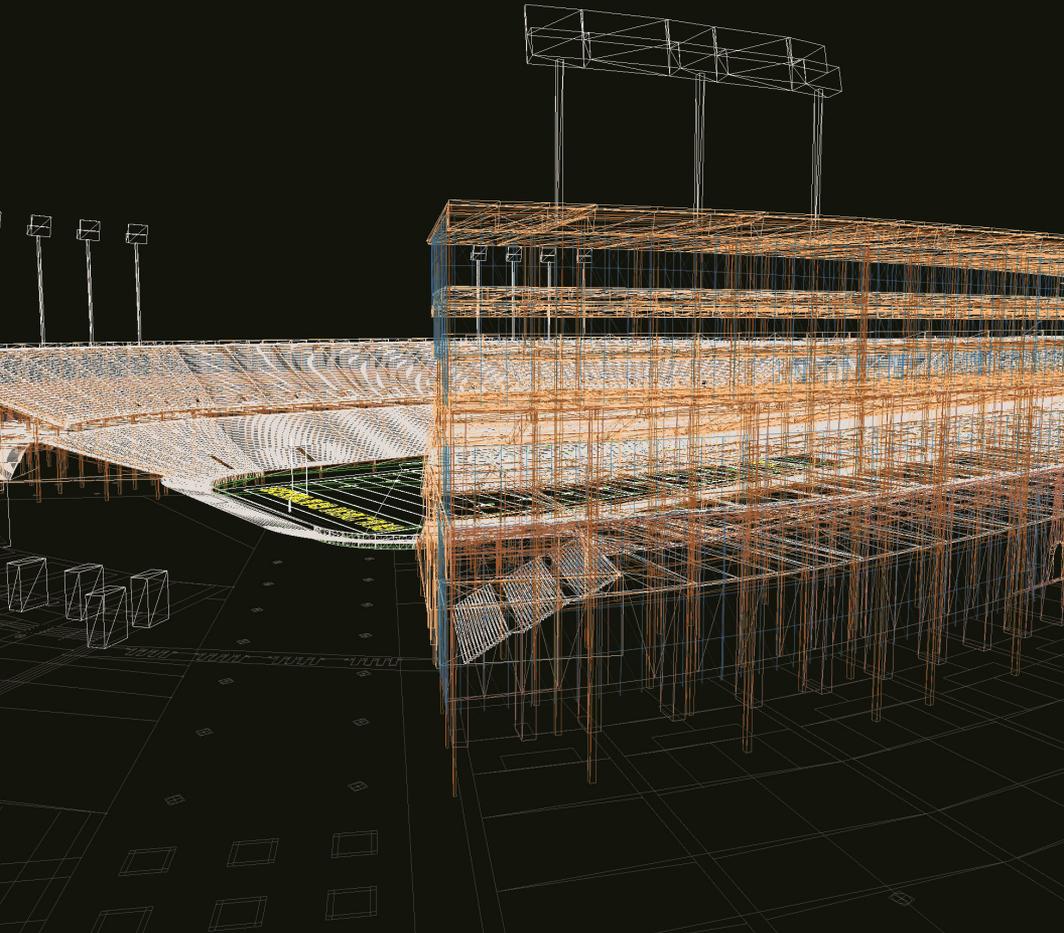


Building Information Modeling Education Program

Brought to you by Master Builders of Iowa



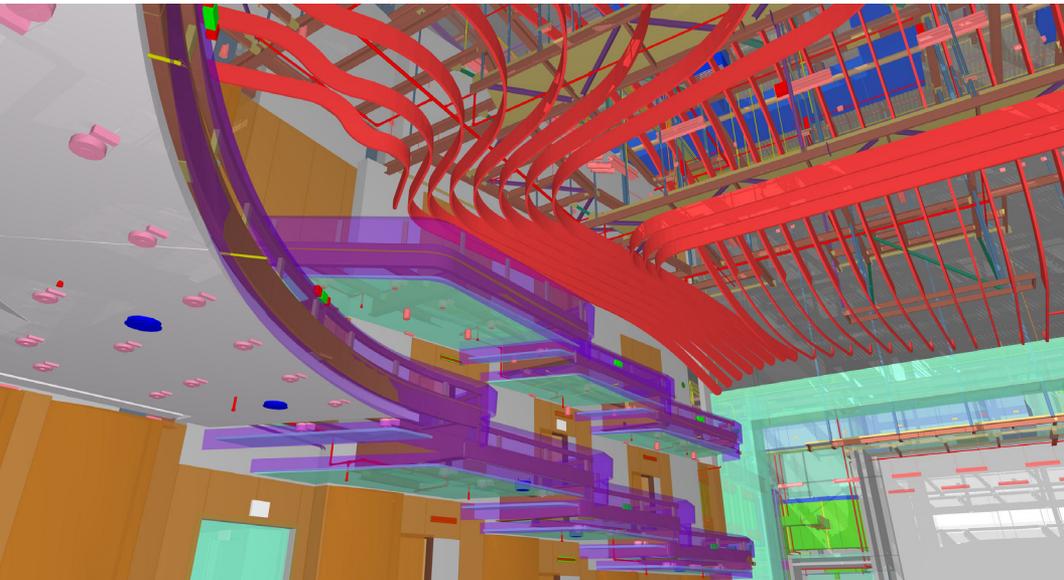
Spring 2020

Overview of BIM

Building Information Modeling (BIM) is changing the way projects are constructed. Whether you are a prime contractor using BIM across an entire project or a subcontractor impacted by a specific BIM implementation, this emerging practice requires new mindsets and technological know-how in order to achieve significant improvements in efficiency and cost control. Each BIM Education Program course provides a full day of training for a total of 32 hours of course time. The CM-BIM is the construction industry's only credential that teaches the practical application of the Building Information Modeling process for commercial construction firms.

AGC's BIM Education Program — developed in conjunction with leading BIM practitioners, technology firms and educators—is designed to prepare construction professionals at all experience levels to successfully implement BIM on a construction project.

This highly interactive program provides 32-hours of instruction and training to get construction industry professionals at all levels ready to take advantage of the benefits of BIM. After participants complete all four courses in the program they become eligible to sit for an exam to earn the Certificate of Management—Building Information Modeling (CM-BIM).





The Certificate of Management—Building Information Modeling (CM-BIM) is the construction industry’s first BIM assessment-based certificate program that teaches the practical application of the building information modeling process for commercial construction firms. Based on AGC’s BIM Education Program, AGC’s CM-BIM can be achieved by completing the four courses and successfully completing the CM-BIM assessment

Become a BIM Champion

How BIM is implemented within a construction firm can vary based on many factors, however, BIM transformation is most effectively driven by individuals within an organization. The courses below are intended for those individuals who will design and implement a BIM transformation strategy within an organization, the BIM Champion.

- Unit 1 | An Introduction to Building Information Modeling
- Unit 2 | BIM Technology
- Unit 3 | BIM Project Execution Planning
- Unit 4 | BIM Adoption, Implementation and ROI

Program Requirements

Each participant is required to have a participant manual for each of the four units. Master Builders of Iowa will provide a book for each attendee of our provided courses. The corresponding book will be available for pick up upon arrival to each course.

Participants must attend each unit in its entirety to receive credit and have the completion form signed by the instructor. No “part-time” students will be given credit for any unit. If the participant plans to attend all four units and take the CM-BIM exam, failure to attend all four units in their entirety will disqualify the applicant from sitting for the exam. You do not need to take all four units in the same year in order to take the exam. You may take any missed units in the following year(s) in order to complete all four units and to qualify for the exam.

Earn Your BIM Credential

Following completion of all four units of the BIM Education Program, participants will be eligible to sit for the Certificate of Management—Building Information Modeling (CM-BIM).

CM-BIM
CERTIFICATE OF
MANAGEMENT
BUILDING INFORMATION MODELING

For questions, contact Tom Fulcher at (515) 657-4395 / tfulcher@mbi.build

BIM Construction Education Program

Unit 1: An Introduction to Building Information Modeling

Date: Thursday, March 26, 2020

Time: 8:00 AM - 5:00 PM

Location: Courtyard by Marriott
2405 SE Creekview Dr. | Ankeny, IA

Fees: *Includes Participant Manual & Lunch*
\$600.00 / Person - Master Builders of Iowa & AGC Members
\$750.00 / Person - Construction Update Subscribers & Non-Members

Master Builder Designation Credits: Project Management - 8 Credits

Unit 2: BIM Technology

Date: Friday, March 27, 2020

Time: 8:00 AM - 5:00 PM

Location: Courtyard by Marriott
2405 SE Creekview Dr. | Ankeny, IA

Fees: *Includes Participant Manual & Lunch*
\$600.00 / Person - Master Builders of Iowa & AGC Members
\$750.00 / Person - Construction Update Subscribers & Non-Members

Master Builder Designation Credits: Project Management - 8 Credits

Unit 3: BIM Project Execution Planning

Date: Thursday, April 9, 2020

Time: 8:00 AM - 5:00 PM

Location: Courtyard by Marriott
2405 SE Creekview Dr. | Ankeny, IA

Fees: *Includes Participant Manual & Lunch*
\$600.00 / Person - Master Builders of Iowa & AGC Members
\$750.00 / Person - Construction Update Subscribers & Non-Members

Master Builder Designation Credits: Project Management - 8 Credits

Unit 4: BIM Adoption, Implementation and ROI

Date: Friday, April 10, 2020

Time: 8:00 AM - 5:00 PM

Location: Courtyard by Marriott
2405 SE Creekview Dr. | Ankeny, IA

Fees: *Includes Participant Manual & Lunch*
\$600.00 / Person - Master Builders of Iowa & AGC Members
\$750.00 / Person - Construction Update Subscribers & Non-Members

Master Builder Designation Credits: Project Management - 8 Credits



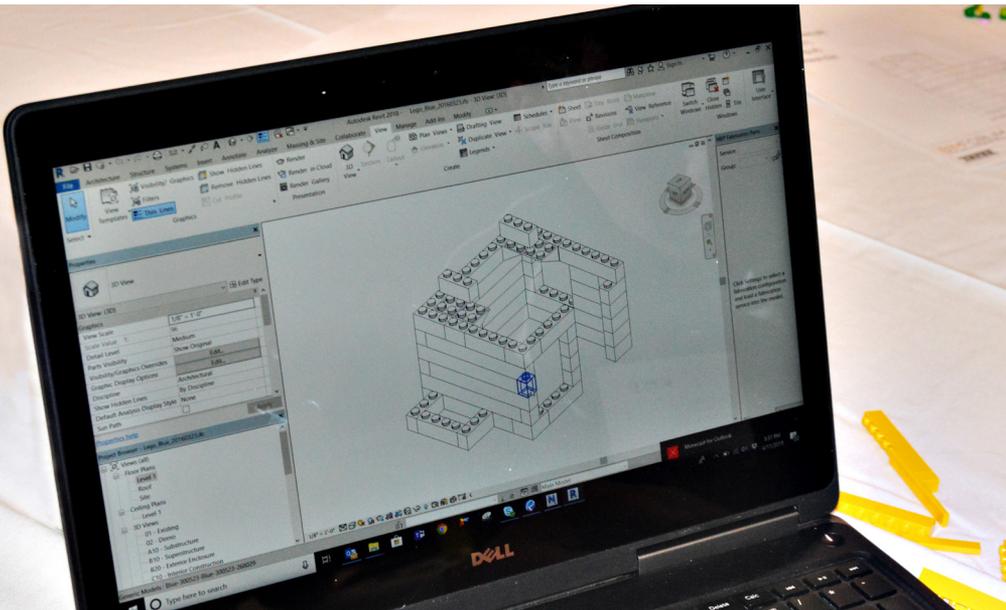
Art Theusch, *CM-BIM LEED AP BD+C*

**Collaborative Construction Group
Lansing, MI**

Art Theusch (LEED AP BD + C) is the President of Collaborative Construction Group. He is a certified Building Information Modeling (BIM) instructor for the Associated General Contractors of America. He has trained hundreds of professionals across the U.S. in BIM technology and he teaches BIM in the Construction Management program at Michigan State University.

Collaborative provides BIM services to Construction Management firms including marketing models, 3D Modeling, MEP Coordination, Laser Scanning, Point Layout and much more. Art has developed and coordinated 3-D construction models for projects as large as \$180 million and as small as \$5000.

Art Theusch has over 15 years of experience as a construction manager and prior to the he spent time working in the architectural industry. This experience helps bring the expertise of BIM into all phases of planning and executing a project.



Unit I

Unit I: An Introduction to Building Information Modeling

Date: Thursday, March 26, 2020

Time: 8:00 AM - 5:00 PM

Location: Courtyard by Marriott
2405 SE Creekview Dr. | Ankeny, IA
(515) 223-1800

Presenter: Art Theusch, CM-BIM LEED AP BD+C
Collaborative Construction Group, Lansing, MI

Unit I: An Introduction to Building Information Modeling Designed is the first step for any company looking to understand the role of BIM in our industry and develop its own BIM Champion. Unit I provides a comprehensive understanding of BIM terminology while introducing important concepts that are necessary to understand how BIM is changing the construction process. The course culminates with participants developing a Company BIM Assessment to take back to their organizations to begin implementing BIM project- and corporate-wide.

Following completion of Unit I, participants will be able to:

- Recognize the importance of BIM
- Define common BIM terminology
- Discuss how BIM can be used as a communication and collaboration tool
- Explain the benefits of BIM
- Explain the federated model process
- Compare examples of successful BIM usage
- Discuss issues associated with starting BIM
- Create a Company BIM Assessment



The Master Builder Designation program will offer credits for completion of these sessions. For more information on becoming a 'Master Builder,' please visit MBI's website at: www.mbi.build



**8 - PROJECT
MANAGEMENT**

Unit 2: BIM Technology

Date: Friday, March 27, 2020

Time: 8:00 AM - 5:00 PM

Location: Courtyard by Marriott
2405 SE Creekview Dr. | Ankeny, IA
(515) 223-1800

Presenter: Art Theusch, CM-BIM LEED AP BD+C
Collaborative Construction Group, Lansing, MI

Unit 2: BIM Technology introduces tools as they relate to the functions they perform, as well as particular phases in a project where they have the strongest capabilities. Tools are examined by how they fit the process and needs of the user(s). We explain a four-step process of software selection that participants can use as they start the BIM software purchasing process. The course concludes by examining file formats before participants develop a sample BIM Execution Plan that will help guide their company implementation process.

Following completion of Unit 2, participants will be able to:

- Explain the phased structure of a BIM project
- Discuss the classes of BIM tools
- List common BIM applications
- Describe how the use of BIM tools needs to be planned and organized
- Explain the need to embed tools into processes
- Develop a process for identifying and selecting BIM tools



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**8 - PROJECT
MANAGEMENT**

Unit 3

Unit 3: BIM Project Execution Planning

Date: Thursday, April 9, 2020

Time: 8:00 AM - 5:00 PM

Location: Courtyard by Marriott
2405 SE Creekview Dr. | Ankeny, IA
(515) 223-1800

Presenter: Art Theusch, CM-BIM LEED AP BD+C
Collaborative Construction Group, Lansing, MI

Unit 3: BIM Project Execution Planning begins by explaining how to articulate roles and responsibilities for BIM use on a project using contractual BIM addendums. Participants learn definitions of common intellectual property terms; review types of insurance coverage that protect against certain risks related to BIM use; explore specialty insurances, and examine surety bonding issues that result from the BIM process.

Following completion of Unit 3, participants will be able to:

- Explain contract liability and standards of care related to BIM
- Negotiate BIM Addendum terms for BIM
- Execution Plan development
- Use BIM contract negotiation to establish proactive collaborative BIM
- Identify intellectual property rights and licensing issues related to Model use
- Recognize BIM coverage limitations in existing insurance and bond products
- Devise fair risk allocation and management responsibility provisions on BIM projects



The Master Builder Designation program will offer credits for completion of these sessions. For more information on becoming a 'Master Builder,' please visit MBI's website at: www.mbi.build



**8 - PROJECT
MANAGEMENT**

Unit 4: BIM Adoption, Implementation and ROI

Date: Friday, April 10, 2020

Time: 8:00 AM - 5:00 PM

Location: Courtyard by Marriott
2405 SE Creekview Dr. | Ankeny, IA
(515) 223-1800

Presenter: Art Theusch, CM-BIM LEED AP BD+C
Collaborative Construction Group, Lansing, MI

Unit 4: BIM Adoption, Implementation and ROI describes how to establish and execute the BIM process, facilitate its adoption, and achieve integration on a single project and on multiple projects simultaneously. Participants will review several real world case studies to analyze the costs, benefits and impacts of each decision made while experiencing how BIM breaks down the isolation found in organizational silos. While it may appear at times that BIM is a technology-led movement, the reality — and AGC's BIM EP — speaks to a results-driven shift with real change happening within the construction industry.

Following completion of Unit 4, participants will be able to:

- Define process, adoption, and integration as related to BIM implementation
- Describe why BIM is a disruptive practice today
- Identify reactive and proactive BIM outcomes
- Evaluate and select process options for specific BIM projects
- Describe the roles and responsibilities of participants in the BIM process
- Identify consistent factors influencing BIM Return on Investment (ROI) at the project and the company levels
- Communicate the BIM process to management, colleagues, and project stakeholders
- Outline a process for BIM adoption and implementation at the project and the company levels



The Master Builder Designation program will offer credits for completion of these sessions. For more information on becoming a 'Master Builder,' please visit MBI's website at: www.mbi.build



**8 - PROJECT
MANAGEMENT**

CM-BIM Credential

The AGC Certificate of Management-Building Information Modeling (CM-BIM) is an assessment-based certificate credential that denotes knowledge and understanding of concepts related to BIM adoption, practice and process transformation outlined in the AGC BIM Education Program (BIMEP). Successful candidates will carry the CM-BIM designation.

Exam Format and Specification

The CM-BIM is a multiple-choice exam, derived directly from the BIM Education Program (BIMEP). Therefore, the CM-BIM exam is designed to measure knowledge obtained during one's participation in the four BIMEP courses. Each question provides four answer options with one correct option. All items on the exam will be scored with the same point value. Four hours will be provided to complete the exam and total exam time is calculated in the testing software.

The exam contains 125 questions with the following approximate number of questions from each unit:

Unit 1 - 8 questions

Unit 2 - 43 questions

Unit 3 - 38 questions

Unit 4 - 36 questions

Validity

The CM-BIM Certificate will be valid for three (3) years. It may be necessary for those achieving the CM-BIM credential to take new course modules, review refresher course material or attend industry events to keep up with new changes in practice and technology.



MBI is an Authorized CM-BIM Exam Test Site!

Exam registration is through AGC of America and all of MBI's testing dates are listed on their website. To register for any of the dates listed below, go to www.agc.org/learn/education-training/building-information-modeling/cm-bim-exam-calendar.

Eligibility Requirements

CM-BIM candidates must successfully complete all four BIM Construction Education Program courses, provide AGC with record of completion and have an approved application in advance of exam administration.

Exam Fees

All fees total \$575 and will be collected at one time after the candidate application is reviewed and approved. This includes the application and technology fee and the exam fee. (Paid to AGC of America)

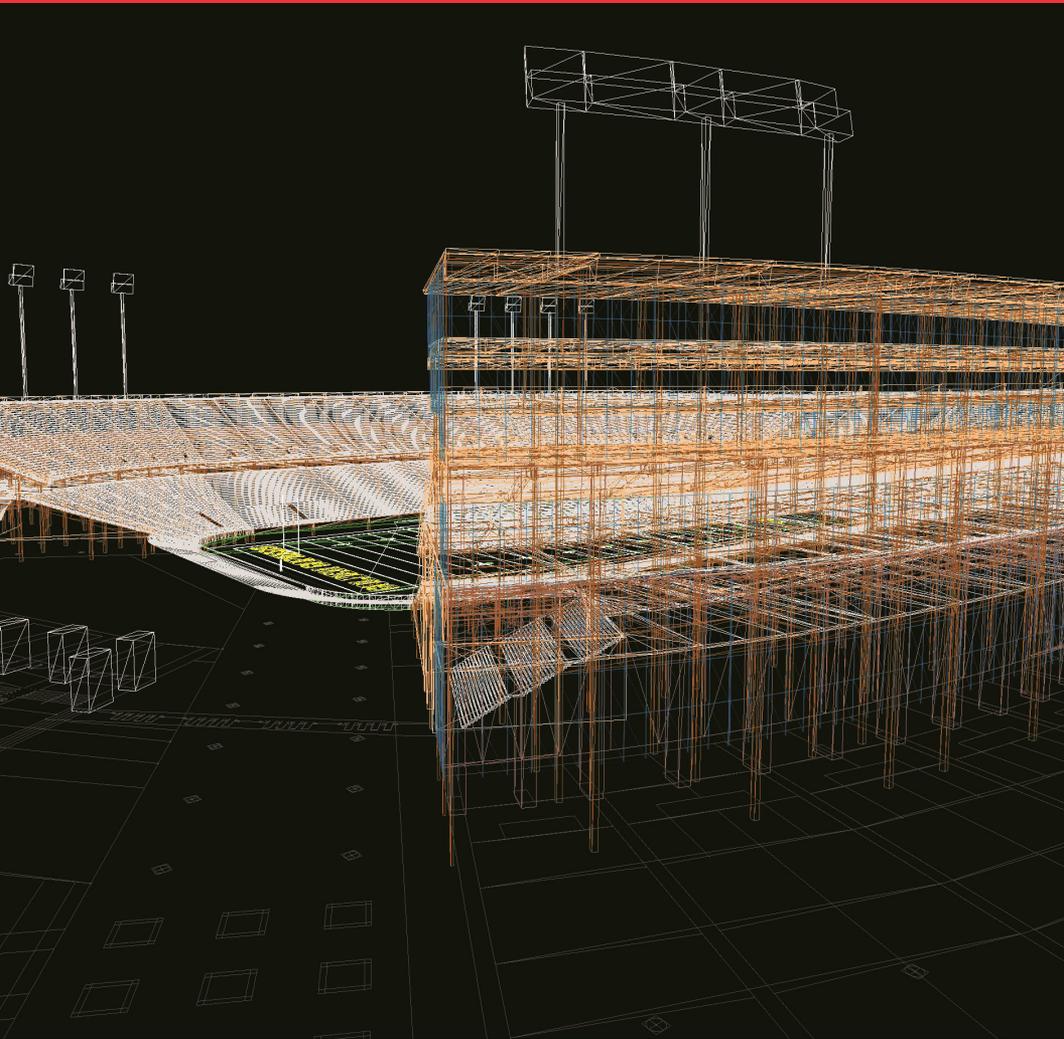
Application

Visit the AGC website for the CM-BIM application - <https://www.agc.org/agc-cm-bim-exam-application>. Your application will be reviewed against the national database of BIM Construction Education Program (BIMEP) course completers. **Application should not be submitted until you have completed all four units of BIMEP.** Please allow 10 business days once this form is submitted for it to be reviewed and approved. You will receive a follow-up email with details related to next steps. See the appropriate Candidate Guide for instructions on filling out this application.

MBI Administered Testing Dates

All testing sessions will take place at the Master Builders of Iowa office at 221 Park Street, Des Moines, Iowa 50309.

April 22, 2020	1:00 - 5:00 PM
April 24, 2020	8:00 AM - 12:00 PM
April 28, 2020	1:00 - 5:00 PM
May 1, 2020	8:00 AM - 12:00 PM



Master Builders of Iowa

221 Park Street

Des Moines, Iowa 50309

(515) 288-8904 | info@mbi.build

www.mbi.build