Request for Graduate Course Addition

1. Prepare one paper copy with all signatures and supporting material and forward to the Graduate Council Chair.
2. E-mail one identical PDF copy to the Graduate Council Chair. If attachments included, please merge into a single file.
3. *The Graduate Council cannot process this application until it has received both the PDF copy and the signed hard copy.*

College: CITE   Dept/Division: Computer Science   Alpha Designator/Number: CS 530   ⦿ Graded   ◯ CR/NC

Contact Person: Paulus Wahjudi   Phone: 304-696-5443

NEW COURSE DATA:

New Course Title: Cybersecurity

Alpha Designator/Number: | C | S | 5 | 3 | 0 | | | | |

Title Abbreviation: | C | y | b | e | r | s | e | c | u | r | i | t | y | | | | | | | | | | | | |

(Limit of 25 characters and spaces)

Course Catalog Description:
(Limit of 30 words)

Concepts and issues in physical and cyber security; technological vulnerabilities found in operating systems, database servers, Web servers, Internet, and local area networks; developing defensive and offensive security measures.

Co-requisite(s): None   First Term to be Offered: Spring 2015

Prerequisite(s): None   Credit Hours: 3

Course(s) being deleted in place of this addition (*must submit course deletion form*): _____

Signatures: if disapproved at any level, do not sign. Return to previous signer with recommendation attached.

Dept. Chair/Division Head _____	Date _____
Registrar _____	Date _____
College Curriculum Chair _____	Date _____
Graduate Council Chair _____	Date _____

College: CITE   Department/Division: Computer Science   Alpha Designator/Number: CS 530

Provide complete information regarding the new course addition for each topic listed below. Before routing this form, a complete syllabus also must be attached addressing the items listed on the first page of this form.

1. FACULTY: Identify by name the faculty in your department/division who may teach this course.

- Paulus Wahjudi

2. DUPLICATION: If a question of possible duplication occurs, attach a copy of the correspondence sent to the appropriate department(s) describing the proposal. Enter "**Not Applicable**" if not applicable.

Not Applicable

3. REQUIRED COURSE: If this course will be required by another deparment(s), identify it/them by name. Enter "**Not Applicable**" if not applicable.

Not Applicable

4. AGREEMENTS: If there are any agreements required to provide clinical experiences, attach the details and the signed agreement. Enter "**Not Applicable**" if not applicable.

Not Applicable

5. ADDITIONAL RESOURCE REQUIREMENTS: If your department requires additional faculty, equipment, or specialized materials to teach this course, attach an estimate of the time and money required to secure these items. (Note: Approval of this form does not imply approval for additional resources.) Enter "**Not Applicable**" if not applicable.

Not Applicable

6. COURSE OBJECTIVES: (May be submitted as a separate document)

Please see attached Syllabus

7. COURSE OUTLINE   (May be submitted as a separate document)

Please see attached Syllabus

8. SAMPLE TEXT(S) WITH AUTHOR(S) AND PUBLICATION DATES (May be submitted as a separate document)

Please see attached Syllabus

9. EXAMPLE OF INSTRUCTIONAL METHODS (Lecture, lab, internship)

- Lecture related to the chapters in the textbook
- In class discussion regarding the chapter and or
- Case studies: Review and discussion of case studies related to cybersecurity
- Article/Paper review: Review and discussion of recent and/or significant event or scholarly paper related to Cybersecurity
- Table top simulation that simulates real life Cybersecurity event
- Course related labs on utilizing different tools and techniques in Cybersecurity

10. EXAMPLE EVALUATION METHODS (CHAPTER, MIDTERM, FINAL, PROJECTS, ETC.)

- Quiz for each chapter covered
- Midterm Exams to evaluate student proficiency in utilizing the knowledge from the various materials covered in class
- Final exam will be a cybersecurity exercise to protect and defend a cyber infrastructure
- Programming projects related to cybersecurity such as steganography and encryption.

11. ADDITIONAL GRADUATE REQUIREMENTS IF LISTED AS AN UNDERGRADUATE/GRADUATE COURSE

The course contents and objectives will remain the same for both courses. The graduate students will have augmented requirements in the assignments along with additional assignments and/or projects related to the field of Cybersecurity.

12. PROVIDE COMPLETE BIBLIOGRAPHY   (May be submitted as a separate document)

Please see attached Syllabus

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Please insert in the text box below your course summary information for the Graduate Council agenda. Please enter the information exactly in this way (including headings):

Department:
Course Number and Title:
Catalog Description:
Prerequisites:
First Term Offered:
Credit Hours:

Department: Computer Science

Course Number and Title: CS 530 Cybersecurity

Catalog Description: Concepts and issues in physical and cyber security; technological vulnerabilities found in operating systems, database servers, Web servers, Internet, and local area networks; developing defensive and offensive security measures.

Prerequisites: None

First Term Offered: Spring 2015

Credit Hours: 3