Extending Dynamics 365 with Custom Plugins Training Course

Professional Development Training Course Outline

Category	Enterprise Resource Planning (ERP)	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In today’s rapidly evolving digital landscape, businesses require highly customizable solutions to stay competitive. Microsoft Dynamics 365 provides a robust platform for enterprise resource planning (ERP) and customer relationship management (CRM), but the true potential of Dynamics 365 is unlocked through custom plugins, enabling tailored workflows, automated processes, and seamless integrations. Extending Dynamics 365 with Custom Plugins Training Course empowers professionals to design, implement, and optimize custom plugins, leveraging advanced .NET development, Azure integrations, and real-time event processing to extend Dynamics 365 functionality and maximize business impact.

This course is designed to bridge the gap between out-of-the-box capabilities and advanced customization needs. Participants will gain hands-on experience in C# plugin development, event handlers, asynchronous workflows, and best practices for secure and maintainable code. By the end of the program, learners will confidently build scalable, efficient, and reusable plugins that solve complex business challenges, enhance automation, AI-driven insights, and data-driven decision-making, and future-proof their Dynamics 365 ecosystem.

Programme Curriculum

Extending Dynamics 365 with Custom Plugins Training Course

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Course Duration

5 days

Course Objectives

By the end of this course, participants will be able to:

1. Master Dynamics 365 plugin architecture and core event pipeline concepts.
2. Develop custom C# plugins for pre-operation, post-operation, and asynchronous workflows.
3. Integrate plugins with Power Automate and external systems for seamless automation.
4. Implement best practices for error handling, logging, and debugging in Dynamics 365 plugins.
5. Utilize Azure Functions and Logic Apps to enhance plugin capabilities.
6. Optimize plugin performance using asynchronous execution and batch processing techniques.
7. Apply security and role-based access control within custom plugins.
8. Extend Dynamics 365 with real-time data processing and AI-driven insights.
9. Design reusable plugin templates and libraries for faster development.
10. Automate business processes using workflow orchestration and event-driven triggers.
11. Troubleshoot and maintain plugins using Dynamics 365 monitoring and analytics tools.
12. Incorporate cloud integration patterns for scalable plugin solutions.
13. Prepare for advanced certifications and enterprise-grade plugin deployments.

Target Audience

1. Dynamics 365 Developers
2. Solution Architects
3. CRM/ERP Consultants
4. IT Professionals and System Administrators
5. Business Analysts with technical roles
6. Software Engineers transitioning to Microsoft stack
7. Technical Project Managers
8. Enterprise IT Teams seeking automation expertise

Course Modules

Module 1: Introduction to Dynamics 365 Plugins

- Overview of plugin architecture and event execution pipeline
- Difference between synchronous and asynchronous plugins
- Understanding pre-operation, post-operation, and main operation stages
- Common scenarios where plugins enhance business processes

- Case Study: Automating lead qualification workflow in Dynamics 365

Module 2: Setting Up Development Environment

- Installing Visual Studio and Dynamics 365 SDK
- Setting up a sandbox environment
- Creating plugin project templates
- Connecting to Dynamics 365 instances
- Case Study: Setting up a development environment for custom sales workflows

Module 3: Plugin Development Basics

- Writing your first C# plugin
- Implementing IPlugin interface and context handling
- Accessing entity data within plugins
- Logging and exception handling
- Case Study: Automating account record updates on creation

Module 4: Advanced Plugin Techniques

- Using images (pre/post) for data manipulation
- Handling complex business logic with multiple steps
- Implementing secure plugin code
- Performance optimization strategies
- Case Study: Real-time opportunity scoring using plugin logic

Module 5: Integration with Power Platform & Azure

- Connecting plugins to Power Automate flows
- Using Azure Functions for external service integration
- Triggering Logic Apps from plugins
- Best practices for hybrid cloud scenarios
- Case Study: Sending automated notifications to Teams from plugin events

Module 6: Debugging and Testing Plugins

- Using the Plugin Registration Tool for deployment
- Debugging plugins with Visual Studio
- Unit testing and test-driven development
- Logging for production monitoring
- Case Study: Troubleshooting a plugin causing performance bottlenecks

Module 7: Advanced Workflows and Automation

- Combining plugins with workflows and business rules
- Implementing asynchronous and batch operations
- Automating multi-step business processes
- Using AI Builder and predictive analytics
- Case Study: Automated customer feedback analysis and action triggers

Module 8: Governance, Maintenance & Best Practices

- Version control and deployment strategies

- Monitoring plugin performance and exceptions
- Security and compliance considerations
- Writing reusable plugin libraries
- Case Study: Maintaining enterprise-level plugins for sales and service modules

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call +254769199797

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price

23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

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