CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

COURSE MODIFICATION PROPOSAL

Courses must be submitted by October 15, 2013, and finalized by the end of the fall semester to make the next catalog (2014-15) production

DATE (CHANGE DATE EACH TIME REVISED): 10/7/13 REV 10/18/13

PROGRAM AREA(S) : COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

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.

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1. Indicate Changes and Justification for Each. *[Mark an X by all change areas that apply then please follow-up your X's with justification(s) for each marked item. Be as brief as possible but, use as much space as necessary.]*

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

Justification: IT/COMP 421 is now IT421. Adjustments made so both CS and IT majors have equivalent prereqs. Corrects error in course justification.

2. Course Information.

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

OLD

Prefix COMP/IT Course# 424
Title Computer System Security Units (3)
3 hours lecture per week
hours blank per week

X Prerequisites: IT 151 or COMP 151 required, COMP 362 or COMP/IT 421 recommended
Consent of Instructor Required for Enrollment
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

General Education Categories:
Grading Scheme (Select one below):
X A – F
Credit/No Credit
Optional (Student's Choice)
Repeatable for up to units
Total Completions
Multiple Enrollment in Same Semester Y/N
Course Level:
X Undergraduate
Post-Baccalaureate
Graduate

NEW

Prefix COMP/IT Course# 424
Title Computer System Security Units (3)
3 hours lecture per week
hours blank per week

X Prerequisites: COMP 151 or IT221 required
COMP 362 or IT421 recommended.
Consent of Instructor Required for Enrollment
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

General Education Categories:
Grading Scheme (Select one below):
X A – F
Credit/No Credit
Optional (Student's Choice)
Repeatable for up to units
Total Completions
Multiple Enrollment in Same Semester Y/N
Course Level:
X Undergraduate
Post-Baccalaureate
Graduate

3. Mode of Instruction (Hours per Unit are defaulted) **Hegis Code(s)**_____
(Provided by the Provost Office)

	Existing				Proposed				
	Units	Hours Per Unit	Default Section Size	Graded	Units	Hours Per Unit	Default Section Size	Graded	CS No. (filled out by Provost Office)
Lecture	3	1	24	y	3	1	24	y	
Seminar		1				1			
Lab		3				3			
Activity		2				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 (Graduation Writing Assessment Requirement)

Meets University Language Requirement

American Institutions, Title V Section 40404: Government US Constitution US History
Regarding 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).

Online Course (Answer YES if the course is ALWAYS delivered online).

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

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

NEW
The course is an elective for Computer Science majors and a required course for Information Technology majors.

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

Submit Program Modification if this course changes your program.

6. Student Learning Outcomes. (List in numerical order. Please refer to the Curriculum Committee's "Learning Outcomes" guideline for measurable outcomes that reflect elements of Bloom's Taxonomy: *http://senate.csuci.edu/comm/curriculum/resources.htm*. The committee recommends 4 to 8 student learning outcomes, unless governed by an external agency (e.g., Nursing).

Upon completion of the course, the student will be able to:	Upon completion of the course, the student will be able to:
OLD	**NEW**
* Describe modern security protocols	* Describe modern security protocols
* Design security protocols	* Design security protocols
• Assess vulnerabilities of a computer systems and corresponding threats	• Assess vulnerabilities of a computer systems and corresponding threats
• Explain impediments to security	• Explain impediments to security
• Assess the strength of a cryptographic system	• Assess the strength of a cryptographic system
• Synthesize and articulate ideas clearly and convincingly in oral and written forms.	• 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	**NEW**
Introduction	Introduction
Encryption	Encryption
Viruses and Covert Channels	Viruses and Covert Channels
Operating System Security	Operating System Security
Data Base Security	Data Base Security
Networks and Distributed System 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) *Beyond three disciplines consult with the Curriculum Committee.*

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 and Information Technology

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 Kaufman, Perlman and Speciner, Network security: private communication in a public world, Prentice-Hall, 2nd edition (2002) ISBN 0130460192
Pfleeger and Pfleeger Security in Computing Fourth Edition Prentice-Hall (2008) ISBN 0-13-239077-9
Trappe and Washington Introduction to Cryptography with Coding Theory Second Edition Pearson/Prentice-Hall (2006) ISBN 0-13-186239-1
Stallings Network Security Essentials Applications and Standards Fifth Edition Prentice-Hall (2013) ISBN 978-0133370430

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

11. Requested Effective Date or First Semester offered: Fall 2014

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** ☐ **(Lab fee requests should be directed to the Student Fee Committee)**

E. Other. ☐

13. Will this course modification alter any degree, credential, certificate, or minor in your program? Yes ☐ **No** X
If, YES attach a program update or program modification form for all programs affected.
Priority deadline for New Minors and Programs: October 1, 2013 of preceding year.
Priority deadline for Course Proposals and Modifications: October 15, 2013.
Last day to submit forms to be considered during the current academic year: April 15th.

Peter Smith — 10/7/13

Proposer(s) of Course Modification — Date
Type in name. Signatures will be collected after Curriculum approval.

Approval Sheet

Course: COMP/IT 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.

The CI program review process includes a report from the respective department/program on its progress toward accessibility requirement compliance. By signing below, I acknowledge the importance of incorporating accessibility in course design.

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