Learn Building Blocks Essential
Online Training

Registration Information
Register for Building Blocks Online using our online Training Registration Center at http://trainingcenter.blackboard.com If you have any questions, please contact Blackboard Training at training@blackboard.com.

Overview
The objective of the Blackboard Building Block Essentials Online Course is to provide clients with the knowledge necessary to successfully build Blackboard Learn™ application extensions. This online training introduces the client to Blackboard Building Blocks through readings, recordings, assignments, and assessments designed to demonstrate the client’s mastery of the course objective to become self-sufficient in their Blackboard Building Block development activities.

Course Objectives
Blackboard Overview
- Understand the basic architecture of Blackboard Learn
- Understand the end-user experience

Building Block Lifecycle, Architecture, and Tools
- Understand the architecture of the Building Block framework
- Understand the role of the bb-manifest.xml
- Understand Tomcat’s JSP caching and how to configure it

Building Block Resources and Collaboration
- Resources available for helping build and maintain Building Blocks

Web Application Development
- Understand the technologies used by Blackboard
- Understand the technologies Building Blocks may use

Environment Setup
- Setup the Development Environment
- Create a simple Building Block in the Environment
- Deploy and Test the Building Block

Introduction to Building Block Development
- Understand the manifest file
- Understand launch points
- Know what resources are available to you

Data Management
- Understand the Blackboard public APIs
- Understand key core data elements
- Understand Blackboard’s persistence model
• Understand the Blackboard context

Interfaces
• Understand the bbNG Tags Library
• Understand the most commonly used tags
• Understand how and why tags are used
• Use tags on a JSP page

Data Collection
• Understand how to use form pages in a Building Block
• Understand how to handle form submissions
• Understand how to turn forms into objects
• Understand how to validate data

Modules
• Understand the Building Block module
• Understand how to build a Building Block module
• Understand how to configure a Building Block module

Who Should Attend
Blackboard Developers using Blackboard Learn™ 9.1.x who meet the following requirements:
• Administrator level access to a Blackboard Development environment
• Basic level or above Java experience including the ability to write, compile and understand Web applications written in Java using the Struts/Spring MVC framework
• Basic level or above understanding of Blackboard functionality

Duration and Costs
• Participants should expect to spend approximately 25 hours to complete the course activities.
• Course is available for 30 days after enrollment is processed. Participants are asked to budget their time accordingly.
• $3,000 USD per person

Location
• Fully online/asynchronous self-paced. Participants will have access for 30 days.

Pre-Requisites
• Administrator level access to a Blackboard Learn™ Development environment, both at the application and database levels.
• Updated browser.