

AGC OF MICHIGAN

BIM
EDUCATION
PROGRAM



BIM TECHNOLOGY

FEBRUARY 9 & 10,
2012

7:30 A.M. - 5:00 P.M.

AGC OF MICHIGAN

2323 N. LARCH

LANSING, MI

\$600/MEMBER

\$680/CIAP MEMBER

\$800/NON-MEMBER

EARN YOUR
CERTIFICATE OF
MANAGEMENT
(CM-BIM)

This course provides 16 - hours of instruction in a 40-hour program developed to help you obtain AGC's Certificate of Management - Building Information Modeling (CM-BIM). The program is the construction industry's first and only certificate program that teaches the practical application of the building information modeling process for commercial construction firms.

For more information please contact Viki Gotts (313.533.3509 or vgotts@agcmichigan.org)

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.

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.

BIM Technology

BIM Technology explores the major applications and classes of BIM tools across all project phases; how BIM processes for QTO, shop drawing and fabrication, and construction scheduling can improve projects; and the impact models have for improving estimating, scheduling, and coordinating. This two-day (16-hour) course is designed specifically for construction professionals to establish a solid process for selecting BIM tools and to investigate the significant impact models have for improving estimating, scheduling, and coordinating. The goal of the *BIM Technology* course is to help participants become BIM champions within their organizations.

Who should attend?

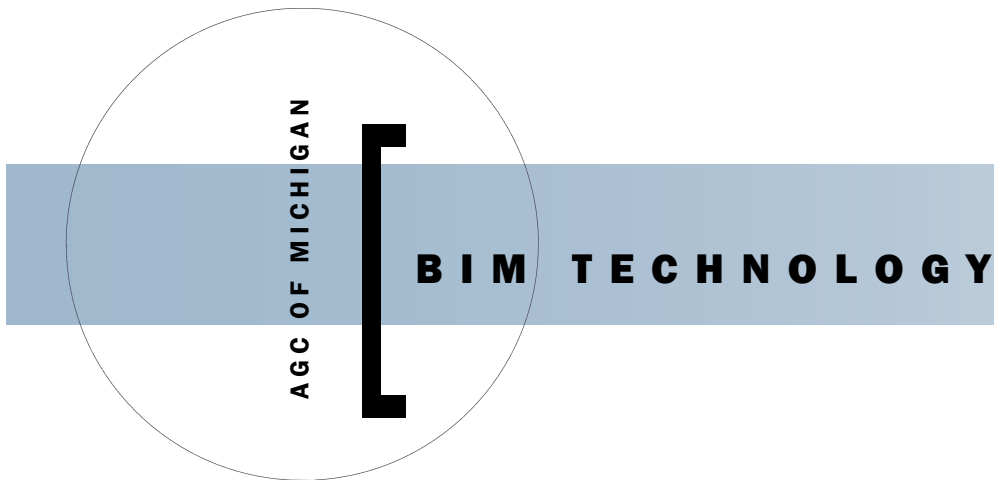
Contractors, construction managers, design professionals, owners, suppliers, service providers and professionals seeking continuing education hours.



The Associated General Contractors of America (AGC) is a Registered Provider with The American Institute of Architects Continuing Education Systems. Credit earned on completion of this program will be reported to CES Records for AIA members. Certificates of completion for non-AIA members are available on request.



The U.S. Green Building Council (USGBC) developed Leadership in Energy and Environmental Design (LEED®) Green Building Rating Systems for different applications, such as New Construction and Major Renovations, Commercial Interiors, Core and Shell, and Homes. The USGBC Education Provider Program has approved the technical and instructional quality of this course.



Course Learning Objectives

Following successful completion of this course you will be able to:

- Identify at least five benefits of the BIM approach
- Explain what is meant by parametric modeling and why this benefits the BIM process
- Match specific tools with their functions
- Define the federated model process
- Describe two functions of analysis tools
- Explain a generic four-step process for creating and using a shop drawing and fabrication model
- Outline a process for estimating and scheduling
- Explain a four-step process for selecting BIM software
- Identify the major cost drivers, functionality, and characteristics of a good BIM estimating model
- Explain how to identify what project components should be modeled, and determine what level of detail is required
- Explain how 4D models are created
- Explain a five step coordinating process
- Develop the basis for a BIM Execution

Instructors

Steven Hunt, BIM/CAD Manager, Dee Cramer, Holly, MI

Steve began his construction career with Dee Cramer 21 years ago as a pre-apprentice in sheet metal. Since that time he has worked for Dee Cramer as a sheet metal apprentice, journeyman, detailer (CAD Drawing), estimator assistant, coordination manager, and detailing manager. Steve now serves as the BIM/CAD Manager for Dee Cramer. Steve has a great depth of experience in 3D coordination on more than a dozen projects including: GM Toledo Power Train, GM Fort Wayne Sequencing Addition; Sparrow Hospital, UM Kellogg Eye Center, UM Mott Women's and Children's Hospital, Firekeepers Casino, and many others.

Arthur Theusch, LEED AP BIM Specialist, The Christman Company, Lansing, MI

Art is responsible for constructing and coordinating 3-D construction models used for estimating, scheduling, conflict resolution and facilities management purposes and works directly with each design and client team, in conjunction with trade contractors, to implement their system-specific models into one collaborative project model. Art's understanding of the technology and skills facilitating the collaborative process of BIM helps the team resolve coordination problems prior to installation and with optimized solutions enhancing system performance in the long term. To date, Art has managed BIM services on projects totaling over \$500 million. His experience as a conceptual estimator also allows him to contribute to the cost engineering and value management aspects of working within a BIM project.



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COURSE SCHEDULE

Begin	End	Topic/Activity
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DAY 1

7:30 a.m.	8:00 a.m.	Registration & Continental Breakfast
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8:00 a.m.	Noon	Welcome and Course Overview; Session 1 Overview; Tools to Support the BIM Process; Best Practices Approach to Federated Model; File Formats, and Application Areas and Software
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Noon	12:30 p.m.	Lunch (provided)
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12:30 p.m.	5:00 p.m.	Analysis Tools; Shop Drawings and Fabrication Tools; Construction Management and Model Review Tools; File Sharing Tools; Construction Management and Model Review Tools; File Sharing Tools; How to Use BIM for Specifications; How to Approach Selection of the Software, Hardware, Graphics, and Peripherals; Closing and Forms
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DAY 2

7:30 a.m.	8:00 a.m.	Sign-in & Continental Breakfast
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8:00 a.m.	Noon	Welcome; Conceptual Estimating and Quantity Takeoff; Detailed Estimating and Pre Construction Process; Scheduling and BIM
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Noon	12:30 p.m.	Lunch (provided)
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12:30 p.m.	5:00 p.m.	4D and Scheduling; Coordination and Interoperability; Closing
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BIM TECHNOLOGY

7:30 a.m. - 5:00 p.m.

Thursday, February 9 and Friday, February 10, 2012

AGC OF MICHIGAN
2323 N. LARCH
LANSING, MI

Registration Fee: \$570/member \$684/CIAP \$798/non-member

Registration Deadline: Wednesday, February 1, 2012

Please note: All cancellations must be made in writing and faxed to 517-371-1131 or e-mailed to vgotts@agcmichigan.org at least 48 hours in advance of the start of the class to obtain a refund. Substitutions are welcomed - please let us know who will be attending in your place.



Please mail or fax this registration form to:

AGC of Michigan, 2323 N. Larch, Lansing, MI 48906 - fax (517) 371-1131

For more information contact Viki Gotts (vgotts@agcmichigan.org or 313.533.3509 Ext. 3102).

Company: _____

Address (non-members only): _____

Phone: _____ Fax _____ Email: _____

- Please invoice me (members only).
- Fax registration—check to follow.
- Check # _____ enclosed (payable to AGC Michigan)
- Credit card—Account # _____ Exp. Date _____

Signature _____

Participant Name	E-Mail Address	Amount
Total		