

**Universe Design Tool (UDT)**

**Course Number:** BO-106
**Duration:** 2 days

**Overview**

Accelebrate's SAP® BusinessObjectsTM Universe Design Tool training teaches attendees to get up and running with Universe creation. Attendees learn how to create database connections, joins, classes and objects, hierarchies, loop resolution, contexts, table aliases, and much more.

**Prerequisites**

All students should already have:

* Basic Windows Skills
* Some Database Background
* Some SQL Skills
* Experience with Desktop Reporting 4.x or WebIntelligence 4.x Basic Reporting (Recommended)

**Materials**

All BusinessObjects training students receive comprehensive courseware.

**Software Needed on Each Student PC**

Class files and instructions for setting them up on your BusinessObjects server are provided. All attendees and the instructor will need access to the server during the training.

**Objectives**

* Create and Maintain Universes
* Join Database Tables and Set or Detect Join Cardinality
* Create Classes and Objects within Hierarchies
* Define Dimensions, Details, and Measures
* Using Contexts and Aliases
* Create Predefined Conditions
* Use Desktop ReportingTM 4.x or WebIntelligenceTM 4.x Reporting to Test Universes and SQL Generation

**Outline**

* BusinessObjects Overview
	+ Basic Architecture
	+ Administration
	+ Semantic Layer
	+ Definitions Review
	+ Universe Development Process
* Getting Started
	+ Using Designer
	+ Defining Database Connection
	+ Setting Parameters
	+ Inserting Database Tables
* Joins
	+ Defining Joins
	+ Methods of Creating Joins
	+ Creating Equi-joins
	+ Creating Outer Joins
	+ Creating Theta Joins
	+ Detecting Joins
* Classes and Objects
	+ Defining Classes/Subclasses
	+ Defining Object Types
	+ Class and Object Organization
	+ Creating Classes
	+ Creating Dimensions/Details
	+ Object Properties
	+ List of Values
	+ Deleting Objects
	+ Testing Cycle
* Measures
	+ Creating Measures Class
	+ Creating Simple Measures
	+ Creating Measures Using Arithmetic Formula
	+ Formatting Measures
* Understanding Aliases and Contexts
	+ Using Aliases
	+ Using Contexts
	+ Checking Universe Integrity
* Restrictions
	+ Forced Restrictions
	+ Object-level Restrictions
	+ Self-restricting Joins
	+ Conditional Select Statements
	+ Additional Inferred Joins
	+ Optional Restrictions
	+ Predefined Conditions
	+ Understanding Index Awareness
	+ Setting Primary and Foreign Key index awareness
* @Functions
	+ @Prompt
	+ @Select
	+ @Where
	+ @Variable
	+ @Script
* Hierarchies
	+ Hierarchy Types
	+ Default Hierarchies
	+ Automatic Time Hierarchies
	+ Table Based Time Hierarchies
	+ Custom Hierarchies
* Aggregate Awareness
	+ Summary Tables
	+ Creating Aggregate Derived Tables
	+ Applying Aggregate Awareness
	+ @Aggregate\_Aware
	+ Detecting & Setting Incompatible Objects
* Resolving Traps
	+ Fan Traps
	+ Chasm Traps
	+ Procedures for Resolving Traps
* Reviewing Security Restrictions
	+ Group and User GroGroup & User Security
	+ Applying Security Restrictions
	+ Net Security Restrictions
* Documenting & Maintaining Universes
	+ Documenting Universes
	+ Creating Hardcopies (Printing)
	+ Saving As PDF
	+ Distributing Universe
	+ Universe Security
	+ Enterprise Distribution
	+ Exporting Universes
	+ Locking Universes
	+ Incremental Exports
	+ Version Control
	+ Maintaining Universes
	+ Target Database Changes
	+ Impact Resolution
	+ Adding New Tables
	+ Object Revisions
	+ Efficient Maintenance
* Conclusion