PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION,
OR REVISION OF A GRADUATE COURSE
(50000-60000 LEVEL)

DEPARTMENT: Electrical and Computer Engineering
EFFECTIVE SESSION: Spring 2015

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

1. New course with supporting documents (complete proposal form)
2. Add existing course offered at another campus
3. Expiration of a course
4. Change in course number
5. Change in course title
6. Change in course credit/grade
7. Change in course attributes
8. Change in instructional hours
9. Change in course description
10. Change in course requisites
11. Change in semesters offered
12. Transfer from one department to another

PROPOSED:
Subject Abbreviation: ECE
Course Number: 50863
Long Title: Computer Network Systems
Short Title: Computer Network Systems

EXISTING:
Subject Abbreviation: 
Course Number: 

TERMS OFFERED:
Check All That Apply:
- Fall
- Spring
- Summer

CAMPUS(ES) INVOLVED:
- Calumet
- Cont Ed
- Pl Wayne
- Indianapolis
- N. Central
- Tech Statewide
- W. Lafayette

CREDIT TYPE

1. Fixed Credit: Cr. Hrs.
   - 3.0

2. Variable Credit Range:
   - Minimum Cr. Hrs.
   - Maximum Cr. Hrs.

Equivalent Credit:
   - Yes
   - No

Thesis Credit:
   - Yes
   - No

Schedule Type
   - Lecture
   - Recitation
   - Presentation
   - Laboratory
   - Lab Prep
   - Studio
   - Distance
   - Clinic
   - Experiential
   - Research
   - Ind. Study
   - Pract/Observ

COURSE ATTRIBUTES:
Check All That Apply:
- Pass/Not Pass Only
- Satisfactory/Unsatisfactory Only
- Repeatable
- Maximum Repeatable Credit
- Credit by Examination
- 7. Variable Title
- 8. Honors
- 9. Full Time Privilege
- 10. Off Campus Experience

COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):
The goal of this course is to provide students with a proper grounding in the basic concepts and seminal work in computer network protocols and systems, and to introduce students to research in the field.
The course will cover classical concepts such as network architecture, switching, routing, congestion control, and quality of service, and discuss recent developments in these areas. The course will also cover new developments in networking such as network measurements, network management, overlay networking and peer-to-peer systems, network security, and new network architectures. The course will emphasize a system-exploited and empirical view of internet architecture. Graduate standing or consent of instructor, Professor Ruc.

COURSE LEARNING OUTCOMES:
1. An understanding of the architectural principles underlying the Internet design.
2. An understanding of LAN interconnects, routing algorithms and congestion control algorithms.
3. An ability to identify, formulate and solve problems encountered in the design of networks.
4. An ability to implement networking systems and demonstrate the use of systematic empirical methods.

RECEIVED
JAN 2 2 2016
OFFICE OF THE REGISTRAR

Calumet Department Head
Date
Calumet School Dean
Date
Calumet Director of Graduate Studies
Date

Fort Wayne Department Head
Date
Fort Wayne School Dean
Date
Fort Wayne Director of Graduate Studies
Date

Indianapolis Department Head
Date
Indianapolis School Dean
Date
IUPUI Associate Dean for Graduate Education
Date

North Central Department Head
Date
North Central School Dean
Date
North Central Director of Graduate Studies
Date

West Lafayette Department Head
Date
West Lafayette College/School Dean
Date

Graduate Area Committee Convener
Date
Graduate Dean
Date

APPROVED 1/21/16
Date Approved by Graduate Council
Date

Sue L. Payne
Graduate Council Chair
Date

West Lafayette Registrar
Date

OFFICE OF THE REGISTRAR