

# PYRAMID PRESS

ASHRAE – Memphis Chapter  
[www.angelfire.com/tn/ashrae/](http://www.angelfire.com/tn/ashrae/)

December, 2004

**HOLIDAY DINNER PARTY, 7:00 P.M.  
MONDAY, DECEMBER 06, 2004 at  
LULU'S GRILL, 565 ERIN DRIVE**

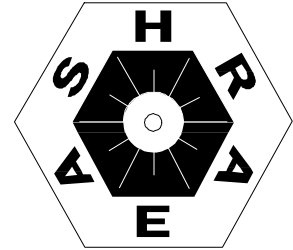
Happy Holidays to everyone! I hope to see you all at the annual Holiday Party on Monday, 6 December, at LuLu's Grille on Erin Drive. Jimmy Fleck has done an excellent job of making the arrangements. Make sure to thank Jimmy for his hard work.

During this holiday season we need to remember those serving in far away lands. I do not mean just military personnel. Engineers, contractors, and facility maintenance people just like us are serving as civilians in Afghanistan and Iraq. Many of these men and women are ASHRAE members. They are putting their knowledge and experience in the fields of HVAC, refrigeration, construction, automatic control systems, indoor air quality, efficient use of energy, security, etc. to use in bringing these nations out of their old cultures of war lords and dictators and into a 21st century culture of individual freedom and opportunity. As we already know, and they are learning, comfortable, secure, and efficient facilities in which to learn and work and govern are essential to becoming a modern society. There are various programs for sending phone cards, care packages, and other holiday gifts from home to those serving in the Afghanistan and Iraq theaters of operation. I would encourage all of you to find one of these programs you like and contribute.

I wish you all a Merry Christmas and a Happy New Year!

One final word.... If your version of holiday celebrating involves alcohol, please drink responsibly. Do not drive under the influence. The accident you cause could ruin someone else's holidays forever.

Jeff



## Memphis Chapter Contacts

**PRESIDENT:**

Jeff Gatlin: 452-2500  
Fax: 452-2530

**PRESIDENT ELECT:**

Evans Jack: 324-6610  
Fax: 324-6612

**V. PRES. - PROGRAMS**

Stephanie Cianciola 820-0820  
Fax: 683-1001

**SECRETARY:**

John Colmer: 761-0885  
Fax: 761-2943

**TREASURER:**

James Prillaman: 452-6283  
Fax 458-9640

**MEMBERSHIP:**

Jason Snyder: 683-3900  
Fax: 683-3990

**NEWSLETTER:**

Denver Glazier: 432-3348  
Fax: 396-4864



## **FUTURE PROGRAMS**

### **December 2004**

- ***Christmas Party***

### **January 11, 2005**

- ***11:30 a.m. – 1:00 p.m. Chapter Meeting*** – Topic TBA.
- Location: Christian Brothers University, East Lounge Thomas Center

### **February 08, 2005**

- ***11:30 a.m. – 1:00 p.m. Chapter Meeting*** – “Professional License Rules and Regulations” – Barbara Bowling
- Location: CBU, Montesi Conference Center

### **March 08, 2005**

- ***11:30 a.m. – 1:00 p.m. Chapter Meeting*** – “Fire Damper Design and Application”
- Location: CBU, Montesi Conference Center

### **April 12, 2005**

- ***11:30 a.m. – 1:00 p.m. Chapter Meeting*** – “Tennessee Energy Loan Program”
- Location: CBU, Montesi Conference Center

### **May 10, 2005**

- ***11:30 a.m. – 1:00 p.m. Chapter Meeting*** – “Proper Treatment of Outside Air” – Nick DesChamps
- Location: CBU, Montesi Conference Center

## **Notices**

**Spring Resource Promotion meeting is set for March 10, 2005.**

# REGISTRATION FORM • F.E. REVIEW

Name _____ <small>Last First M.I.</small>	Amount Enclosed \$ _____
Affiliation _____	<b>CREDIT CARD INFORMATION</b>
Address _____	CARD NUMBER _____
City _____ State _____ Zip _____	NAME ON CARD _____
Phone _____ Fax _____	EXPIRATION DATE ____ / ____ CCID _____
Email _____	SIGNATURE _____

## REGISTRATION

Please fill in the registration form.

- ▶ If you pay by check, please enclose a \$250 check (made payable to Christian Brothers University) along with your registration form to:  
**School of Engineering  
FE Review  
Christian Brothers University  
650 East Parkway South  
Memphis, TN 38104**
- ▶ If you pay by credit card, please enter the credit card information on the registration form. For your protection, we ask that you enter the CCID number in the space provided. This is the extra 3-4 digit number, usually on the back of the credit card. Fax the registration form to (901) 321-3402 or mail it to the above address.

REGISTRATION DEADLINE:  
**January 15, 2005**

### CONTACT INFORMATION

**Siripong Malasri, Ph.D., P.E.**  
Dean of Engineering  
pong@cbu.edu or 901-321-3419

Christian Brothers University

650 East Parkway South  
Memphis, TN 38104  
Phone 901-321-3405  
Fax 901-321-3402



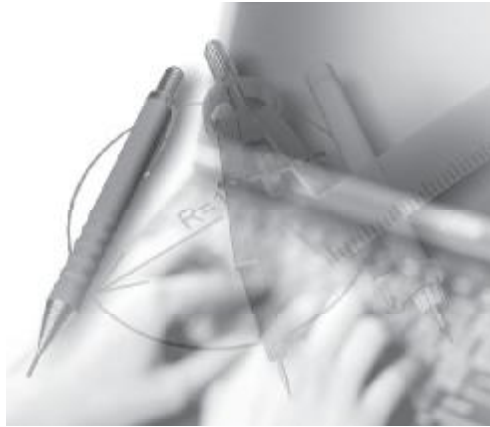
**FUNDAMENTALS  
OF ENGINEERING**

**REVIEW**

Christian  
Brothers  
University

SCHOOL OF ENGINEERING

## DEAR FELLOW ENGINEERS:



The School of Engineering at Christian Brothers University recognizes the importance of being a registered professional engineer. We encourage our engineering students to become registered professional engineers. We offer the FE Review for our seniors every spring. Recently, we offered a Civil Engineering Review. We also provide a continuing education opportunity for registered PE's through our one-day MAESC Conference ([www.cbu.edu/engineering/maesc](http://www.cbu.edu/engineering/maesc)). We would like to extend our annual FE Review to engineers. We hope you can take advantage of this excellent program.

Sincerely,

Siripong Malasri, P.E.  
Dean of Engineering

More details can be found at  
[www.cbu.edu/engineering](http://www.cbu.edu/engineering)

## BECOMING A P.E.

To become a registered professional engineer in Tennessee, one must meet the following education and experience requirements:

- ▶ An ABET accredited undergraduate engineering degree or a substantial equivalent.
- ▶ A minimum of four years of progressive engineering experience with an Engineer Intern Certification or a minimum of twelve years of progressive engineering experience without an Engineer Intern Certification.
- ▶ A passing score on the Principles and Practice of Engineering Examination.

FOR MORE INFORMATION about becoming a registered professional engineer in Tennessee, please check the website at:

[www.state.tn.us/commerce/boards/ae/index.html](http://www.state.tn.us/commerce/boards/ae/index.html)



The School of Engineering at CBU will offer:

## FUNDAMENTALS OF ENGINEERING REVIEW

Mondays & Wednesdays

6:00 – 8:00 p.m.

February 21– April 11, 2005

Cost: \$250/person

The cost will cover 20+ hours of review time. Sessions include mathematics, chemistry, statics, mechanics of materials, dynamics, electrical circuits, thermodynamics, material science, fluid mechanics, ethics, and economics.

## REVIEW TEXTBOOK:

We will use the *FE Review Manual* by Michael R. Lindburg, P.E. You can purchase the book with a discount from our website at [www.cbu.edu/engineering/fe\\_exam.html](http://www.cbu.edu/engineering/fe_exam.html)



## INSTRUCTORS:

All review sessions will be given by CBU engineering and science professors.

## CHRISTIAN BROTHERS UNIVERSITY SCHOOL OF ENGINEERING



**CHRISTIAN BROTHERS UNIVERSITY** offers undergraduate engineering programs in the four foundation disciplines of chemical, civil, electrical, and mechanical engineering.

Each curriculum is sufficiently flexible to permit a student to tailor a course of study for entry into the engineering profession immediately or for continued study in graduate school. While most graduates remain in the engineering profession, a significant number use their engineering background as a foundation for professional careers in law, medicine, business, education, science, and other fields.

The chemical, civil, electrical, and mechanical engineering degree programs are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD, 21202-4012, 410.347.7700. The school also offers a minor in computer engineering and certificates in packaging engineering, engineering entrepreneurship, construction management, and information technology.

The Master of Engineering Management program builds upon the bachelor's degree preparation in several engineering disciplines as well as other technical fields, such as physics, chemistry, and quantitative management. The purpose of the program is to prepare men and women to successfully address supervisory and managerial needs in a technical environment. The role of the engineering manager is viewed as the link between management and technical expertise and involves matching or managing resources in cross-functional or uncoordinated areas, working through people, and simultaneously formulating technical strategies for the success and survival of the enterprise.

## CONTACT INFORMATION

### **Gene McGinnis, P.E.**

Chair, Civil & Environmental Engineering  
Department  
Coordinator, Construction Management  
Certificate  
gmcginni@cbu.edu  
901-321-3279

### **Siripong Malasri, Ph.D., P.E.**

Dean  
School of Engineering  
pong@cbu.edu  
901-321-3419

## CIVIL & ENVIRONMENTAL ENGINEERING ADVISORY BOARD

### **Jeff Arnold**

Fisher & Arnold Engineers, Inc.

### **Eric Barnhart**

Barnhart Crane & Rigging Co.

### **Bruce Burr**

Burr & Cole Consulting Engineers, Inc.

### **James Frazier**

Cline Frazier, Inc.

### **Connie Hess**

Hess Environmental Services, Inc.

### **Harry Pratt**

Allen & Hoshall Engineers

### **John Jernigan**

Ellers, Oakley, Chester & Rike, Inc.

### **Dewey Jones**

Jones Davis Engineering

## Christian Brothers University

650 East Parkway South  
Memphis, TN 38104  
Phone 901-321-3405  
Fax 901-321-3402  
[www.cbu.edu/engineering](http://www.cbu.edu/engineering)

# CONSTRUCTION MANAGEMENT



# CERTIFICATE

Christian  
Brothers  
University

SCHOOL OF ENGINEERING

## CONSTRUCTION MANAGEMENT



Construction Management involves the application of engineering and management principles to a wide variety of issues involving construction material handling, equipment selection, adherence to specifications, planning and scheduling, estimating and cost control, quality control, labor productivity, inspection, environmental concerns, safety and contract administration. A Construction Manager must also have the computer skills necessary to address these issues.

The Construction Management Certificate is designed for individuals who would like to possess the proper skills to succeed in the construction profession. The curriculum is designed to prepare individuals for the art of achieving maximum profit through the effective use of human resources, equipment, materials and financial resources to complete a construction project on time and to the satisfaction of the owner. Individuals completing the certificate will have an understanding of management's point of view in the construction industry.

If you want to improve your construction management skills, meet your PE's continuing education requirement, or to expand your career possibilities, this certificate might be for you!

Call the Christian Brothers University School of Engineering at (901) 321-3405 for more information.

More details can be found at  
<http://www.cbu.edu/engineering>

## CONSTRUCTION MANAGEMENT @ CHRISTIAN BROTHERS UNIVERSITY

### Requirements for Construction Management Certificate:

- ▶ CE 314 Engineering Economy (3 crs.)
- ▶ Electives (6 crs.)
- ▶ Project or Internship (3 crs.)

Project and Internship must be approved by civil engineering faculty.

### Approved Electives:

- ▶ CE 345 Planning and Scheduling (3 crs.)
- ▶ CE 350 Construction Estimating and Cost Control (3 crs.)
- ▶ CE 420 Contracts and Specifications (3 crs.)
- ▶ CE 425 Heavy Construction Equipment and Methods (3 crs.)

Transfer of credit for the elective requirement is also possible. Pre-and/or co-requisite requirements for each course taken must be met or approved by civil engineering faculty. Work experience approved by the department can be substituted for the pre-and/or co-requisite requirements. Requirements to receive the Construction Management Certificate are: all courses taken must be passed, and overall grade must be at least a 2.0 on a 0-4.0 grading scale.



## KEY COURSES

### CE 314 ENGINEERING ECONOMY

Fundamentals of engineering economy. Cost concepts. Time value of money and equivalence. Economic analysis of alternatives. Replacement analysis. Depreciation and after-tax analysis. Effects of inflation on economic analysis. (3 crs.) Prerequisite: Junior standing or permission of instructor

### CE 345 PLANNING AND SCHEDULING

Various methods of scheduling will be presented including CPM, PPM, PERT, and LSM. Discussion of issues relating to activity duration, contractual considerations, time cost tradeoff, schedule monitoring/updating and integration of schedule and cost. Computer applications. (3 crs.) Prerequisite: Junior standing

### CE 350 CONSTRUCTION ESTIMATING AND COST CONTROL

Methods of making quantity surveys, estimating construction cost, construction scheduling and methods of cost control. The study of labor relations as they affect construction cost, scheduling and job control. (3 crs.) Prerequisite: Junior standing

### CE 420 CONTRACTS AND SPECIFICATIONS

Consideration of fundamental principles of contract law with particular reference and application to engineering contracts. Study of specification documents. Preparation of typical documents for public and private construction projects. (3 crs.) Prerequisite: Junior standing

### CE 425 HEAVY CONSTRUCTION EQUIPMENT AND METHODS

Study of the equipment, methods and materials used in "horizontal" construction. Methods of estimating the production and costs of heavy construction equipment will be presented. (3 crs.) Prerequisite: Junior standing