

Use Case Modeling

As a fundamental component to identifying requirements for a new system, business analysts must be able to illustrate how “actors,” such as end users, stakeholders, or related systems, will be affected once the new system is implemented. This process, also known as Use Case Modeling, provides business analysts with a powerful tool for documenting functional requirements—and the interactions between these requirements—in a manner that can be easily communicated to designers, programmers, project managers and other project stakeholders.

This course provides business analysts with the required competencies for creating use case diagrams and use case scenarios, which serve as a vehicle for eliciting, analyzing, documenting and communicating functional requirements. You will practice creating use cases in the Unified Modeling Language (UML) to graphically represent the interactions between use cases and actors. To fully gain the benefits of UML, you will create use case diagrams through an object-oriented approach, which enables business analysts to sift through the complexity of a system by breaking it down into smaller units.

Take this course and you’ll gain more than just the lexicon required for use case and object oriented modeling. Through interactive exercises, you will practice writing the alternate/exception flows, arranging objects into properly named classes, and reading class diagrams. Most importantly, you’ll gain the ability to integrate use case modeling within the software development life cycle to ensure that project requirements are accurate, complete, and map to the objectives of the business.

Reminder: Prior to taking this course, you should have acquired the background as taught in *How to Gather and Document User Requirements* and *Process Modeling Management*.

Course Topics

1. **Introduction to Use Case Modeling**
 - a. Organizing requirements with use cases
 - b. Use case diagrams as a UML notation
 - c. Organizing the model with packages
2. **Identifying and Describing Actors**
 - a. Use case actors
 - b. Business versus system actors
 - c. Identifying actors
 - d. Mapping stakeholders to actors
 - e. Users versus actors
3. **Identifying and Describing Use Cases**
 - a. Identifying use cases
 - b. Writing a use case description
 - c. Including preconditions, postconditions, assumptions and scenarios
4. **Writing Use Case Scenarios**
 - a. Identifying the main success scenario
 - b. Identifying alternates and exceptions
 - c. Indicating iteration
5. **Advanced Use Case Modeling Techniques**
 - a. Diagramming an «include» relationship
 - b. Diagramming an «extend» relationship
 - c. Diagramming generalization and specialization
 - d. Considering multiplicity
6. **Ensuring Use Case Quality**
 - a. Employing quality assurance techniques
 - b. Ensuring use cases are testable
7. **Prioritizing Use Cases**
 - a. Estimating project cost with use cases
 - b. Employing prioritization techniques
8. **Introduction to Object Modeling**
 - a. Use cases and object orientation (OO)
 - b. Identifying objects and classes
9. **Identifying and Describing Business Domain Objects**
 - a. Assigning objects to classes
 - b. Guidelines for describing business objects
 - c. Describing operations, attributes and associations

Learn how to:

- Employ use cases to elicit, analyze, document and communicate functional requirements for software
- Use the Unified Modeling Language (UML) to create use case diagrams
- Determine when to employ use case modeling
- Prioritize use cases based on their importance to the business and on technical considerations
- Describe ways to develop consistent vocabulary between use cases and objects
- Analyze and document detailed requirements using an object model
- Read a class diagram

 For pre- and post-course assessments, visit www.esi-intl.com/MyESI.

BABOK® Guide knowledge areas:

Business Analysis Planning and Monitoring
Elicitation
Requirements Analysis
Requirements Management and Communication
Solution Assessment and Validation

PMBOK® Guide knowledge areas:

Project Scope Management
Project Quality Management
Project Risk Management

ACE CREDIT recommendation:

Undergraduate: 2 credit hours

PDUs: 28.0 **CEU**s: 2.8 **CDU**s: 28

This course has been updated to reflect the *BABOK® Guide*—Version 2.0.

 **Endorsed Education Provider**

 **AMERICAN COUNCIL ON EDUCATION**
CREDIT
College Credit Recommendation Service