

INSTRUCTOR REQUIREMENTS AGC BIM EDUCATION PROGRAM

UNIT 4: BIM PROCESS, ADOPTION, AND INTEGRATION

BIM Education Program Overview

The BIM Education Program was developed in conjunction with leading BIM practitioners, technology firms and educators. The program is designed to successfully educate construction professionals at all experience levels on a range of topics they would encounter implementing and using a BIM.

The resources that make up the BIM Education Program have all been released. The components and release dates of the curriculum are:

- Unit 1: BIM 101—An Introduction to Building Information Modeling
 - Released April 2009
- Unit 2: BIM Technology
 - Released January 2010
- Unit 3: BIM Contract Negotiation and Risk Allocation
 - Released November 2010
- Unit 4: BIM Process, Adoption, and Integration
 - Released December 2010

Overview of *BIM Process, Adoption, and Integration*

BIM Process, Adoption, and Integration is a one-day, instructor-led course that provides a foundation for participants to establish and execute the BIM process, facilitate its adoption, and achieve integration on a single project and at a company level to execute multiple BIM projects simultaneously. These tools will help establish participants as BIM champions within their organizations.

The course provides the foundation for a participatory environment that balances discussion and small group assignments within an instructor-led format. The course consists of three sessions:

- Session 1: Introduction to BIM Process, Adoption, and Integration
- Session 2: Project-Level BIM Implementation
- Session 3: Company-Level BIM Implementation

AGC of America relies on qualified instructors with knowledge of the industry, BIM, and course materials to help fulfill the overall learning objectives of the course which include:

Course Learning Objectives

Following this course, 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 a specific BIM project
- 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

Session Learning Objectives

Following successful completion of Session 1, 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

Following successful completion of Session 2, participants will be able to:

- Evaluate and select process options for a specific BIM project
- Describe the roles and responsibilities of participants in the BIM process
- Identify consistent factors influencing BIM ROI at the project level
- Communicate the BIM process to management, colleagues, and project stakeholders
- Outline a process for BIM adoption and implementation at the project level

Following successful completion of Session 3, participants will be able to:

- Identify factors influencing BIM ROI at the company level
- Outline a process for BIM adoption and implementation at the company level

Minimum Instructor Qualifications

AGC of America has established the following minimum BIM and construction-related experience requirements for primary instructors. Please check the boxes indicated below to note that you have complied with each requirement.

Foundation of BIM

- Project-level BIM implementation experience as a construction professional is a requirement.
- Company-level BIM implementation experience within a construction firm.
- An understanding of BIM concepts and terminology including roles and responsibilities of project team members and the benefits of BIM for the construction industry.
- An understanding of the different theories of BIM implementation.
- Knowledge of BIM use in scheduling, estimating and facility management.
- Presentation orientation must be BIM 'product neutral' neither endorsing nor showing bias, though capable of describing the strengths and weaknesses of leading BIM applications.

Teaching and Facilitation Skills

In addition, excellent communication and listening skills with individuals from varied backgrounds are required, including the ability to paraphrase and summarize lessons and participant discussions.

Facilitators must:

- Be skilled with leading class activities and ensuring that learners actively engage with course content and activities.
- Encourage everyone's participation in the discussions keeping the group focused and on track without dominating discussion and group processes.
- Expect to spend between 16 and 24 hours preparing and familiarizing themselves with the materials and teaching approach.

- Maintain a positive attitude and professional approach to the presentation of course material representing the industry.

Proficiency with Course Materials

Please check the boxes indicated below to note that you have complied with each requirement.

- AGC of America offers several resources to instructors in order to help enhance training results. The *BIM Process, Adoption, and Integration* Instructor’s Guide and accompanying CD contains guide sheets for the instructor, PowerPoint slides and thumbnails, and ROI matrix. **Instructors must purchase/receive and review a copy of both the Instructor’s Guide and the Participant’s Manual for the course prior to being approved to facilitate the course.**
- Each participant must have a copy of the *BIM Process, Adoption, and Integration* Participant’s Manual during the course.
- Instructors should be well-versed in the contents of the course materials, knowledgeable of the course format and committed to helping the attendees achieve the learning objectives for the course. The course materials provide a minimum of information for the instructor to deliver. AGC of America welcomes and encourages instructors to add personal experience, case studies, examples, exercises and visual aids to the course delivery.
- Instructors should be familiar with the subjects covered in all BIM Education Program courses to avoid unnecessary repetition of the course material. This can be achieved by attending the programs as a participant, facilitating them, or purchasing course materials for self-study.
 - To familiarize myself with *BIM 101 I*:
 - Attended a *BIM 101* course
 - Facilitated *BIM 101*
 - Purchased and reviewed the Instructor’s Guide (containing the Participant’s Manual)
 - To familiarize myself with *BIM Technology I*:
 - Attended a *BIM Technology* course
 - Facilitated *BIM Technology*
 - Purchased and reviewed the Instructor’s Guide
 - Purchased and reviewed the Participant’s Manual
 - To familiarize myself with *BIM Contract Negotiation and Risk Allocation I*:
 - Attended a *BIM Contract Negotiation and Risk Allocation* course
 - Facilitated *BIM Contract Negotiation and Risk Allocation*
 - Purchased and reviewed the Instructor’s Guide
 - Purchased and reviewed the Participant’s Manual
 - To familiarize myself with *BIM Process, Adoption and Integration I*:
 - Attended a *BIM Process, Adoption and Integration* course
 - Facilitated *BIM Process, Adoption and Integration*
 - Purchased and reviewed the Instructor’s Guide
 - Purchased and reviewed the Participant’s Manual
- The AGC of America curriculum staff can hold individual conference calls with instructors to provide additional insight and direction, as needed, to ensure consistent and quality delivery of the course.
 - I would like to schedule a conference call at this time to discuss: _____

Unit 4: Process, Adoption, and Integration Instructor Orientation

The *BIM Process, Adoption, and Integration* Instructor Orientation is a one hour presentation facilitated by the subject matter expert course developer and instructional design team. The purpose of this walk thru is to prepare instructors of *BIM Process, Adoption, and Integration* to deliver the course for the first time and demonstrate the instructional intent of the material. Watching this orientation is a requirement of all instructors. The recording can be found at www.agc.org/BIMEP.

Instructor Statement of Qualifications

Instructors should read the statements below, check the following box to indicate that they meet the requirements for instructing the course, and then sign and submit the form. Please submit the signed form to the AGC of America staff contact for this course with a copy of your most recent biographical sketch and curriculum vitae for approval.

- I read the statements above regarding the minimum qualifications for instructing this course and proficiency with the course materials, knowledge of learning objectives, and I meet those requirements.
- I have purchased and reviewed both the *BIM Process, Adoption, and Integration* Instructor’s Guide and Participant’s Manual and feel I can successfully present this course.
- Attached is a recent biographical sketch and curriculum vitae
- I watched the *BIM Process, Adoption, and Integration* Instructor Orientation, found at www.agc.org/BIMEP and have a complete understanding of the instructional intent of the material. I have the following questions as a result (please list): _____

Signed Name Date

Printed Contact Information:
 Name: _____
 Title: _____
 Company Name: _____
 Address: _____
 Phone Number: _____ Fax: _____
 Email Address: _____
BIM Process, Adoption, and Integration Host Chapter/Organization: _____

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