

Course title

Introduction to Object-oriented Programming: OpenEdge 12 Course

Duration

Equivalent to 8 hours of learning

Audience

Experienced ABL application developers

Description

This course introduces the object-oriented programming (OOP) capabilities of Progress OpenEdge ABL. You learn to define and use ABL classes to model real-world business entities and application behavior. You explore the structure and anatomy of classes and understand how access modes control visibility and encapsulation.

As the course progresses, you work with more advanced object-oriented features such as, inheritance, interfaces, abstract classes, enums, delegation, static members, and events. You learn how to design class hierarchies, override methods and properties, apply polymorphism, and use delegation to promote flexibility and reuse.

The materials that you receive with this course include a Course Guide and an Exercise Guide, which includes hands-on exercises and solutions.

This course is also available online with a subscription to the [Progress Education Community](#).

Version compatibility

This course is compatible with OpenEdge 12.2 and OpenEdge 12.8.

What you will learn

After taking this course, you should be able to:

- Determine and apply the core principles of object-oriented programming—including abstraction, encapsulation, inheritance, polymorphism, and delegation.
- Design and define well-structured ABL classes by creating data members, properties, constructors, methods, destructors, and events with appropriate access modes.
- Create, manage, and test class instances by controlling object lifecycles, accessing members safely, and validating behavior through test procedures.
- Implement inheritance and polymorphism by defining class hierarchies, overriding methods and properties correctly, and enforcing object hierarchy through constructors.

- Improve application design by using interfaces, abstract classes, and enums to define contracts, templates, and strongly-typed constants.
 - Apply delegation and composition to share responsibilities between objects while reducing coupling and improving flexibility.
 - Define and use static members and static constructors to manage class-level or session-wide data and behavior.
 - Implement event-driven programming by defining, publishing, subscribing to, and handling class events.
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Prerequisites

Before you begin this course, you should have:

- Knowledge of the core components and architecture of the Progress OpenEdge platform
 - Knowledge of the Developer Studio interface and its key perspectives
 - Ability to create and configure an OpenEdge database
 - Knowledge of procedural coding concepts and syntax in ABL
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