COURSE MODIFICATION PROPOSAL
**Courses must be submitted by October 15, 2010,
to make the next catalog (2011-12) production**

DATE (CHANGE DATE EACH TIME REVISED): 9/23/10; REV 10.15.10; REV 12.15.10

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

OLD	NEW
Prefix IT Course# 429 Title Computer Networks for IT Units (3)	Prefix IT Course# 429 Title Computer Networks for IT Units (3)
3 hours lecture per week	3 hours lecture per week
____ hours blank per week	____ hours blank per week
X Prerequisites: COMP 362	X Prerequisites: IT 151 or IT152
____ Consent of Instructor Required for Enrollment	____ Consent of Instructor Required for Enrollment
____ Corequisites: ____	____ Corequisites: ____

OLD

Catalog Description (Do not use any symbols):
Basic software design and analysis considerations in networking computers into coherent, cooperating systems capable of processing computational tasks in a distributed manner. Network topology, routing procedures, message multiplexing and process scheduling techniques.

Graded ____
General Education Categories ____   ____ CR/NC   ____ Repeatable for up to ____ units
____ Lab Fee Requested   X A - F   Total Completions ____
Course Level: ____
X Undergraduate   ____ Post-bac/Credential   ____ Graduate   Optional (Student's choice)   ____ Multiple Enrollment in same semester

NEW

Catalog Description (Do not use any symbols)**:**
Basic software design and analysis considerations in networking computers into coherent, cooperating systems capable of processing computational tasks in a distributed manner. Network topology, routing procedures, message multiplexing and process scheduling techniques.

Graded ____
General Education Categories ____   ____ CR/NC   ____ Repeatable for up to ____ units
____ Lab Fee Requested   X A - F   Total Completions ____
Course Level: ____
X Undergraduate   ____ Post-bac/Credential   ____ Graduate   Optional (Student's choice)   ____ Multiple Enrollment in same semester

2. **Mode of Instruction (Hours per Unit are defaulted)**   Hegis Code(s)_____
(Provided by the Dean)

Existing

	Units	Hours Per Unit	Benchmark Enrollment	Graded
Lecture	3	1	30	y
Seminar	____	1	____	____
Lab	____	3	____	____
Activity	____	2	____	____
Field Studies	____		____	____
Indep Study	____		____	____
Other blank	____		____	____

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	____		____	____	____

3. **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).

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

OLD	**NEW**
Required course for the BSIT	Required course for the BSIT
X Requirement for the Major/Minor	X Requirement for the Major/Minor
[ ] Elective for the Major/Minor	[ ] Elective for the Major/Minor
Free Elective	Free Elective

Submit Program Modification if this course changes your program.

5. **Student Learning Outocmes.** (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:

OLD	**NEW**
1. Analyze a computer network and its components	1. Analyze a computer network and its components
2. Define and explain typical network protocol layers.	2. Define and explain typical network protocol layers.
3. Explain the components of a "packet" in the http protocol.	3. Explain the components of a "packet" in the http protocol.
4. Design and implement a peer-to-peer configuration.	4. Design and implement a peer-to-peer configuration.
5. Analyze network security issues.	5. Analyze network security issues.
6. Explain the functions of a hub, switch, and router.	6. Explain the functions of a hub, switch, and router.
7 Describe basic data encryption techniques	7 Describe basic data encryption techniques

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

OLD	**NEW**
1. Network Architectures	1. Network Architectures
2. Network Hardware Devices.	2. Network Hardware Devices.
3. Data Communication Protocols	3. Data Communication Protocols
4. Network Analysis Tools.	4. Network Analysis Tools.

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.

7. **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:**
   - C. **Program responsible for staffing:**

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

   OLD
   1. Network security: private communication in a public world (2nd ed) Kaufman, Perlman and Speciner Prentice-Hall 2002 ISBN 0130460192
   2. Computer Networks (4th ed) Tanenbaum Prentice-Hall 2002 ISBN 0130661023
   3. Computer Networking: A Top-Down Approach Featuring the Internet Kurose, Ross Addison Wesley 2003 ISBN 0-201-97699-4
   4. Network Management Subramanian, Mani Addison-Wesley 2000 ISBN0201357429

   NEW
   1. Network security: private communication in a public world (2nd ed) Kaufman, Perlman and Speciner Prentice-Hall 2002 ISBN 0130460192
   2. Computer Networks (4th ed) Tanenbaum Prentice-Hall 2002 ISBN 0130661023
   3. Computer Networking: A Top-Down Approach Featuring the Internet (5th ed) Kurose, Ross Addison Wesley 2009 ISBN 0136079679
   4. Network Management Subramanian, Mani Addison-Wesley 2000 ISBN0201357429

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

10. **Requested Effective Date or First Semester offered: Fall 2011**

11. **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.**

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

	Course title		Course Content
	Prefix/suffix		Course Learning Objectives
	Course number	X	References
	Units		GE
	Staffing formula and enrollment limits		Other

X   Prerequisites/Corequisites   ☐ Reactivate Course
☐ Catalog description
X Mode of Instruction

Justification: The prerequisite is changed to a new, broader course that also covers the essential required material. Reference updated

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 4, 2010 of preceding year.
    Priority deadline for Course Proposals and Modifications: October 15, 2010.
    Last day to submit forms to be considered during the current academic year: April 15th.

Peter Smith   9/23/10
_____   _____
Proposer(s) of Course Modification   Date
Type in name. Signatures will be collected after Curriculum approval.

Approval Sheet

Course: IT429

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

Dean of Faculty		
	Signature	Date