COURSE MODIFICATION PROPOSAL

Courses must be submitted by October 15, 2011, and finalized by the end of the fall semester to make the next catalog (2012-13) production

DATE (CHANGE DATE EACH TIME REVISED): 9/15/11

PROGRAM AREA(S) : COMPUTER SCIENCE

Directions: All of sections of this form must be completed for course modifications. Use YELLOWED areas to enter data. All documents are stand alone sources of course information.

---

1. **Indicate Changes and Justification for Each.** *[Mark all change areas that apply and follow with justification. Be as brief as possible but, use as much space as necessary.]*

☐ Course title	☐ Course Content
X Prefix/suffix	☐ Course Learning Outcomes
☐ Course number	☐ References
☐ Units	☐ GE
☐ Staffing formula and enrollment limits	☐ Other ☐
X Prerequisites/Corequisites	☐ Reactivate Course
☐ Catalog description	
☐ Mode of Instruction	

Justification: IT424 is being eliminated; COMP/IT 424 will serve both the BSCS and BSIT. BSIT students do not take COMP 350 or COMP 362 so the pre-requisites are adjusted appropriately.

2. **Course Information.**
 [Follow accepted catalog format.] (***Add additional prefixes i f cross-listed***)

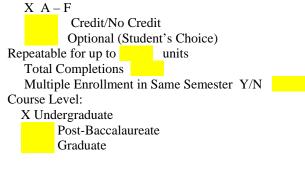| OLD	NEW
Prefix COMP Course# 424	Prefix COMP/IT Course# 424
Title Computer System Security Units (3)	Title Computer System Security Units (3)
3 hours lecture per week	3 hours lecture per week
☐ hours blank per week	☐ hours blank per week
X Prerequisites: COMP 350 and COMP 362	X Prerequisites: IT 151 or COMP 151 required, COMP 362 or COMP/IT 421 recommended.
☐ Consent of Instructor Required for Enrollment	☐ Consent of Instructor Required for Enrollment
☐ Corequisites: ☐	☐ Corequisites: ☐

Catalog Description (Do not use any symbols):
 Security systems in operating systems, databases, and computer networks. Analysis of formal security models. Introduction to cryptography and public key security schemas

Catalog Description (Do not use any symbols)**:**
 Security systems in operating systems, databases, and computer networks. Analysis of formal security models. Introduction to cryptography and public key security schemas
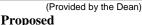
OLD	NEW
General Education Categories: ☐	General Education Categories: ☐
Grading Scheme (Select one below):	Grading Scheme (Select one below):
X A – F	X A – F
☐ Credit/No Credit	☐ Credit/No Credit
☐ Optional (Student's Choice)	☐ Optional (Student's Choice)
Repeatable for up to ☐ units	Repeatable for up to ☐ units
Total Completions ☐	Total Completions ☐
Multiple Enrollment in Same Semester Y/N ☐	Multiple Enrollment in Same Semester Y/N ☐
Course Level:	Course Level:
X Undergraduate	X Undergraduate
☐ Post-Baccalaureate	☐ Post-Baccalaureate
☐ Graduate	☐ Graduate

3. Mode of Instruction (Hours per Unit are defaulted)   **Hegis Code(s)**_____

Existing

	Units	Hours Per Unit	Benchmark Enrollment	Graded
Lecture	**3**	**1**	**24**	y
Seminar		**1**		
Lab		**3**		
Activity		**2**		
Field Studies				
Indep Study				
Other blank				
Online				

Proposed

	Units	Hours Per Unit	Benchmark Enrollment	Graded	CS No. (filled out by Dean)
Lecture	**3**	**1**	**24**	y	
Seminar		**1**			
Lab		**3**			
Activity		**2**			
Field Studies					
Indep Study					
Other blank					
Online					

4. Course Attributes:

General Education Categories: All courses with GE category notations (including deletions) must be submitted to the GE website: http://summit.csuci.edu/geapproval. Upon completion, the GE Committee will forward your documents to the Curriculum Committee for further processing.

A (English Language, Communication, Critical Thinking)
    A-1 Oral Communication
    A-2 English Writing
    A-3 Critical Thinking
B (Mathematics, Sciences & Technology)
    B-1 Physical Sciences
    B-2 Life Sciences – Biology
    B-3 Mathematics – Mathematics and Applications
    B-4 Computers and Information Technology
C (Fine Arts, Literature, Languages & Cultures)
    C-1 Art
    C-2 Literature Courses
    C-3a Language
    C-3b Multicultural
    D (Social Perspectives)
    E (Human Psychological and Physiological Perspectives)
    UDIGE/INTD Interdisciplinary
    Meets University Writing Requirement
    Meets University Language Requirement

American Institutions, Title V Section 40404:   Government   US Constitution   US History
Refer to website, Exec Order 405, for more information: http://senate.csuci.edu/comm/curriculum/resources.htm
Service Learning Course (Approval from the Center for Community Engagement must be received before you can request this course attribute).

5. Justification and Requirements for the Course. *[Make a brief statement to justify the need for the course]*

OLD
The course is an elective course for Computer Science majors.

NEW
The course is an elective for both Computer Science and Information Technology majors

    Requirement for the Major/Minor
X Elective for the Major/Minor
    Free Elective

    Requirement for the Major/Minor
X Elective for the Major/Minor
    Free Elective

Submit Program Modification if this course changes your program.

6. Student Learning Outcomes. (List in numerical order. You may wish to visit resource information at the following website: http://senate.csuci.edu/comm/curriculum/resources.htm)

Upon completion of the course, the student will be able to: Upon completion of the course, the student will be able to:

OLD

* Describe modern security protocols
* Design security protocols
• Assess vulnerabilities of a computer systems and corresponding threats
• Explain impediments to security
• Assess the strength of a cryptographic system
• Synthesize and articulate ideas clearly and convincingly in oral and written forms.

NEW

* Describe modern security protocols
* Design security protocols
• Assess vulnerabilities of a computer systems and corresponding threats
• Explain impediments to security
• Assess the strength of a cryptographic system
• Synthesize and articulate ideas clearly and convincingly in oral and written forms.

7. Course Content in Outline Form. (Be as brief as possible, but use as much space as necessary)

OLD

Introduction
Encryption
Viruses and Covert Channels
Operating System Security
Data Base Security
Networks and Distributed System Security

NEW

Introduction
Encryption
Viruses and Covert Channels
Operating System Security
Data Base Security
Networks and Distributed System Security

Does this course content overlap with a course offered in your academic program? Yes ▨ **No** X
If YES, what course(s) and provide a justification of the overlap. ▨

Does this course content overlap a course offered in another academic area? Yes ▨ **No** X
If YES, what course(s) and provide a justification of the overlap. ▨

Overlapping courses require Chairs' signatures.

8. Cross-listed Courses (Please note each prefix in item No. 1)
     A. List cross-listed courses (Signature of Academic Chair(s) of the other academic area(s) is required).
     B. List each cross-listed prefix for the course: COMP, IT
     C. Program responsible for staffing: Computer Science

9. References. *[Provide 3-5 references]*

     OLD Schneier, *Secrets and lies: digital security in a networked world*, Wiley 2000 ISBN 0471253111
Pfleeger, *Security in Computing,* 2nd Edition, Prentice-Hall (1996) ISBN 0133374866
Kaufman, Perlman and Speciner, *Network security: private communication in a public world*, Prentice-Hall, 2nd edition (2002) ISBN 0130460192

NEW Schneier, *Secrets and lies: digital security in a networked world*, Wiley 2000 ISBN 0471253111
Pfleeger, *Security in Computing,* 2nd Edition, Prentice-Hall (1996) ISBN 0133374866
Kaufman, Perlman and Speciner, *Network security: private communication in a public world*, Prentice-Hall, 2nd edition (2002) ISBN 0130460192

10. Tenure Track Faculty qualified to teach this course.
   All Computer Science faculty

11. Requested Effective Date or First Semester offered: Fall 2012

12. New Resource Requested: Yes ▨ **No** X
   If YES, list the resources needed.

     A. Computer Needs (data processing, audio visual, broadcasting, other equipment, etc.)
        ▨

     B. Library Needs (streaming media, video hosting, databases, exhibit space, etc.)

C. Facility/Space/Transportation Needs:

D. Lab Fee Requested: Yes ▮ **No** ▮ **(Refer to the Dean's Office for additional processing)**
E. Other. ▮

13. Will this course modification alter any degree, credential, certificate, or minor in your program? Yes X   No ▮
If, YES attach a program update or program modification form for all programs affected.
Priority deadline for New Minors and Programs: October 1, 2011 of preceding year.
Priority deadline for Course Proposals and Modifications: October 15, 2011.
Last day to submit forms to be considered during the current academic year: April 15th.

Peter Smith   9/15/11
_____   _____
Proposer(s) of Course Modification   Date
Type in name. Signatures will be collected after Curriculum approval.

Approval Sheet

Course: COMP 424

If your course has a General Education Component or involves Center affiliation, the Center will also sign off during the approval process.

Multiple Chair fields are available for cross-listed courses.

Program Chair		
	Signature	Date

Program Chair		
	Signature	Date

Program Chair		
	Signature	Date

General Education Chair		
	Signature	Date

Center for Intl Affairs Director		
	Signature	Date

Center for Integrative Studies Director		
	Signature	Date

Center for Multicultural Engagement Director		
	Signature	Date

Center for Civic Engagement and Service Learning Director		
	Signature	Date

Curriculum Chair		
	Signature	Date

AVP		
	Signature	Date