

Professional Construction Management Course™

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

This course includes the *CACM Study Guide* and *CMAA Standards of Practice*. It is designed to help you understand and teach construction management techniques, as well as the nuances of CMAA's best practices regarding construction project management, leadership, and decision-making and provide guidance as you prepare for the CACM exam.

Who Should Attend?

- ✓ Construction Managers
- ✓ Resident Engineers
- ✓ Program and Project Managers
- ✓ All levels of experience welcome!

Study Materials Included

- ✓ *CMAA Construction Management Standards of Practice*
- ✓ *CACM Study Guide*

“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

“Industry wide, CMAA's Professional CM Course is a great program for all CMs, but especially for those pursuing the CCM and CACM. The value of this course 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

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.



Introduction

- » What is Construction Management?
- » About CMAA, Mission & Vision, Publications, Resources
- » Construction Manager Certification Institute (CMCI)



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 Associate Construction Manager (CACM); 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
- » 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.

Contract Administration

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



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.

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.

Technology Management

- » Transition to Technology
- » BIM, Digital Twins, Drones, Software/ Apps
- » Applying Technology



Learning Objectives: Describe the primary uses of technology; Identify the role of the CM while managing technology; Describe the role of technology 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 CM's 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.