New Course Request

Check Appropriate Boxes: Undergraduate credit ☑ Graduate credit ☐ Professional credit ☐

1. School/Division School of Engineering and Technology
2. Academic Subject Code CNT
3. Course Number 125 (must be cleared with University Enrollment Services)
4. Instructor 
5. Course Title Construction Visualization
   Recommended Abbreviation (Optional) Constr Visualization
   (Limited to 32 Characters including spaces)
6. First time this course is to be offered (Semester/Year): Spring 2007
7. Credit Hours: Fixed at 3 or Variable from to 
8. Is this course to be graded S-F (only)? Yes ☑ No ☐
9. Is variable title approval being requested? Yes ☐ No ☑
10. Course description (not to exceed 50 words) for Bulletin publication: CNT 125 - Construction Visualization (3 cr.) Class 2, Lab 2. Introduction to extraction & interpretation of information from construction documents as they relate to diverse types of construction projects including heavy civil, highways, utilities, water, storm-water and sewer construction, other infrastructure construction and buildings. Lab work including blueprint reading, plots, construction symbols interpretation for diverse undertakings.

11. Lecture Contact Hours: Fixed at 2 or Variable from to 
12. Non-Lecture Contact Hours: Fixed at 2 or Variable from to 
13. Estimated enrollment: 30 of which 0 percent are expected to be graduate students.
14. Frequency of scheduling: Fall, Spring, Sum Will this course be required for majors? Yes
15. Justification for new course: Course developed to address current construction industry demands for CM majors.
16. Are the necessary reading materials currently available in the appropriate library? Yes
17. Please append a complete outline of the proposed course, and indicate instructor (if known), textbooks, and other materials.
18. If this course overlaps with existing courses, please explain with which courses it overlaps and whether this overlap is necessary, desirable, or unimportant.
19. A copy of every new course proposal must be submitted to departments, schools, or divisions in which there may be overlap of the new 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: 

[Signature] Date 9/17/06
Department Chairman/Director

[Signature] Date
Dean of Graduate School (when required)

Approved by: 

[Signature] Date 10/18/06
Dean

[Signature] Date
Chancellor/Vice-President

[Signature] Date
University Enrollment Services

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 724
University Enrollment Services Final—White; Chancellor/Vice-President—Blue; School/Division—Yellow; Department/Division—Pink; University Enrollment Services Advance—White
Course Description: Introduction to extraction and interpretation of information from construction documents (i.e., construction and shop drawings, plots, etc) as it relates to diverse types of construction projects including heavy civil engineering construction, highways, utilities; water, storm-water, and sewer construction; other infrastructure construction and buildings. Lab work related to blue print reading, construction symbols interpretation for diverse construction undertakings, and plots.

Prerequisite: none required

Instructor:

Post Class Help: Posted office hours or by appointment, ET 314G

Time/Day/Location:

Required Textbook:
Course Pak as developed by Instructor and avail from the Bookstore

References:

Student Responsibilities: Students in this class have the responsibility to take appropriate advantage of the educational opportunities presented by the university, to participate in the learning process in a serious and conscientious manner, and to respect the rights of other members of the university community with regard to academic affairs. Students and Instructors will abide by the IU Code of conduct in terms of cheating, plagiarism and disruptive conduct as described at the following web site, [http://life.iupui.edu/help/code](http://life.iupui.edu/help/code) see student misconduct, and academic misconduct.

Course Objectives: Upon completion of this course, students will be able to:

1. Identify the location and purpose of the components of contract documents
2. Recognize the graphic symbols common to civil, structural, architectural, mechanical and electrical construction work
3. Understand visually communicated project requirements, construction specifications and submittal information
4. Interpret project documents for highway and road construction
5. Understand the basic geometry and components of drainage systems for highways and road construction
6. Understand the basic geometry of the components in the construction of water distribution and sewer systems
7. Utilize electronic means to review and manipulate existing drawings
8. Prepare comprehensive site utilization layouts for construction projects

IUPUI Principles of Undergraduate Learning:
Upon successful completion of this course students must show:
1. Core Communication and Quantitative Skills

ABET Objectives:
(a) Demonstrate an appropriate mastery of the knowledge, skills and modern tools of their disciplines.
(b) Teamwork

Preparation of assignments and semester project: Lab time will be provided for students to complete team work.

Grading:
The semester grade will be determined as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Class participation and attendance</td>
<td>10%</td>
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<tr>
<td>Homework assignments</td>
<td>10%</td>
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<td>Term Project</td>
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<tr>
<td>Midterm Exam</td>
<td>30%</td>
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<tr>
<td>Final Exam</td>
<td>30%</td>
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<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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</table>
Attendance Policy: It is to your benefit to be prepared for and attend class...because the professor will be providing information of added value to your ability to learn in this class, and which will not be re-taught to those who choose not to attend, and occasionally the assignments will be for in class work. 20% of the final grade in this class will be directly allocated to assignments/attendance, but more importantly graded projects will reflect your knowledge and skills as gained thru attendance and observation of in class demonstrations and critiques. Missed assignments can not be made up.

Schedule of Topics

Week 1  Introduction to Communication in Construction Industry
         Overview Project development process, players and products

Week 2  The Project Manual and Organization of Construction Documents

Week 3  Architectural and Engineering Drawings and Documentation including Symbols

Week 4  Specialty Systems Mechanical, Electrical Systems and Symbols

Week 5  Submittals and Field Drawings and As-Builts

Week 6  Geometric Representations and Orthographic Projections

Week 6  Fabrication and Shop Drawings

Week 8  Construction Administration- Decisions and Communication during

Week 9  Review and Midterm Exam

Week 10  Spring Break

Week 11  Electronic review and distribution of Construction Documents

Week 12  Construction Site Utilization and Layouts

Week 13  Roads and Highways Systems

Week 14  Roads and Highways Drainage Systems

Week 15  Water Distribution and Sanitary Systems

Week 16  Review and Help Sessions

Finals  Final Test
DATE: October 11, 2006

TO: Thomas May
    Associate Registrar

FROM: William Conrad
      Interim Associate Dean, Undergraduate Programs

SUBJECT: New Courses and Course Changes

Attached are the following courses for the next remonstrance:

   CNT 120 - delete
   CNT 125 - new course
   CNT 215 - new course

Please call Betty Klein @ 274-0815 if you have any questions.

Thank you.

[Handwritten note: Not processed. Waiting on approval form.]

[Handwritten note: From AWL]
**PURDUE UNIVERSITY**

**REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF A COURSE**

**DEPARTMENT** of CONSTRUCTION TECHNOLOGY

**EFFECTIVE SESSION** SPRING 2007

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

- [x] New course with supporting documents
- [ ] Add existing course
- [ ] Expiration of a course
- [ ] Change in course title
- [ ] Change in course number
- [ ] Change in course credit type
- [ ] Change in course attributes
- [ ] Change in instructional hours
- [ ] Change in course description
- [ ] Change in course requisites
- [ ] Change in semesters offered
- [ ] Transfer from one department to another

### PROPOSED

<table>
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<th>Subject Abbreviation</th>
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<table>
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<tbody>
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<table>
<thead>
<tr>
<th>Long Title</th>
<th>Short Title</th>
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<tr>
<td>CONSTRUCTION VISUALIZATION</td>
<td>Constr Visualization</td>
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Abbreviated title will be entered by the Office of the Registrar if omitted. (22 characters only)

### CREDIT TYPE

1. Fixed Credit: Cr. Hrs.
   - [ ] 3

2. Variable Credit Range
   - [ ] Minimum Cr. Hrs.
     - [ ] 0
   - [ ] Maximum Cr. Hrs.
     - [ ] 0

3. Equivalency Credit
   - [ ] Yes
   - [ ] No
   - [ ] No

4. Thesis Credit
   - [ ] Yes
   - [ ] No
   - [ ] No

5. Special Fees
   - [ ] Yes

### COURSE DESCRIPTION (INCLUDE REQUISITES):

CNT 125 Construction Visualization (3 cr.) Class 2+ Lab 2.

Introduction to extraction and interpretation of information from construction documents as they relate to diverse types of construction projects including heavy civil, highways, utilities, water, storm-water and sewer construction, other infrastructure construction and buildings. Lab work including blue print reading, plots, and construction symbols interpretation for diverse undertakings.

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**TERMS OFFERED** Check All That Apply:

- [x] Summer
- [ ] Fall
- [x] Spring

**CAMPUS(ES) INVOLVED**

- Calumet
- Indianapolis
- W. Lafayette
- Tech Statewide

**Instructional Type**

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<th>Meetings Per Week</th>
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<th>% of Credit Allocated</th>
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<th>Delivery Medium (Audio, Internet, Live, Text-Based, Video)</th>
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**Cross-Listed Courses**

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**OFFICE OF THE REGISTRAR**