

KOENIG SOLUTIONS · COURSE OUTLINE

Development Basics in Microsoft Dynamics 365 Finance and Operations

Learn to develop in Microsoft Dynamics 365 Finance and Operations using Visual Studio, X++, tables, forms and security basics.

5 Days

40 HOURS

17

MODULES

92

TOPICS

16

HANDS-ON ACTIVITIES

COURSE OVERVIEW

The Development Basics in Microsoft Dynamics 365 Finance and Operations course is designed to provide learners with foundational knowledge and skills for developing within the Microsoft Dynamics 365 platform, specifically targeting the Finance and Operations applications. It covers a broad range of topics, from an introduction to Visual Studio, which is the primary development environment, to understanding the Architecture of D365 operations, working with Labels and resources for localization, and defining data structures through Extended data types, Base enumerations, and Tables. Students will learn how to create efficient Table indexes, establish Table relations, design forms using Form patterns, and navigate the Menu structure. The course also dives into the core programming language of D365 development, X++, and it instructs on how to create classes, perform Database manipulation, and handle exceptions. Additionally, it covers security basics crucial for developing secure applications and introduces advanced topics to prepare learners for more complex development tasks. By completing this course, learners will gain the necessary skills for D365 development within Microsoft 365 operations, setting the stage for creating robust, enterprise-level solutions.

Who Should Attend

The Development Basics in Microsoft Dynamics 365 Finance and Operations course equips IT professionals with essential skills for software customization and development in Dynamics 365.

Dynamics 365 Developers

Technical Consultants

Software Engineers interested in Dynamics 365

IT Professionals transitioning to Dynamics 365 development

Systems Architects designing solutions for Dynamics 365

Existing Dynamics AX developers upgrading their skills

ERP Specialists seeking to understand the technical aspects of Dynamics 365

Application Developers working with X++

Technical Solution Architects

Database Administrators involved in Dynamics 365 implementations

IT Graduates aiming for a career in Dynamics 365 development

LEARNING OBJECTIVES

- Configure Visual Studio and build development projects
- Explain Dynamics 365 Finance and Operations architecture
- Create labels, resources and base enumerations
- Define extended data types and tables with indexes and relations
- Design forms using form patterns and menu structures
- Apply X++ syntax to build classes and runnable code
- Implement database manipulation and exception handling
- Describe security roles, duties and advanced topics

COURSE SYLLABUS

17 Modules, 92 Topics

01

4 Labs

Introduction to Visual Studio

TOPICS

- Module Overview
- Fleet Management Scenario
- Setup and Configuration
- Terminology and Concepts
- Naming Conventions
- Navigation
- Projects, Models, and Packages
- Using Elements
- Performing Builds

02

Architecture

TOPICS

Application Stack · Server Architecture · Cloud Architecture

03**Lab**

Labels and Resources

TOPICS

Labels · Fleet Management Scenario · Creating and Using Labels · Searching Labels · Best Practices for Labels · Resources · Creating and Using Resources

04**Lab**

Base Enumerations

TOPICS

Fleet Management Scenario · Creating a Base Enumeration · Best Practices

05**Lab**

Extended Data Types (EDTs)

TOPICS

Fleet Management Scenario · Primitive Data Types · Creating an EDT · Best Practices

06**2 Labs**

Tables

TOPICS

Fleet Management Scenario · Creating a Table · Adding Data Types · Key Properties · Table Inheritance · Temporary Tables · Queries · Best Practices

07**Lab**

Table Indexes

TOPICS

Fleet Management Scenario · Index Types · Creating an Index · Best Practices

08**Lab**

Table Relations

TOPICS

Fleet Management Scenario · Relations · Creating a Relation · Best Practices

09

Form Patterns

TOPICS

Form Patterns and Sub-patterns (Part 1) · Form Patterns and Sub-patterns (Part 2) · Form Patterns and Sub-patterns (Part 3) · Layout Properties · Checking Form Patterns

10**2 Labs**

Form Creation

TOPICS

Fleet Management Scenario · Creating a Form · Form Controls · Adding Elements · Best Practices

11**2 Labs**

Menus

TOPICS

Fleet Management Scenario · Creating Menu Items · Creating Menus

12

Lab

X++ Overview

TOPICS

- Fleet Management Scenario
- Code Editor
- Creating a Runnable Class
- IntelliSense
- Data Types
- Variable Declaration
- Key Operators
- Basic Syntax (Part 1)
- Basic Syntax (Part 2)
- Comparison Tools
- Debugger
- Best Practices

13

Classes

TOPICS

Fleet Management Scenario · Class Structure ·
Creating a Base Class · Methods · Class Inheritance ·
Best Practices

14

Database Manipulation

TOPICS

Fleet Management Scenario · Data Retrieval · Reading
Records · Transaction Integrity Checking · Data
Insertion · Data Updates · Data Deletion

15

Exception Handling

TOPICS

Fleet Management Scenario · Exception Types · Key
Commands · Code Statements

16

Security Basics

TOPICS

Security Architecture Overview · Creating a Role ·
Creating a Duty · Security Properties on Key Elements

17

Introduction to Advanced Topics

TOPICS

Business Intelligence · Reporting Services · Services and Integration · Data Entities

Practise What You Learn

#	MODULE	ACTIVITY
01	Introduction to Visual Studio	LABS
		■ Configure Visual Studio
		■ Create a Project
		■ Create an Element
		■ Build and Compile
03	Labels and Resources	Lab: Create Labels
04	Base Enumerations	Lab: Create Base Enumerations
05	Extended Data Types (EDTs)	Lab: Create Extended Data Types (EDTs)
06	Tables	LABS
		■ Create Tables
		■ Create Queries
07	Table Indexes	Lab: Create an Index
08	Table Relations	Lab: Create a Table Relationship
10	Form Creation	LABS
		■ Create Forms
		■ Add Elements
11	Menus	LABS
		■ Create Menu Items
		■ Create a Menu
12	X++ Overview	Lab: Create a Runnable Class

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

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Live Online Classes (ILO)

Fly-Me-A-Trainer (FMAT)

Flexi (Self-Paced)

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