved <input checked="" type="checkbox"/> _____	Disapproved _____ Signature _____ Date _____
Returned to ACAD Senate for Vote	Date 3-5-09	Approved <input checked="" type="checkbox"/> _____	Disapproved _____ Signature _____ Date 3-27-09
Sent to Provost's office for Full Faculty vote Voted on at Full Faculty meeting	Date _____	Approved _____	Disapproved _____ Signature _____ Date _____
Forwarded to Provost for Approval/Disapproval	Date 3-30-09	Approved _____	Disapproved _____ Signature _____ Date _____
Forwarded to Chancellor for Approval/Disapproval	Date _____	Approved _____	Disapproved _____ Signature _____ Date _____
Copies sent to originating college and registrar's office Updated 09/29/05	Date _____	Signature _____	Date _____

COURSE REVISION FORM

NEW ___ DROPPED X MAJOR REVISION ___ FOR INFORMATION ONLY ___

College Technical Sciences Program Area Computer Information Systems Date 20-Oct-08

Submitter [Signature] Chair/Dean [Signature] Date 12.22.08
Signature Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
Combing the old 335 and 435 into one course (4xx), dropping 435.

Please provide the following information:
College: Technical Sciences
Program Area: Computer Information Systems
Date: 20-Oct-08
Course Prefix & No.: ISET 435

Course Title: Network Routers and Security
Credits: 3

Required by: Computer Information Systems BS

Selective in:
Elective in:
General Education:

Lecture: X
Lecture/Lab:
Gradable Lab:
Contact hours lecture: 3
Contact hours lab:

Current Catalog Description (include all prerequisites):
Today's companies need security professionals to protect and maintain their vital information. Security Administration course that builds an understanding of hacking, authentication, encryption, prevention and deterrence, viruses, worms, "Denial of Service" attacks, auditing, and scanning. Students learn to establish solid security policies, implement Intrusion Detection Systems, determine security threats, build deterrence and prevention systems, and audit their network for potential threats. Prerequisite: *Junior or Senior standing, completion of ISET 335 or similar operating systems course*

Proposed or New Catalog Description (include all prerequisites):
No change

435

Course Outcome Objectives:

General Knowledge

- Why We Need Security
- Review security basics
- Identify the features and benefits of security products
- Install an Embedded Firewall (EFW)
- Configure and manage the a EFW
- Design and troubleshoot a EFW network
- List steps to install, configure and manage a hardware Firewall, Software firewall and a VPN Firewall
- List steps to install, configure and manage a VPC Review security basics
- Identify the features and benefits of security products
- Install an Embedded Firewall (EFW)
- Configure and manage the EFW
- Design and troubleshoot a EFW network
- List steps to install, configure and manage a VPN
- Locking Down Services for More Effective Security
- Operating System Add-ons
- Disabling and Removing Unnecessary Services
- Controlling Specific Services, Including FTP, Telnet, and HTTP
- Scanning and Protecting Shares

Encryption Techniques

- Encryption and Internetworking
- Encryption in Enterprise Networks
- Understanding Trust Relationships
- Symmetric Key Encryption
- Public Key Encryption
- One-Way Encryption
- Data Encryption Standard
- Working with Digital Certificates
- SSL Encryption and Web Servers
- Use Pretty Good Privacy (PGP) to Sign a Document
- Deploying S/MIME
- Public Key Infrastructure (PKI) vs Certificate Authority (CA)
- Encryption Protocols and System Performance

Intrusions and Attacks

- Intrusion Threats
- Scanning Attacks
- Detecting a NIC in "Promiscuous Mode"
- Sniffing Attacks, Including Sniffing E-Mail, Telnet, NFS, NIS, And Web Traffic
- E-Mail Bombing
- Scanning and Cracking a Share
- System Bug-Based Attacks
- Causes and Results of a Denial of Service (DOS) Attacks
- Defining and Conducting Buffer Overflow Attacks
- How to Protect Your Operating Systems, Routers, and Equipment Against Physical Attacks
- Brute Force Attack
- Dictionary Attack
- Social Engineering
- Understanding Key Logging
- Identifying Trojans
- Describe the Effects of a Worm
- Three Virus Types (Boot Sector, Macro, File Attaching)
- IP Spoofing

Security Components

- Identifying and Implementing Security Policies

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.