Course Change Request

Indiana University

Check Appropriate Boxes: Undergraduate credit [✓] Graduate credit [ ] Professional credit [ ]

1. School/Division: School of Engineering and Technology
2. Academic Subject Code: CIT
3. Current Course Number: 220
4. Current Credit Hours: 3
5. Current Title: Quantitative Analysis II
6. Effective Semester/Year for changes listed below: Spring 2008
7. Instructor:

Type of Change Requested (Check appropriate boxes and indicate changes)

☐ 8. Change course number to: ____________________________ (must be cleared with University Enrollment Services)

☐ 9. Current course title:
   Change to: ____________________________
   Recommended abbreviation (optional) ____________________________ (Limited to 32 Characters including spaces)

☐ 10. Current credit hours fixed at: ________________ or variable from: ________________ to ____________________________

☐ 11. Current lecture contact hours fixed at: ________________ or variable from: ________________ to ____________________________

☐ 12. Current non-lecture contact hours fixed at: ________________ or variable from: ________________ to ____________________________

☐ 13. Is this course currently graded with S-F (only) grades? Yes [✓] No [ ]

☐ 14. Does this course presently have variable title approval? Yes [✓] No [ ]

☐ 15. Is variable title approval being requested? Yes [✓] No [ ]

☐ 16. Current course description: P: CPT 120 or EET 105, Math 153. Continue investigation into problem-solving tools and techniques including functions and relations, Boolean algebra and switching theory, probability, statistical distributions (with emphasis on the normal and Poisson), and the use of appropriate software.

Change course description to (not to exceed 50 words) P: CPT 120 or ECET 109 or Math 153 or Math M118.

Continue investigation into problem-solving tools and techniques including functions and relations, Boolean algebra and switching theory, probability, statistical distributions (with emphasis on the normal and Poisson), and the use of appropriate software.

17. Justification for change: Realignment of prerequisites for other technology majors.

(Use additional paper if necessary)

☐ 18. Are the necessary reading materials currently available in the appropriate library? Yes [✓] No [ ]

19. A copy of every new course proposal must be submitted to departments, schools, or divisions in which there may be overlap of this course with existing courses or areas of strong concern, with instructions that they send comments directly to the originating Curriculum Committee. Please append a list of departments, schools, or divisions thus consulted.

Submitted by: ____________________________ Date 3/15/08

Department Chairman/Division Director

Approved by: ____________________________ Date 3/19/08

Dean

Dean of Graduate School (when required) ____________________________ Date ____________________________

Chancellor/Vice-President

University Enrollment Services

Date ____________________________

After School/Division approval, forward the last copy (without attachments) to University Enrollment Services for initial processing, and the remaining four copies and attachments to the Campus Chancellor or Vice-President.

UPS 725 University Enrollment Services Final—White; Chancellor/Vice-President—Blue; School/Division—Yellow; Department/Division—Pink; University Enrollment Services Advance—White
PURDUE SCHOOL OF ENGINEERING & TECHNOLOGY
COURSE OUTCOMES AND ASSESSMENT DATA SHEET

This is an internal document to identify and record expected outcomes and anticipated assessment strategies for all courses taught within the School of Engineering and Technology. Submission of this form, as noted below, is required and must accompany all new course and course change requests. Copies of this form should also be retained within the department and kept on file with the outline or syllabus for each course.

Course Number: 220 Course Title: QUANTITATIVE ANALYSIS II

Procedure:

1. First, identify all instructional outcomes expected for this course, and then select all ABET outcomes which are consistent with those anticipated objectives from TABLE 1 below.

TABLE 1 - ABET OUTCOMES

<table>
<thead>
<tr>
<th>#</th>
<th>TECHNOLOGY - TAC Criteria #1 (Proposed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Demonstrate an appropriate mastery of the knowledge, techniques, skills and modern tools of their discipline.</td>
</tr>
<tr>
<td>2</td>
<td>Apply current knowledge and adapt to emerging applications in mathematics, science, engineering and technology.</td>
</tr>
<tr>
<td>3</td>
<td>Conduct, analyze and interpret experiments and apply experimental results to improve processes.</td>
</tr>
<tr>
<td>4</td>
<td>Apply creativity in the design of systems, components or processes appropriate to program objectives.</td>
</tr>
<tr>
<td>5</td>
<td>Function effectively on teams.</td>
</tr>
<tr>
<td>6</td>
<td>Identify, analyze and solve technical problems.</td>
</tr>
<tr>
<td>7</td>
<td>Communicate effectively.</td>
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<tr>
<td>8</td>
<td>Recognize the need for and possess the ability to pursue lifelong learning.</td>
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<tr>
<td>9</td>
<td>Understand professional, ethical and societal responsibilities.</td>
</tr>
<tr>
<td>10</td>
<td>Recognize contemporary professional, societal and global issues and be aware of and respect diversity.</td>
</tr>
<tr>
<td>11</td>
<td>Have a commitment to quality, timeliness and continuous improvement.</td>
</tr>
</tbody>
</table>

2. Subsets for each of the six IUPUI Principles of Undergraduate Learning (PUL) are given on the reverse side in TABLE 2. Using a number corresponding to each ABET outcome identified from TABLE 1 above to select a column, place a “✓” or “X” mark in the applicable TABLE 2 row(s) cell for each PUL. Courses will often address multiple ABET outcomes and ABET outcomes frequently will overlap more than one PUL subset. Thus, it is expected completed data sheets may contain marks in several cells thereby indicating the course simultaneously satisfies multiple Principles of Undergraduate Learning while fulfilling its intended ABET objective(s).

3. After completing TABLE 2, briefly define or explain how the course outcomes or objectives will be evaluated within the context of the departmental assessment program in the space below:

Homework problems / exams

Submitted by: [Signature] Date: 2/11/05
### TABLE 2 - MATRIX OF EXPECTED COURSE OUTCOMES

(Suggestion - while completing Table 2, place a copy of the ABET outcomes from Table 1 along side for easy cross referencing.)

<table>
<thead>
<tr>
<th>PRINCIPLES OF UNDERGRADUATE LEARNING - &quot;Require All Students to Demonstrate An Ability to:&quot;</th>
<th>TECHNOLOGY OUTCOMES - TAC CRITERIA #1: items (a) to (k)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(a) - Express ideas and facts effectively in written formats</td>
<td>![X]</td>
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<tr>
<td>1(b) - Comprehend, interpret, and analyze texts</td>
<td>![X]</td>
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<td>1(c) - Communicate orally in one-on-one and group settings</td>
<td>![X]</td>
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<td>1(d) - Solve problems that are quantitative in nature</td>
<td>![X]</td>
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<tr>
<td>1(e) - Make efficient use-of information resources and technology for personal and professional needs</td>
<td>![X]</td>
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<tr>
<td>2(a) - Analyze complex issues and make informed decisions</td>
<td>![X]</td>
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<td>2(b) - Synthesize information in order to arrive at reasoned conclusions</td>
<td>![X]</td>
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<td>2(c) - Evaluate the logic, validity, and relevance of data</td>
<td>![X]</td>
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<tr>
<td>2(d) - Solve challenging problems</td>
<td>![X]</td>
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<td>3(a) - Apply knowledge to enhance personal lives</td>
<td>![X]</td>
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<tr>
<td>3(b) - Apply knowledge to meet professional standards and competencies</td>
<td>![X]</td>
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<tr>
<td>3(c) - Apply knowledge to further the goals of society</td>
<td>![X]</td>
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<tr>
<td>4(a) - Demonstrate substantial knowledge and understanding of at least one field of study</td>
<td>![X]</td>
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<tr>
<td>4(b) - Compare and contrast approaches to knowledge in different disciplines</td>
<td>![X]</td>
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<tr>
<td>4(c) - Modify their approach to an issue or problem based on the contexts and requirements of particular situations</td>
<td>![X]</td>
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<tr>
<td>5(a) - Compare and contrast the range of diversity and universality in human history, societies, and ways of life</td>
<td>![X]</td>
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<tr>
<td>5(b) - Analyze and understand the interconnectedness of global and local concerns</td>
<td>![X]</td>
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<td>5(c) - Operate with civility in a complex social world</td>
<td>![X]</td>
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<tr>
<td>6(a) - Make informed and principles choices regarding conflicting situations in their personal and public lives and to foresee the consequences of these choices</td>
<td>![X]</td>
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<tr>
<td>6(b) - Recognize the importance of aesthetics in their personal lives and to society</td>
<td>![X]</td>
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</tbody>
</table>
**PURDUE UNIVERSITY**
REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF AN UNDERGRADUATE COURSE

**DEPARTMENT:** Computer and Information Technology  
**EFFECTIVE SESSION:** Spring 2008

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

1. New course with supporting documents
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_type
7. Change in course attributes (department head signature only)
8. Change in instructional hours
9. Change in course description
10. Change in course requisites
11. Change in semesters offered (department head signature only)
12. Transfer from one department to another

### PROPOSED:

**Subject Abbreviation:** CIT  
**Course Number:** 220
**Long Title:**  
**Short Title:**

Abbreviated title will be entered by the Office of the Registrar if omitted. **(22 CHARACTERS ONLY)**

### TERMS OFFERED

Check All That Apply:
- [ ] Summer  
- [ ] Fall  
- [x] Spring

**CAMPUS(ES) INVOLVED**
- [ ] Calumet  
- [ ] Cont Ed  
- [ ] Ft. Wayne  
- [ ] Tech Statewide  
- [x] Indianapolis

### CREDIT TYPE

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<th>Lab Prep</th>
<th>Studio</th>
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### COURSE ATTRIBUTES:

Check All That Apply:
- [ ] Pass/Not Pass Only
- [x] Satisfactory/Unsatisfactory Only
- [ ] Repeatable
- [ ] Maximum Repeatable Credit
- [ ] Credit by Examination
- [ ] Designator Required
- [ ] Full Time Privilege
- [ ] Off Campus Experience

### COURSE DESCRIPTION (INCLUDE REQUISITES):

P: CIT 120 or ECET 109 or Math 153 or Math M118. Continue investigation into problem-solving tools and techniques including functions and relations, Boolean algebra and switching theory, probability, statistical distributions (with emphasis on the normal and Poisson), and the use of appropriate software.

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**Department Heads:***

Calumet Department Head
Date

Calumet School Dean
Date

Fort Wayne Department Head
Date

Fort Wayne School Dean
Date

Indianapolis Department Head
Date

Indianapolis School Dean
Date

North Central Department Head
Date

North Central Chancellor
Date

West Lafayette Department Head
Date

West Lafayette College/School Dean
Date

West Lafayette Registrar
Date

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OFFICE OF THE REGISTRAR