

(80437A) –C/Side Solution Development in Microsoft Dynamics NAV 2013

OBJECTIVE

This three-day instructor-led course leads students through a simulated implementation project, where their goal is to customize Microsoft Dynamics NAV 2013 to meet customer's requirements. It explains standard application concepts and provides insight into most important processes in Microsoft Dynamics NAV 2013, including documents and journals posting, dimension management, feature integration, role tailoring, and automating unit testing.

COURSE TOPICS

Module 1: Data and Process Model

- Table Types and Characteristics
- Standard Data Model
- Standard Process Model

Module 2: Master Tables and Pages

- Prerequisite Knowledge
- Participants
- Instructors and Rooms
- Seminars

Module 3: Documents

- Prerequisite Knowledge
- Registrations
- Reviewing the Table Code

Module 4: Posting

- Prerequisite Knowledge
- Posting Seminar Registrations

Module 5: Feature Integration

- Prerequisite Knowledge
- Seminar Feature Integration
- Navigate Integration

Module 6: Reporting

- Prerequisite Knowledge
- Reporting Lab Overview
- Participant List Reporting

- Invoice Posting Batch Job

Module 7: Statistics

- Prerequisite Knowledge
- Seminar Statistics

Module 8: Dimensions

- Prerequisite Knowledge
- Integrating Seminar Management with Dimensions

Module 9: Role Tailoring

- Prerequisite Knowledge
- Seminar Manager Role Center
- Menu Suite Object Type
- Seminar Management Department Page

Module 10: Interfaces

- Prerequisite Knowledge
- Email Confirmation

Module 11: Web Services

- Prerequisite Knowledge
- Registration Web Service

Module 12: Testing and Debugging

- Prerequisite Knowledge
- Testing Seminar Management
- Debugging

Module 13: Optimizing for SQL Server

- SQL Server for Microsoft Dynamics NAV
- Representation of Microsoft Dynamics NAV Tables and Indexes in SQL Server
- Collation Options
- SQL Server Query Optimizer
- Optimizing a Microsoft Dynamics NAV Application
- Data Access Redesign
- C/AL Database Functions and Performance on SQL Server
- Bulk Inserts

- Locking, Blocking, and Deadlocks
- SIFT Data Storage in SQL Server
- SQL Server Profiler

Module 14: Appendix

- CRONUS International Ltd.
- Functional Requirements
- Content Structure

After completing this course, students will be able to:

- Explain the different table types and their characteristics.
- Present the standard data model and introduce the data-related business logic.
- Present the standard process model that governs the transactions in Microsoft Dynamics NAV 2013.
- Explain the master table and page standards.
- Work with table event triggers.
- Work with complex data types and their member functions.
- Explain the multi-language functionality.
- Define the strategy for implementing Customers and Participants.
- Create the tables to manage the seminar rooms.
- Create instructor data management.
- Create seminar data management.
- Import and export objects as text files.
- Support multi language functionality.
- Use document pages.
- Use virtual tables.
- Use temporary tables.
- Review the various types of tables.
- Review different page and table C/AL functions.
- Create additional tables and pages to maintain registrations.
- Explain the working and posting tables.
- Explain the posting routines and their relationships.
- Create journal posting routines.
- Create document posting routines.
- Present the best practices for documenting changes to existing objects.
- Program for minimum effect on the application.

- Integrate previously created Seminar Management module features with one another.
- Explain the architecture of the Navigate feature.
- Extend the Navigate functionality to enable finding posted seminar information.
- Enable easier searching for information by adding Navigate functionality to Seminar Management pages.
- Enable looking up Seminar Management information from standard application areas.
- Use report event triggers.
- Use special report functions.
- Create reports for the Role Tailored client.
- Create a seminar participant list.
- Create a Processing Only report that posts invoices.
- Create a page that calculates price sums efficiently.
- Make the page available from the Seminar pages.
- Use Flow Filters to easily calculate statistics for different time periods.
- Describe Global, Shortcut, and Budget dimension types and their functions.
- List the basic rules of Dimension Setup.
- Present the dimension management data and process models.
- Implement dimensions on the master record level.
- Define the components of the Role Tailored user interface.
- Explain the structure, purpose, and functionality of a Role Center-type page.
- Create the Seminar Manager Role Center page.
- Describe the functionality of the Departments page and the Menu Suite object type.
- Integrate the Seminar Management department into the Departments page.
- Explain how to use Automation and OCX to perform tasks with other applications.
- Describe file handling functions to import or export data.
- Describe Microsoft Dynamics NAV 2013 Web services architecture.
- Explain the protocols that Microsoft Dynamics NAV 2013 uses for Web services.
- Evaluate the benefits of Web services over other integration options in Microsoft Dynamics NAV.
- Explain how to expose code unit, page, and query objects as Web services.
- Consume Web services from external applications.
- Demonstrate the testing features of Microsoft Dynamics NAV 2013.
- Explain the test code units, test functions, and handler functions.
- Describe how to automate user interface testing.
- Explain the functionality and purpose of test runner code units.
- Develop a unit testing framework for the Seminar Management solution.

- Describe the Debugger functionality and features.
- Demonstrate the debugging process.
- Explain the advantages of SQL Server for Microsoft Dynamics NAV 2013.
- Work with tables and indexes.
- Use collation options and descriptions.
- Explain SQL Server Query Optimizer.
- Explain the areas within Microsoft Dynamics NAV that can be optimized.
- Explain how the Microsoft Dynamics NAV database driver enables the Microsoft Dynamics NAV clients to communicate with SQL Server.
- Understand the performance effect of locking, blocking and deadlocks.
- Understand how SIFT data is stored in SQL Server.
- Present the case study for the CRONUS International Ltd. implementation project.
- Provide test scripts for function testing of customized functionality.

PREREQUISITES

Before attending this course, students must have:

- knowledge of Microsoft Dynamics NAV 2013
- completed course 80436A C/SIDE Introduction in Microsoft Dynamics NAV 2013

TRAINING APPROACH

This course includes lectures, course notes, exercises and hands-on practice.

COURSE DURATION

24 Hours (in 3 days)

CERTIFICATION COMPLETION

A certificate of completion is provided for all trainees attending the course