

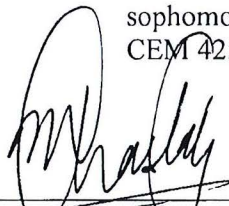
**TO:** The Faculty of the College of Engineering  
**FROM:** The Faculty of the Division of Construction Engineering and Management  
**RE:** New Course - CEM 38000 Construction Engineering  
Professional Development II

The faculty of the Division of Construction Engineering and Management has approved the following new course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

**Course no.** CEM 38000 Construction Engineering Professional Development II  
Semester 1, Lab 1, Cr. 1  
Prerequisite: CEM 28000, CEM 19100, CEM 29100

**Description:** CEM 38000 will build upon the topics discussed in CEM 28000 to further prepare students for their work in the construction industry. A focus of this class will be on presentation skills. By integrating with the CEM 42500 Construction Practice Project course, the students of CEM 38000 will have the opportunity to present and also participate as an audience and active participant in CEM 42500 Construction Practice Project. The presentations of CEM 38000 will consist of their required Summer Internship Reports, which are a compilation of the work they have completed and skills they have learned in their first two internships (CEM 19100 and CEM 29100).

**Reason:** The Construction Engineering and Management Faculty have concluded that there is a need to improve documentation and presentation skills of the students. With the rollout of a new Summer Internship Report format, a class that can provide feedback on these documents as well as give opportunities for presenting will be a valuable addition to the curriculum. CEM 38000 will provide both a written and oral based communication CEM class that will build upon the sophomore level CEM 28000 class and provide preparation for the senior level CEM 42500 Construction Practice Project.



Makrand Hasfak, Ph.D., PE, CCP  
Professor and Head of Construction Engineering and Management  
Professor of Civil Engineering

APPROVED FOR THE FACULTY  
OF THE SCHOOLS OF ENGINEERING  
BY THE ENGINEERING  
CURRICULUM COMMITTEE

ECC Minutes 4/29/14

Date 4/29/14

Chairman ECC Jerry L. King

## **CEM 38000 Construction Engineering Professional Development II**

**Description:** CEM 38000 will build upon the topics discussed in CEM 28000 to further prepare students for their work in the construction industry. A focus of this class will be on presentation skills. By utilizing the first or last hour of CEM 42500- Construction Practice Project, the students of CEM 38000 will have the opportunity to present and also participate as an audience and active participant in CEM 42500 Construction Practice Project. The presentations of CEM 38000 will consist of their required Summer Internship Reports, which are a compilation of the work they have completed and skills they have learned in their first two internships (CEM 19100 and CEM 29100).

**Objectives:** CEM 38000 will provide the student with content to support their successful professional advancement and sustained interest in construction engineering. More specifically:

- a. Students will demonstrate an ability to apply knowledge of mathematics, science and engineering.
- b. Students will demonstrate an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- c. Students will demonstrate an ability to identify, formulate, and solve engineering problems.
- d. Students will demonstrate an understanding of professional and ethical responsibility.
- e. Student will demonstrate an ability to communicate effectively.
- f. Students will demonstrate the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- g. Students will demonstrate a recognition of the need for, and an ability to engage in life-long learning.
- h. Students will demonstrate a knowledge of contemporary issues.

**Required Text:** None

**Recommended References:** TBD

**Schedule (Tentative):**

Week	Topic
1	Introduction
2	Elevator Pitch
3	Mock Career Fair
4	Interviews and Resume Workshop
5	CEM 42500 Presentation Reviews – Short-list Interview
6	GEP and EPICS Support
7	Portfolio Review
8	CEM 42500 Negotiations – Hiring Process
9	Professional and Ethical Responsibility
10	GEP and EPICS Support
11	Global Engineering Investigation
12	Life-long Learning
13	Contemporary Issues
14	Impromptu Public Speaking
15	GEP and EPICS Support
16	CEM 42500 Presentation Reviews – Executive Team Review of Bid Documentation
17	Finals Week

**Grading:**

- a. 50% - Attendance based.
  - i. Attendance in CEM 38000 is mandatory. A class roster is circulated at each class session for student sign-up. More than two unexcused absences will result in the student receiving an unsatisfactory grade for the course. Sleeping in class, reading the newspaper, utilizing electronic devices except to take notes or doing homework will be counted as an unexcused absence.
  
- b. 50% - Oral and/or written communication assignments will be administered.
  - i. The content of the course has been enhanced to introduce an oral and written communication requirement. This provides students greater exposure and practice in understanding issues in the Construction Industry. The assignments will be collected and graded.
  
- c. Final grades will be defined as:
 

i. A+ (100-97)	A (96.9-94)	A- (93.9-90)
ii. B+ (89.9-87)	B (86.9-84)	B- (83.9-80)
iii. C+ (79.9-77)	C (76.9-74)	C- (73.9-70)
iv. D+ (69.9-67)	D (66.9-64)	D- (63.9-60)
v. F (59.9 or less)		

PURDUE UNIVERSITY  
REQUEST FOR ADDITION, EXPIRATION,  
OR REVISION OF AN UNDERGRADUATE COURSE  
(10000-40000 LEVEL)

CEM 38000

EFD 44-14

201520

DEPARTMENT Construction Engineering and Management EFFECTIVE SESSION Spring 2015 (201520)

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

PROPOSED: Subject Abbreviation CEM Course Number 38000 Long Title Construction Engineering Professional Development II Short Title CEM Prof. Development II

EXISTING: Subject Abbreviation \_\_\_\_\_ Course Number \_\_\_\_\_

TERMS OFFERED: Check All That Apply:  Summer  Fall  Spring

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

Abbreviated title will be entered by the Office of the Registrar if omitted. (30 CHARACTERS ONLY)

CREDIT TYPE: 1. Fixed Credit: Cr. Hrs. 1 2. Variable Credit Range: Minimum Cr. Hrs. \_\_\_\_\_ Maximum Cr. Hrs. \_\_\_\_\_ (Check One) To  Or  3. Equivalent Credit: Yes  No

COURSE ATTRIBUTES: Check All That Apply: 1. Pass/Not Pass Only  2. Satisfactory/Unsatisfactory Only  3. Repeatable  4. Credit by Examination  5. Fees  Coop  Lat  Rate Request  6. Registration Approval Type  Department  Instructor  7. Variable Title  8. Honors  9. Full Time Privilege  10. Off Campus Experience

Schedule Type	Minutes Per Mtg	Meetings Per Week	Weeks Offered	% of Credit Allocated
Lecture				
Recitation				
Presentation				
Laboratory	160	1	16	100
Lab Prep				
Studio				
Distance				
Clinic				
Experiential				
Research				
Ind. Study				
Pract/Observ				

Cross-Listed Courses

RECEIVED

APR 29 2014

OFFICE OF THE REGISTRAR

COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):  
CEM 38000 will build upon the topics discussed in CEM 28000 to further prepare students for their work in the construction industry. A focus of this class will be on presentation skills. By integrating with the CEM 42500 Construction Practice Project course, the students of CEM 38000 will have the opportunity to present and also participate as an audience and active participant in CEM 42500 Construction Practice Project. The presentations of CEM 38000 will consist of their required Summer Internship Reports, which are a compilation of the work they have completed and skills they have learned in their first two internships (CEM 19100 and CEM 29100). Prerequisite: CEM 28000, CEM 19100, CEM 29100.

\*COURSE LEARNING OUTCOMES  
CEM 38000 will provide the student with content to support their successful professional advancement and sustained interest in construction engineering. More specifically:  
a. Students will demonstrate an ability to apply knowledge of mathematics, science and engineering. b. Students will demonstrate an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability. c. Students will demonstrate an ability to identify, formulate, and solve engineering problems. d. Students will demonstrate an understanding of professional and ethical responsibility. e. Student will demonstrate an ability to communicate effectively. f. Students will demonstrate the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context. g. Students will demonstrate a recognition of the need for, and an ability to engage in life-long learning. h. Students will demonstrate a knowledge of contemporary issues.

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 Faculty Senate Chair _____	Date _____	Vice Chancellor for Academic Affairs _____	Date _____
West Lafayette Department Head _____	Date <u>3/24/14</u>	West Lafayette College School Dean _____	Date <u>4/29/14</u>
		West Lafayette Registrar _____	Date <u>8/20/2014</u>

OFFICE OF THE REGISTRAR

LAM 7/15/14