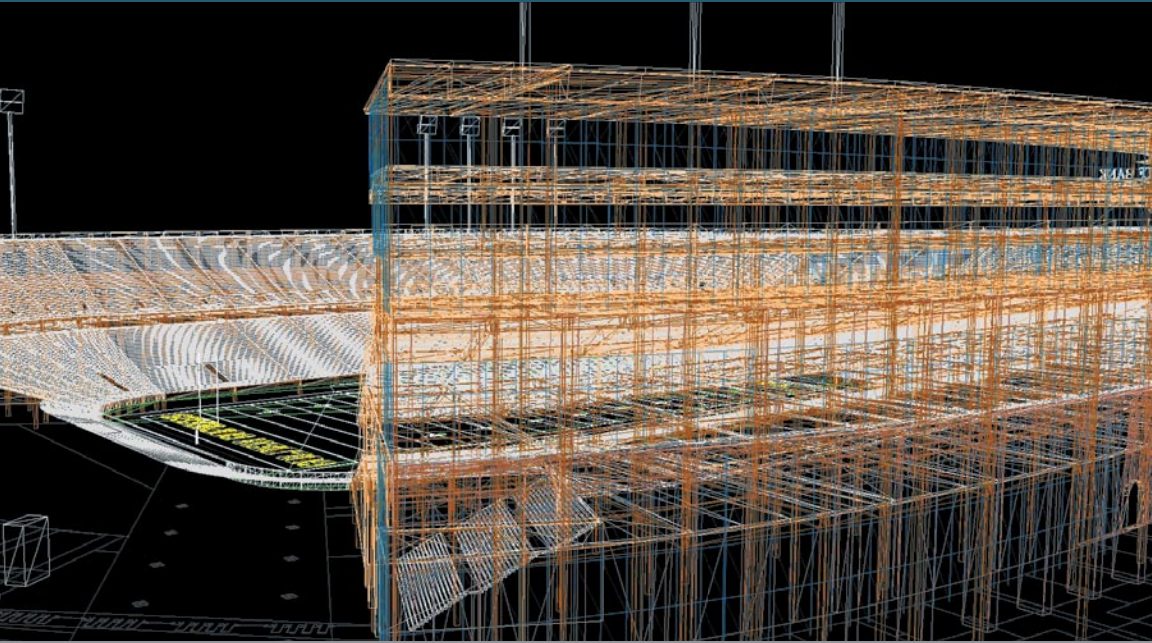


BIM

EDUCATION
PROGRAM

BUILDING INFORMATION MODELING EDUCATION PROGRAM

An AGC Construction Learning Tool



Your Resource for Successful BIM Implementation

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.



Building Information Modeling (BIM) is one of the most exciting developments in the construction industry and is changing the way projects are built. AGC's BIM Education Program is being developed in conjunction with leading BIM practitioners, technology firms and educators to provide contractors with the essential information and skills needed to successfully implement BIM.

AGC's BIM Education Program will be comprised of six units. The program is designed to give participants a broad understanding and essential knowledge on BIM terminology, technology, concepts, functionality, and legal and insurance issues.

Unit 1 | BIM 101 *Available Now*

Unit 2 | BIM Technology

Unit 3 | BIM Legal Issues and Risk Management

Unit 4 | BIM Case Studies and Lessons Learned

Unit 5 | BIM Process and Integration

Unit 6 | Advanced BIM

BIM 101: An Introduction to Building Information Modeling

BIM 101 is designed specifically for construction professionals eager to learn the essential concepts of BIM. Those also benefiting include building developers, owners, managers, supervisors, architects, engineers, and construction product manufacturers. Students in the architecture, engineering and construction (AEC) industry will also greatly benefit from this training.

The full-day course will give participants a comprehensive overview of BIM, supported by case studies to help participants comprehend each session's learning objectives. BIM 101 will introduce important concepts that will be necessary for future BIM courses.

BIM 101 Sessions

Session 1—What is BIM?

Session 1 focuses on answering the question “What is BIM?” and addresses why BIM should be used on construction projects. Participants will learn that the use of BIM eliminates the inefficiencies of the traditional method of Design-Bid-Build and two-dimensional (2D) drawings by facilitating collaboration among project team members and by illustrating the project design through three-dimensional (3D) visualization. The session concludes with a case study highlighting the differences between using BIM and not using BIM on two similar construction projects. Following successful completion of this session, participants will be able to:

- Define common BIM terminology and BIM-related components
- Recognize differences between 2D CAD and 3D BIM
- Describe the evolution of BIM (past, present and future)
- Discuss how BIM is used in collaboration
- Discuss the benefits of BIM to all parties involved

Session 2—BIM Visualization Uses and Spatial Coordination

Session 2 covers the process that a construction firm typically goes through to start incorporating BIM into its business processes. The session begins by taking a look at the core of BIM—the building of 3D models for visualization purposes—and then discusses the different model types that can be used. Following successful completion of this session, participants will be able to:

- Recognize the basics of the modeling process and model management protocol
- Recognize BIM uses in visualization, value analysis and scope clarification
- Explain the advantages of BIM in regards to spatial coordination

Session 3—BIM Scheduling, Estimating, and Facility Management

Session 3 introduces participants to more advanced uses of BIM, following the typical progression a company goes through in its BIM implementation plan. The session starts by looking at how companies have used 4D BIM in their

construction projects, then at the integration of 5D BIM, showing how material quantities can be extracted and costs estimated from the 3D model. The session concludes by encouraging participants to think of ways to incorporate these capabilities into their firms' procedures. Following successful completion of this session, participants will be able to:

- Recognize the advantages of BIM in scheduling and estimating
- Recognize how companies are using BIM in facility management
- Explain the benefits to and lessons learned from companies using BIM

Session 4—Getting Started with BIM

Session 4 describes the four options for BIM implementation and offers an example of how one general contractor got started. BIM implementation depends wholly on a company's unique situation and the implementation plan it develops. With this important reality in mind, the session concludes with participants developing a customized BIM Action Plan. Following successful completion of this session, participants will be able to:

- Identify challenges for getting started with BIM
- Demonstrate a basic understanding of BIM tools
- Develop a BIM Action Plan
- Use BIM resources provided to further understanding of more advanced BIM concepts and practice

How to Access BIM Education Programs

BIM Education Program courses are offered nationwide through select AGC chapters, individual construction firms and educational institutions. Visit www.agc.org/BIMEP for course dates and locations.

Interested in running your own BIM courses? Purchase BIM Education Program Instructor Guides and Participant Manuals at the AGC bookstore, www.agc.org/Bookstore or call 1-800-242-1767.

Future AGC BIM Education Program Courses

BIM Technology | A broad understanding of available BIM tools and hands-on training with some of the leading BIM software solutions. Will also outline ways to get various compatible software tools to work together on a project.

BIM Legal Issues and Risk Management | Uses the ConsensusDOCS BIM Legal Addendum as a foundation for training and will provide an overview of legal and insurance issues that are important to utilizing BIM on a project.

BIM Case Studies and Lessons Learned | Based on the Harvard Case Studies' approach, participants will examine the kinds of decisions and dilemmas BIM managers confront on a daily basis. Each case will illustrate examples of how leading companies have been using BIM and will demonstrate tools and techniques and illustrate the concepts that are necessary for a complete understanding of BIM.

BIM Process and Integration | Achieving the full benefits of BIM requires a reformation of traditional workflow processes and closer collaboration between the contractor and designer. This course will teach participants how to effectively collaborate with all project stakeholders in order to achieve better and more efficient projects.

Advanced BIM | Participants will focus on key BIM-related changes in the industry including: updates on the latest technological advances, new case studies, legal and insurance issues, and future trends.

Join AGC's BIMForum | Join more than 2,000 of the nation's leading Architects, Engineers, Builders and Owners, and become part of AGC's BIMForum today! BIMForum is an effort to facilitate and accelerate the adoption of building information modeling in the construction industry. This unique community collaborates via online forums and biannual conferences and provides both BIM experts and BIM novices a forum for education, discussion and implementation best practices. Learn more at www.BIMForum.org.

BIM EDUCATION PROGRAM

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Take Advantage of Member Pricing on AGC Education Programs and join an AGC Chapter Today | The Associated General Contractors of America (AGC) is the leading national construction trade association representing all facets of commercial construction for both public and private entities including building, heavy, highway, and municipal projects. AGC is committed to improving the profitability of its members by promoting the skill, integrity and responsibility of those who build America. Join your local AGC Chapter today. Visit www.agc.org for more information or to locate the chapter nearest you.

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