

# BIM Technology: An AGC Construction Learning Tool

## REGISTRATION

Register Online • [www.mbionline.com](http://www.mbionline.com)

April 29, 2010 • Embassy Suites on the River • 101 E Locust St. • Des Moines, Iowa

Name(s): \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone:(\_\_\_\_\_) \_\_\_\_\_ Fax:(\_\_\_\_\_) \_\_\_\_\_

**Fee:** Unit Two registration fee includes seminar, continental breakfast, lunch and course materials.

\_\_\_ \$300.00 per person (MBI Members)

\_\_\_ \$420.00 per person (Construction Update Plan Room Members & Non-Members)

**Payment Method:** \_\_\_ Check Enclosed (payable to Master Builders of Iowa)

\_\_\_ Credit Card

\_\_\_ Please Invoice

**Credit Card Type:** \_\_\_ Master Card \_\_\_ Visa \_\_\_ Discover

**Card #** \_ \_ \_ - \_ \_ \_ - \_ \_ \_ - \_ \_ \_

**Expiration Date** \_ \_ / \_ \_

**Name on Card:** \_\_\_\_\_

### Cancellation Policy

If you must cancel your registration, a full refund will be granted to requests received in writing by April 14<sup>th</sup>. A refund, less \$75 for each registrant, will be granted to written requests received from April 15<sup>th</sup> - 21<sup>st</sup>. No refunds will be granted after April 21<sup>st</sup>.

Please send registration and payment to:

#### Master Builders of Iowa

Attn: Laurie Delmott

P.O. Box 695

Des Moines, IA 50306

Phone: (800) 362-2578 / (515) 288-8904

Fax: (515) 288-2617

### MONEY BACK GUARANTEE

We believe you will return home with the tools and information to make a difference in your business. MBI backs this seminar with a money-back guarantee. If for any reason you are not satisfied, please let us know. We will refund your registration fee or give you a credit to use at another MBI program.

For information about this seminar or the BIM Program, contact Monica Worheide at (515) 288-8904 / (800) 362-2578.

**BIM**  
EDUCATION  
PROGRAM  
**Unit 2**

## BIM Technology An AGC Construction Learning Tool

April 29, 2010  
Embassy Suites on the River  
101 E Locust St  
Des Moines  
8:00 am - 5:00 pm

The BIM Education Program was developed in conjunction with leading BIM practitioners, technology firms and educators to provide construction professionals with the essential information and skills needed to successfully implement BIM.

For more information  
[www.mbionline.com](http://www.mbionline.com)  
email | [mworheide@mbionline.com](mailto:mworheide@mbionline.com)

MBI's mission is to be the essential resource for improving member performance and promoting a business environment favorable to the construction industry.



AGC serves our nation's construction professionals by promoting the skill, integrity and responsibility of those who build America.

# THE BIM EDUCATION PROGRAM

## UNIT 2 • BIM Technology

THURSDAY, APRIL 29, 2010

Embassy Suites on the River

8:00 am - 5:00 pm

**BIM Technology** is a one-day course designed specifically for construction professionals who want to establish a solid process for selecting BIM tools and 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.

### Participants will benefit in the following ways:

- Find out who the major market players are.
- Determine the best products to support particular project phases.
- Explore how BIM processes for QTO, shop drawing and fabrication, and construction scheduling can help bring projects in on time and on budget.
- Track how models are maintained, the implications of team member roles, file format requirements, interoperability, and technology limitations.
- Determine how visualizing construction sequencing of a project at any time can improve efficiency.
- Gain an understanding of the power of digital visualization for effectively coordinating onsite activities.

## Morning Session - BIM Technology, Capabilities, Process, and Tools

### Module 1: Technology

- Identify five BIM benefits
- Explain what parametric modeling means
- Distinguish between a traditional and BIM approach
- Associate tool classes and phases
- Match BIM tools and functions
- Determine if tools support the BIM process

### Module 2: Capabilities

- Define the federated model process and describe the characteristics
- Differentiate at least five BIM tools by function and file format
- Identify at least one developer source for preliminary design and authoring tools

### Module 3: Process

- Describe two functions of BIM analysis tools
- Explain goals, needs, how to's, & results for five analysis tools
- Explain a process for creating and using a shop drawing and fabrication model
- Outline a process for estimating and scheduling using a QTO tool
- Contrast two approaches for construction scheduling

### Module 4: Tools

- Develop questions for selecting file sharing tools
- Describe strategies for specifying with BIM
- Explain a process for selecting BIM software
- Create a checklist for selecting BIM hardware

### Become a BIM Champion...

Those who will benefit include contractors, building developers, owners, managers, supervisors, architects, engineers, and construction product manufacturers. Students in the architecture, engineering, and construction industry will also greatly benefit from this training.

## Afternoon Session - Estimating/QTO, Scheduling, and Coordination

### Module 1: Conceptual Estimating and QTO

- Identify the cost drivers and major characteristics of a good model
- Describe what should and should not be modeled
- Identify five coordination points of a modeling process
- Outline processes for exporting and importing quantity information

### Module 2: Scheduling

- Differentiate construction planning and scheduling activities
- Map out how 4D models analyze and evaluate schedules
- Explain how to Identify what project components should be modeled
- List six uses of 4D Technology
- Define bi-directional linking and identify tools with this functionality
- Define how 3D models are maintained with current information

### Module 3: Coordination and Interoperability

- Map a sequence for coordinating the creation of models
- Explain a five step coordinating process
- List three characteristics of best practice coordination that account for the status of model information
- Develop the basis for a BIM Execution Plan for design and shop drawing levels of coordination that include:
  - BIM application tools
  - Interoperability and file formats
  - Model content responsibility
  - Time schedule
  - Naming conventions for files and attributes in models
  - Methods of file sharing, collaboration and coordination
  - Technical considerations

**Note:** It is recommended that attendees have participated in previous basic BIM training or have an understanding of BIM principals and practices prior to attending this class.