

**New Course Request**

**Indiana University**

IUPUI

Campus

Check Appropriate Boxes:

Undergraduate credit

Graduate credit

Professional credit

1. School/Division Engineering and Technology 2. Academic Subject Code \_\_\_\_\_

3. Course Number TECH104 (must be cleared with University Enrollment Services) 4. Instructor D. Acheson

5. Course Title Technical Graphics Communications

Recommended Abbreviation (Optional) Tech Graphics Com

(Limited to 32 Characters including spaces)

6. First time this course is to be offered (Semester/Year): Fall 2008

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: \_\_\_\_\_

An introduction to the graphic language used to communicate design ideas using CAD.

Topics include sketching, multiview drawings, auxiliary views, section views,

pictorial views and dimensioning practices as well as an introduction to

three-dimensional modeling, lighting and rendering.

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: Summer/Fall/Spring Will this course be required for majors? Yes

15. Justification for new course: To serve the programs within the newly-formed Engineering Technology Department.

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:

Richard E Pfeil Date 11/2/07  
Department Chairman/Division Director

Approved by:

Willie Quail Date 12/11/07  
Dean

\_\_\_\_\_  
Date \_\_\_\_\_  
Dean of Graduate School (when required)

\_\_\_\_\_  
Date \_\_\_\_\_  
Chancellor/Vice-President

\_\_\_\_\_  
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.

**COURSE DESCRIPTION**

Revised: 21 - November 2007

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**Course:** **TECH 104 – Technical Graphics Communications**

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**Catalog Data:** 2 Lecture Hours                      2 Lab Hrs.                      3 Credit Hours  
Prerequisites: None

This course is an introduction to the graphic language used to communicate design ideas using CAD. Topics include: sketching, multiview drawings, auxiliary views, pictorial views, working drawings, dimensioning practices and section views.

**Offerings:** Fall / Spring / Summer**Textbooks:** Technical Graphics Communication, Bertoline et al, 2008.  
McGraw-Hill Publishing  
AutoCAD 2008 Instructor, James A. Leach, 2008. McGraw - Hill**Other Required Material** Mechanical pencil: .5mm, H or HB lead w / Eraser  
(1) Flash Drive**Course Coordinator:** Doug Acheson, Associate Professor of Mechanical Engineering Technology

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**Learning Objectives**

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1. Create sketches of technical ideas and problem solutions.
2. Create orthographic views of 3 dimensional objects.
3. Create pictorial drawings of 3 dimensional objects.
4. Extract section & auxiliary views from primary views.
5. Add dimensions and tolerances using standard practices.
6. Use AutoCAD to generate two-dimensional engineering drawings.
7. Gain general understanding of 3D modeling in AutoCAD.

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**Tech 104 - Tentative Course Outline**

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Week 1	Engineering Graphics Overview
Week 2	Sketching, Text, and Visualization
Week 3	Multiview Drawings
Week 4	Multiview Drawings – Continued
Week 5	Auxiliary View Drawings
Week 6	Section View Drawings
Week 7	Dimensioning
Week 8	Midterm Exam
Week 9	Tolerancing Practices
Week 10	Working Drawings
Week 11	Pictorial Drawings
Week 12	3D Modeling Basics
Week 13	Solid Modeling
Week 14	Solid Features
Week 15	Advanced Solid Features
Week 16	Final Exam

Prepared by: Douglas C. Acheson Date November 21, 2007

**PURDUE UNIVERSITY**  
REQUEST FOR ADDITION, EXPIRATION,  
OR REVISION OF AN UNDERGRADUATE COURSE  
(100-400 LEVEL)

DEPARTMENT Engineering Technology EFFECTIVE SESSION Fall 2008

- INSTRUCTIONS: Please check the items below which describe the purpose of this request.
- |   |   |
|---|---|
| <input checked="" type="checkbox"/> 1. New course with supporting documents | <input type="checkbox"/> 7. Change in course attributes (department head signature only)  |
| <input type="checkbox"/> 2. Add existing course offered at another campus   | <input type="checkbox"/> 8. Change in instructional hours                                 |
| <input type="checkbox"/> 3. Expiration of a course                          | <input type="checkbox"/> 9. Change in course description                                  |
| <input type="checkbox"/> 4. Change in course number                         | <input type="checkbox"/> 10. Change in course requisites                                  |
| <input type="checkbox"/> 5. Change in course title                          | <input type="checkbox"/> 11. Change in semesters offered (department head signature only) |
| <input type="checkbox"/> 6. Change in course credit/type                    | <input type="checkbox"/> 12. Transfer from one department to another                      |

<b>PROPOSED:</b>		<b>EXISTING:</b>		<b>TERMS OFFERED</b> Check All That Apply:		
Subject Abbreviation	<u>TECH</u>	Subject Abbreviation		<input checked="" type="checkbox"/> Summer	<input checked="" type="checkbox"/> Fall	<input checked="" type="checkbox"/> Spring
Course Number	<u>104</u>	Course Number		<b>CAMPUS(ES) INVOLVED</b>		
Long Title	<u>Technical Graphics Communications</u>			<input type="checkbox"/> Calumet	<input type="checkbox"/> N. Central	
Short Title	<u>Tech Graphics Com</u>			<input type="checkbox"/> Cont Ed	<input type="checkbox"/> Tech Statewide	
Abbreviated title will be entered by the Office of the Registrar if omitted. (22 CHARACTERS ONLY)				<input type="checkbox"/> Ft. Wayne	<input type="checkbox"/> W. Lafayette	
				<input checked="" type="checkbox"/> Indianapolis		

<b>CREDIT TYPE</b>		<b>COURSE ATTRIBUTES: Check All That Apply</b>				
1. Fixed Credit: Cr. Hrs.	<u>3</u>	<input type="checkbox"/> 1. Pass/Not Pass Only	<input type="checkbox"/> 7. Registration Approval Type	Department <input type="checkbox"/> Instructor <input type="checkbox"/>		
2. Variable Credit Range:		<input type="checkbox"/> 2. Satisfactory/Unsatisfactory Only	<input type="checkbox"/> 8. Variable Title			
Minimum Cr. Hrs		<input type="checkbox"/> 3. Repeatable	<input type="checkbox"/> 9. Remedial			
(Check One) To <input type="checkbox"/> Or <input type="checkbox"/>		Maximum Repeatable Credit: <input type="checkbox"/>	<input checked="" type="checkbox"/> 10. Honors			
Maximum Cr. Hrs		<input type="checkbox"/> 4. Credit by Examination	<input type="checkbox"/> 11. Full Time Privilege			
3. Equivalent Credit: Yes <input type="checkbox"/> No <input type="checkbox"/>		<input type="checkbox"/> 5. Designator Required	<input type="checkbox"/> 12. Off Campus Experience			
4. Thesis Credit: Yes <input type="checkbox"/> No <input type="checkbox"/>		<input type="checkbox"/> 6. Special Fees				

Instructional Type	Minutes Per Mtg	Meetings Per Week	Weeks Offered	% of Credit Allocated	Delivery Method (Asyn. Or Syn.)	Delivery Medium (Audio, Internet, Live, Text-Based, Video)	Cross-Listed Courses
Lecture	X	50	2	16	Syn.	Live	
Recitation							
Presentation							
Laboratory	X	100	1	16	Syn.	Live	
Lab Prep							
Studio							
Distance							
Clinic							
Experiential							
Research							
Ind. Study							
Pract/Observ							

**COURSE DESCRIPTION (INCLUDE REQUISITES):**  
This course is an introduction to the graphic language used to communicate design ideas using CAD. Topics include: sketching, multiview drawings, auxiliary views, section views, pictorial views and dimensioning practices as well as an introduction to three-dimensional modeling, lighting and rendering.

Calumet Department Head	Date	Calumet School Dean	Date
Fort Wayne Department Head	Date	Fort Wayne School Dean	Date
<i>Richard E. Pfeil</i>	<i>11/3/07</i>	<i>William A. ...</i>	<i>11/3/07</i>
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