

# Agenda

*Presented by Mark Gibbons*

## Building Information Modeling (BIM): Concepts and Processes

- Weaknesses in traditional design and construction processes
- Introduction to parametric design
- Opportunities for improving processes and outcomes
- Development of BIM concepts
- Defining key terms and procedures

## BIM Systems, Standards and Stakeholders

- Moving beyond CAD: Development of 3D/4D/5D/6D/7D BIM
- Identifying the benefits of BIM
- BIM interoperability
- Facilitating and maintaining data exchange

## BIM from Project Conception through Building Operation

- BIM in civil engineering
- BIM in architectural design
- BIM in structural design
- BIM in MEP design
- BIM for contractors
- BIM for building owners

## Introduction to BIM-Capable Software

- Bentley Microstation
- Autodesk Revit
- Civil 3D
- Graphisoft ArchiCAD
- Vectorworks
- Solidworks

## The Immense World of BIM

- Laser scanning
- Integrated project delivery
- Clash detection
- Energy analysis and sustainability

## BIM in Practice: Case Studies

## Building Information Modeling

Toledo, OH - Wednesday, October 2, 2019

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PO Box 278  
Altoona, WI 54720-0278



## Learning Objectives

### You'll be able to:

**Explain** key terms, procedures, and concepts of building information modeling.

**Understand** the weaknesses in traditional design and construction processes and the opportunities for improving outcomes.

**Discuss** BIM's use in civil and structural engineering, architectural design, and MEP design, and explore BIM for contractors and building owners.

**Evaluate** Autodesk Revit, Civil 3D, Bentley Microstation and other software.

**Facilitate** data exchange and clash detection.

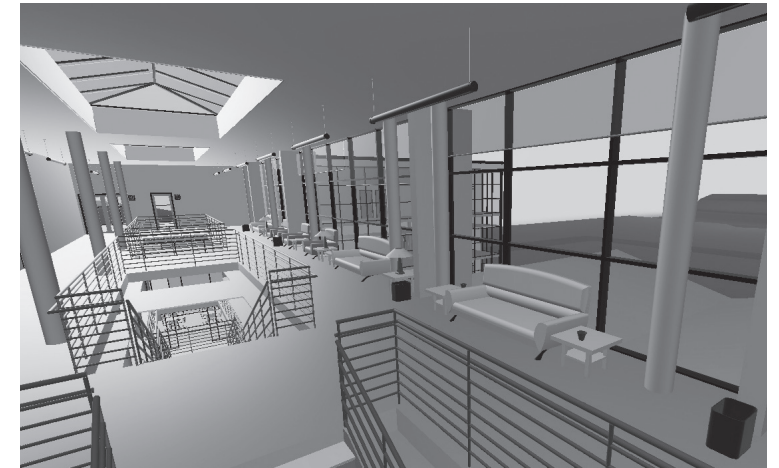
**Review** various case studies.



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# Building Information Modeling

Toledo, OH - Wednesday, October 2, 2019



**Understand** building information modeling (BIM) concepts and processes

**Identify** BIM systems, standards, and stakeholders

**Examine** BIM from project conception through building operation

**Learn** about BIM interoperability and clash detection

**Explore** BIM-capable software

**Discuss** BIM case studies

## Continuing Education Credits

### Professional Engineers

6.5 PDHs

### Contractors

Non-Credit Continuing Ed.

### Architects

6.5 HSW Continuing Ed. Hours

6.5 AIA LU|HSW



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# Faculty

**Mark Gibbons** *BIM Manager/Senior Architectural Designer at O|X Studio, Inc*

Mr. Gibbons has more than 15 years of experience working in architecture offices, both large and small, and he gained experience in small business ownership through developing his own business in architectural consulting. Through designing, developing construction documents and working with clients, consultants and contractors throughout a project’s lifecycle, Mr. Gibbons has gained experience with all levels of the architecture process. This experience provides him with crucial input in regards to BIM-related development and procedures. As a BIM manager, Mr. Gibbons works with the firm’s principals to stay ahead of the technology curve and direct the firm in its continued adoption of building information modeling. Mr. Gibbons provides support, training, and assistance for staff, consultants and clients to maximize the development of all projects. He has experience as BIM manager with multiple firms throughout southeast Michigan, and also teaches Revit and BIM to faculty and students at the University of Michigan. This experience gives him a rounded approach to the best practices in assisting firms to work with their clients to meet a project’s fullest potential. Mr. Gibbons provides support, training, and assistance for staff, consultants and clients to maximize the development of all projects. He also organized and leads the Huron Valley BIM User Group for the Ann Arbor, Michigan, area.

# Seminar Information

|                                                                                                                                    |                                                                             |                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>Radisson Hotel at<br/>The University of Toledo Medical Center</b><br>3100 Glendale Avenue<br>Toledo, OH 43614<br>(419) 381-6800 | Registration<br>8:00 - 8:30 am<br><br>Morning Session<br>8:30 am - 12:15 pm | Lunch (On your own)<br>12:15 - 1:15 pm<br><br>Afternoon Session<br>1:15 - 4:30 pm |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------|

**Tuition**

**\$289** for individual registration

**\$269** for three or more simultaneous registrations.

*Each registration includes a complimentary continental breakfast and printed seminar manual.*

**Receive a reduced tuition rate of \$101** by registering to be our on-site coordinator for the day. For availability and job description, please visit [www.halfmoonseminars.org](http://www.halfmoonseminars.org).

**How to Register**

- Visit us online at [www.halfmoonseminars.org](http://www.halfmoonseminars.org)
- Mail-in or fax the attached form to 715-835-6066
- Call customer service at 715-835-5900

**Cancellations:** Cancel at least 48 hours before the start of the seminar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar. You may also send another person to take your place.

# Additional Learning

**Webinar Series**

**Structural Design and Ethics**

- **Structural Design: Ethical Issues**  
Thurs., August 15, 2019, 11:00 AM - 12:00 PM CDT
- **Structural Design: Gravity Forces**  
Thurs., August 15, 2019, 12:30 - 2:30 PM CDT
- **Structural Design: Lateral Forces**  
Fri., August 16, 2019, 11:00 AM - 12:30 PM CDT
- **Structural Design: Wind, Seismic and Connections**  
Fri., August 16, 2019, 1:00 - 2:30 PM CDT

**Technical Writing**

- **Planning Documents**  
Wed., August 14, 2019, 11:00 AM - 1:00 PM CDT
- **Writing Documents**  
Wednesday, August 14, 2019, 1:30 - 3:30 PM CDT
- **Revising and Editing Documents**  
Thurs., August 15, 2019, 11:00 AM - 1:00 PM CDT
- **Technical Writing Best Practices**  
Thurs., August 15, 2019, 1:30 - 3:30 PM CDT

**Introduction to Hydro Energy Logic Modeling Software (HELP-FL)**

- **Introduction to Hydro Energy Logic Program Modeling Software (HELP-FL), Part I**  
Tues., August 20, 2019, 11:00 AM - 2:00 PM CDT
- **Introduction to Hydro Energy Logic Program Modeling Software (HELP-FL), Part II**  
Wed., August 21, 2019, 11:00 AM - 2:30 PM CDT

**Small Wind Energy Systems**

- **Small Wind Energy System Components**  
Thurs., August 22, 2019, 11:00 AM - 1:00 PM CDT
- **Small Wind Energy Siting and Sizing**  
Fri., August 23, 2019, 11:00 AM - 1:00 PM CDT

**Deep Foundations and Excavations**

- **Earth Retention**  
Tues., August 27, 2019, 11:00 AM - 1:30 PM CDT
- **Deep Foundations**  
Wed., August 28, 2019, 11:00 AM - 1:30 PM CDT

For more information  
and other online learning opportunities visit:  
**[www.halfmoonseminars.org/webinars/](http://www.halfmoonseminars.org/webinars/)**

## Continuing Education Credit Information

This seminar is open to the public and offers 6.5 PDHs to professional engineers and 6.5 continuing education hours to architects in all states. Educators and courses are not subject to preapproval in Ohio.

This seminar is approved by the American Institute of Architects Continuing Education System for 6.5 LU|HSW (Sponsor No. J885). Only full attendance can be reported to the AIA/CES. Visit [www.halfmoonseminars.org](http://www.halfmoonseminars.org) for complete AIA information under this course listing.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York engineers and architects.

This course offers a non-credit continuing education opportunity to contractors. It has not been approved by any state contractor licensing entity for licensing maintenance.

Attendance will be monitored and attendance certificates will be available after the seminar for most individuals who complete the entire event. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days.

# Registration

**Building Information Modeling**  
Toledo, OH - Wednesday, October 2, 2019

| How to Register                                                                          | Registrant Information                                                                                                                                              |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Online:</b><br><a href="http://www.halfmoonseminars.org">www.halfmoonseminars.org</a> | Name: _____<br>Company/Firm: _____<br>Address: _____<br>City: _____ State: _____ Zip _____<br>Occupation: _____<br>Email: _____<br>Phone: _____                     |
| <b>Phone:</b><br>715-835-5900                                                            | <b>Additional Registrants:</b><br>Name: _____<br>Occupation: _____<br>Email: _____<br>Phone: _____                                                                  |
| <b>Fax:</b><br>715-835-6066                                                              | Name: _____<br>Occupation: _____<br>Email: _____<br>Phone: _____                                                                                                    |
| <b>Mail:</b><br>HalfMoon Education Inc.,<br>PO Box 278, Altoona, WI<br>54720-0278        | Occupation: _____<br>Email: _____<br>Phone: _____                                                                                                                   |
| <b>Complete the entire form.</b> Attach duplicates if necessary.                         | Email address is required for credit card receipt, program changes, and notification of upcoming seminars and products. Your email will not be sold or transferred. |
| ( )  I need special accommodations. Please contact me.                                   |                                                                                                                                                                     |

## Tuition

( ) **I will be attending the live seminar.** Single Registrant - **\$289.00**. Three or more registrants from the same company registering at the same time - **\$269.00** each.

**Checks:** Make payable to HalfMoon Education Inc.

**Credit Card:** *Mastercard, Visa, American Express, or Discover*

Credit Card Number: \_\_\_\_\_  
Expiration Date: \_\_\_\_\_ CVV2 Code: \_\_\_\_\_  
Cardholder Name: \_\_\_\_\_  
Billing Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Email: \_\_\_\_\_