# Professional Construction Management Course™



Advancing Professional Construction and Program Management Worldwide

Expand your knowledge and improve your understanding of professional Construction Management with the only in-person training course based on the CMAA Standards of Practice.

### WHO SHOULD ATTEND?

## All levels of experience are welcome!

- ✓ Construction Managers
- Program and Project Managers
- ✓ Resident Engineers
  - ✓ General Contractors and Subcontractors

### STUDY MATERIALS

# All registrants receive the CMAA Study Kit, which includes:

- Capstone—An Introduction to the CM Profession
- CMAA Construction Management Standards of Practice
- CMAA Contract Administration
   Guidelines
- CMAA Cost Management Guidelines

- CMAA Quality Management Guidelines
- CMAA Time Management Guidelines
- CMAA Sustainability Guidelines
- A-Series and CM At-Risk Contract Document samples
- CII Publication IR166-3: Best Practices

# CREDIT FOR PROFESSIONAL DEVELOPMENT







CMAA provides professional development credit for those who complete The Professional Construction Management Course™. In order to meet the varied formats for reporting mandated education requirements to licensing boards, credits are identified as Professional Development Hours (PDH) and Learning Units (LU). CMAA is registered with the American Institute of Architects (AIA) and the National Council of Examiners for Engineering and Surveying (NCEES) as an approved provider. Course participants earn 24 PDHs. LUs are available for registered architects. All AIA reports and NCEES transcripts can be accessed electronically by the participant. Partial credit is not assigned. All three days of the course must be completed to receive credit.

Industry wide, CMAA's
Professional CM Course is a
great program for all CMs, but
especially for those pursing the CCM.
The value of this course and the CCM
certification for VDOT means we have
managers in place that understand both
the theory behind the work, and the
practical experience to perform the work
they are managing daily.

Bill Collins, CCM Virginia Department of Transportation

Gannett Fleming's experience with the CMAA training course was truly enlightening. We had staff members from a variety of construction projects including highway and bridge transportation, water and waste water management, transit facilities, and educational facilities. The information presented by the instructors related to all types of construction, to include all experience levels and backgrounds. A truly satisfying experience that I would highly encourage others to attend.

# Raymond Deering Gannett Fleming

Very interesting and captivating program. I enjoyed this three day seminar. I feel like I learned a great deal more than I expected and would like to pursue a CCM certification.

Thistleton Robertson

New York City Department of
Environmental Protection

#### Introduction

- What is Construction Management?
- About CMAA, Mission & Vision, Publications, Resources
- Construction Manager Certification Institute (CMCI)
- Construction Industry Institute
- (CII), CMAA/CII Alliance, and CII Best Practices

#### **Professional Practice**

- Construction Management Profession and Certification
- · Code of Ethics
- · Essential Definitions
- Legal Relationships
- CM Fee Structures
- Enforcement of Terms & Conditions of CM Agreements and Laws

Learning Objectives: Describe the qualifications for becoming a Certified Construction Manager (CCM); Understand CMAA's Code of Ethics; Define key industry terms; Distinguish between project and program management; Understand how project delivery systems impact CM services; Explain legal relationships between CM and owner; Identify typical fee structures.

#### **Program Management**

- · Program Management Defined
- Pre-Design Phase: Program Development
- Design Phase
- · Procurement and Construction Phase
- Post Construction Phase

Learning Objectives: Describe the similarities and differences between project and program management; Describe the role of program management during each project phase; Identify the key members needed on a Project Management Team.

#### **Project Management**

- Project Management Definitions, Functions, and Focus
- Goals, Philosophies, and Concepts
- Key Functions of the Project Manager
- Project Management Tools
- Project Management Services by Phase

Learning Objectives: Define Project
Management and describe its functions and
goals; Describe the key skills of a Project
Manager; Describe common tools used for
Project Management; Explain the Project
Manager's role during each construction
phase.

# **Professional Construction**



### **Contract Administration**

- Delivery and Procurement Methods
- Contract Forms and Terms
- Contract Administration through Project Phases

Learning Objectives: Gain an understanding of the advantages/ disadvantages of the type of contract administered by studying: delivery methods, procurement methods, types of payment contract terms; Become familiar with the commonalities and differences in the contract forms; Learn the required contract administrative activities in each project phase.

# Time Management and Time Management Lab

- · Time Management Overview
- CPM Building Blocks
- · Calculate the CPM Schedule
- Scheduling by Project Phase
- Time Impact on the Schedule
- Time Management Calculation Activities

Learning Objectives: Explain the importance of time management in CM; Identify the primary objectives of CPM scheduling; Define key CPM terms; Describe the fundamentals of CPM scheduling; Explain how time impacts the project schedule.

# Building Information Modeling (BIM)

- Introduction to BIM and common applications
- BIM and the role of the CM
- BIM by project phase

Learning Objectives: Describe the primary uses of BIM; Identify the role of the CM with BIM; Describe the role of BIM during each phase of the project.

# **Quality Management**

- Terms and definitions
- Quality Management Plans
- Quality Management by construction phase

Learning Objectives: Define Quality Management terminology; Describe the Quality Management Plan; Evaluate the AQ/QC processes; Conduct reviews for quality assurance.

### Sustainability

- Sustainability goals, objectives, and requirements
- The CMs role in sustainability
- Tools for sustainable construction management
- · Sustainability by construction phase

Learning Objectives: Describe the common features of a sustainable project; Customize CM tools for a project with sustainability goals and requirements; Understand a Sustainability Plan; Provide leadership to achieve a project's goals and requirements; Identify tasks by phase.

# Cost Management & Value Engineering

- · Cost Management overview
- Preliminary budgeting
- Cost Management System
- Cost Estimating
- Cost Management by project phase
- Value Engineering

Learning Objectives: Understand the CM's roles and responsibilities for controlling project costs; Describe the methods for developing the project and construction estimates and budget; Explain the Cost Management System; Monitor and manage costs during all project phases.

### Safety & Risk Management

- Project Safety
- OSHA Requirements and Liability
- CM's Roles and Responsibilities
- Project Safety Plan Implementation
- Lessons Learned in the Field
- Risk Management

Learning Objectives: Describe the CM's roles and responsibilities related to safety; Explain OSHA's requirements and guidelines for construction safety; Recognize liabilities associated with safety violations; Identify and report safety hazards.

http://cmaanet.org/education-training