Document N: Course and Program Development:
IMPACT AND APPROVAL SIGNATURES

See Course and Program Development Policy and Procedures (www.ubalt.edu/provost) for instructions.

SCHOOL: 
- LAW
- MSB
- CAS
- CPA

CONTACT NAME: C. Wright Brown/M. Ketel
PHONE: 410-837-5004/5278

DEPARTMENT/DIVISION: Division of Science, Information Arts and Technologies

DATE PREPARED: 3/16/12

PROPOSED SEMESTER OF IMPLEMENTATION: fall

YEAR: 2013

TYPE OF ACTION: add (new) 
- deactivate
- modify
- other

LEVEL OF ACTION: noncredit 
- undergraduate
- graduate
- other

ACTION BEING REQUESTED (select one category, either Course Actions or Program Actions):
- COURSE ACTIONS
- PROGRAM ACTIONS

Original Subject Code/Course Number: COSC 332

Original Course Title: Fundamentals of Computer Security

Select one or multiple actions from one of the lists below (review the list of necessary documents and signatures):

**COURSE ACTIONS**

1. Experimental Course
2. Course Title
3. Course Credits
4. Course Number
5. Course Level
6. Pre- and Co-Requisite
7. Course Description
8. New Course
9. Deactivate Course
10. Other

**PROGRAM ACTIONS**

10. Program Requirements
11a. Undergraduate Specialization (24 credits or fewer)
11b. Master's Specialization (12 credits or fewer)
11c. Doctoral Specialization (18 credits or fewer)
12. Minor (add or delete)
13. Closed Site Program
14. Program Suspension
15. Program Reactivation
16a. Certificate Program (UG/G) exclusively within existing degree program
16b. Certificate Program (UG/G) outside of or across degree programs (12 or more credits)
17. Off-Campus Delivery of Existing Programs
18a. Undergraduate Concentration (exceeds 24 credits)
18b. Master's Concentration (exceeds 12 credits)
18c. Doctoral Concentration (exceeds 18 credits)
19. Program Title Change
20. Program Termination
21. New Degree Program
22. Other

ADDITIONAL DOCUMENTATION (check all appropriate boxes of documents included; review the list of necessary documents):

☑ summary proposal (O)  ☑ course definition document (P)  ☐ full five-page MHEC proposal (Q)

☐ financial tables (MHEC) (R)  ☑ other documents as may be required by MHEC/USM (S)  ☑ other (T)

Summer 2010
### IMPACT REVIEW (review the list of necessary signatures):

<table>
<thead>
<tr>
<th>Impacted Entity</th>
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<th>Date</th>
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### APPROVAL SEQUENCE (review the list of necessary signatures):

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>A. Department/Division (Chair)</td>
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<td>B. General Education (for No. 7, 8)</td>
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<tr>
<td>C. Final Faculty Review Body Within Each School (Chair)</td>
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<td>D. Dean</td>
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<td>E. University Faculty Senate (Chair)</td>
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<td>F. University Council (Chair)¹</td>
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<td>G. Provost and Senior Vice President for Academic Affairs</td>
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<tr>
<td>H. President</td>
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<td>I. Board of Regents (notification only)</td>
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<tr>
<td>J. Board of Regents (approval)</td>
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<td>K. MHEC (notification only)</td>
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<td>L. MHEC (approval)</td>
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<tr>
<td>M. Middle States Association notification</td>
<td>Required only if the University's mission is changed by the action</td>
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</tbody>
</table>

¹ University Council review (for recommendation to the president or back to the provost) shall be limited to curricular or academic policy issues that may potentially affect the University’s mission and strategic planning, or have a significant impact on the generation or allocation of its financial resources.
Document O: Course and Program Development: SUMMARY PROPOSAL

See Course and Program Development Policy and Procedures (www.ubalt.edu/provost) for instructions.

SCHOOL: LAW MSB CAS CPA

CONTACT NAME: C. Wright Brown/M. Ketel  PHONE: 410-837-5004/5278

DEPARTMENT/DIVISION: Division of Science, Information Arts and Technologies  DATE PREPARED: 3/16/12

PROPOSED SEMESTER OF IMPLEMENTATION: fall spring  YEAR: 2013

ACTION BEING REQUESTED (select one category, either Course Actions or Program Actions):

- COURSE ACTIONS
- PROGRAM ACTIONS

Original Subject Code/Course Number: COSC 332

Original Course Title: Fundamentals of Computer Security

Select one or multiple actions from one of the lists below (review the list of necessary documents and signatures):

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</table>

For changes to existing courses:

<table>
<thead>
<tr>
<th>OLD TITLE</th>
<th>SUBJECT CODE/COURSE NO.</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEW TITLE</td>
<td>SUBJECT CODE/COURSE NO.</td>
<td>CREDITS</td>
</tr>
</tbody>
</table>
DESCRIBE THE REQUESTED COURSE/PROGRAM ACTION (additional pages may be attached if necessary):

To create a new course COSC 332, Fundamentals of Computer Security which is a core course requirement for the Applied Information Technology (AIT) 4 year program.

SET FORTH THE RATIONALE FOR THIS PROPOSAL:

While courses in Network Security (COSC 433) and Information Assurance (COSC 432) currently exist, no course provides an introduction to security concepts, terminology, current topics, with applied skill development.

This course will fill a learning gap in the current curriculum; offer a complementary course for Applied Information Technology majors as well as students interested in learning computer security fundamentals. This course would provide the foundation for advanced study of security as applied to computer systems and applications.
1. DATE PREPARED
March 16, 2012

2. PREPARED BY
Cecelia Wright Brown/Mohammed Ketel

3. DEPARTMENT/DIVISION
Division of Science, Information Arts and Technologies

4. COURSE NUMBER(S) with SUBJECT CODE(S)
COSC332

5. COURSE TITLE
Fundamentals of Computer Security

6. CREDIT HOURS
3

7. CATALOG DESCRIPTION
Introduces students to core principles and practices in computer and network security. Covers the fundamentals of computer/network security including general security concepts; threats and vulnerabilities; application, data and host security; access control and identity management; basics of cryptography; and compliance and operational/organizational security. Current topics in computer security such as cloud computing security and application programming development security also are discussed. Course materials prepare students for the vendor-neutral CompTIA Security+ industry certification exam. Lab fee required.

8. PREREQUISITES
None

9. COURSE PURPOSE (how the course is to be used in the curriculum; e.g., required for the major, elective, etc.)
Required course for Applied Information Technology Program and general elective for all other majors.

10. GENERAL EDUCATION AREA (if applicable; e.g., social sciences, humanities, mathematics, etc.)
Not Applicable

11. COURSE TYPE/COMPONENT (clinical, continuance, discussion, field studies, independent study, laboratory, lecture, practicum, research, seminar, supervision, thesis research, tutorial or workshop; this must match PeopleSoft 9.0 coding, so check with your dean's office if you are unsure of the correct entry)
Lecture

Summer 2010
12. FACULTY QUALIFIED TO TEACH COURSE

Cecelia Wright Brown and Mohammed Ketel

13. CONTENT OUTLINE

1: Introduction to Security.
2: Malware and Social Engineering Attacks.
3: Application and Network Attacks.
4: Vulnerability Assessment and Mitigating Attacks.
5: Host, Application, and Data Security.
7: Administering a Secure Network.
9: Access Control Fundamentals.
10: Authentication and Account Management.
11: Basic Cryptography.
12: Advanced Cryptography.
13: Business Continuity.
14: Risk Mitigation.

14. LEARNING GOALS

At the conclusion of this course, the students will be able to:
1) Explain the basic concepts in information security including: policies, models, security technologies, mechanisms and access control.
2) Demonstrate concepts in cryptography, security protocols and standards, security planning, encryption and security management.
3) Describe threats to networks, database reliability, identification, authentication, and legal and ethical issues.

15. ASSESSMENT STRATEGIES

The course will utilize laboratory assignments, exams, drills, team and individual projects.

16. SUGGESTED TEXT(S) and MATERIALS (e.g. textbooks, equipment, software, etc., that students must purchase)

By: Mark Campa, ISBN: 9781111640125
Copyright: 2012, Publisher: Cengage Learning

17. SPECIAL GRADING OPTIONS (if applicable)

N/A

18. SUGGESTED CLASS SIZE

24

19. LAB FEES (if applicable)

$45 per course. Laboratory fees cover additional instructional costs incurred in the operation of computer laboratories necessary for teaching these courses and for students' preparation of classwork, including maintenance and routine upgrades to software and hardware, as well as the renewal of yearly software licenses.