



Course Description

This course consists of lectures, demonstrations, laboratory exercises, and question and answer sessions designed to educate the student in the system configuration, HIS and FCS builders, regulatory and calculation functions, control programs, graphics and advanced function blocks.

Duration

7 days

Objectives/Outcomes

Upon completing this course, the learner will be able to exhibit the ability to:

- Practice with System View to create new projects
- Define field control station (FCS) and operator station (HIS) in a project
- Practice with HIS and FCS Configuration Builders
- Employ Feedback Control Instruments using Regulatory and Calculation Functions
- Use the Report Package Builder
- Design Control Programs using Sequence Tables and related components
- Setup Project Data Backup, Tuning Parameter Backup and FCS Automatic Backup
- Define CENTUM VP graphic display terminology and concepts
- Navigate the Graphic Builder interface
- Modify a graphic using a drawing layer
- Create graphic objects and define

Intended Audience

All plant personnel whom are responsible for the configuration and/or maintenance of a CENTUM VP system. This course is also the prerequisite for the Foundation Fieldbus Engineering course.

Course Prerequisites

Student **must** have attended CENTUM VP Essentials or Maintenance

Technical Requirements

- Basic knowledge of controlling a process
- Basic file/folder manipulation in a Windows environment

Materials

Each learner will be provided with the appropriate course workbook.

Evaluation Methods

- Laboratory exercises
- Question and answer sessions

Requirements to Be Awarded Certification

- Submit completed course Registration Form
- Fulfill financial obligations
- Fulfill the 90% attendance requirement by signing-in each day of facilitated course
- Fulfill the 70% or above overall scoring requirement on labs and projects



CENTUM VP Engineering Training Course 7420



Course Syllabus

Day 1

- System Configuration using “System View” Builder File
- Create a New Project
- Definition of Initial Setup Items
- Create New FCS and HIS
- Configuration of Security Definition
- Exercises

Day 2

- Setup Items in the HIS Configuration Folder
- Create Control and Overview Graphic Window
- Define FCS Configuration
- Define Node Interface Units
- Define I/O Modules for Analog and Digital Points
- Configuration of Common Switches
- Define Operator Guide Messages, Annunciator Messages and Message Printout
- Exercises

Day 3

- Define different types of Regulatory Control and Calculation Function Blocks
- Define Input and Output Signal Processing
- Define Signal Wiring on Control Drawings
- Configuration of Function Block Detail
- Configuration of Report Package to Create and Run Reports
- Exercises

Day 4

- HIS Window Hierarchy and assignment
- Graphic Builder interface
- Linked Parts
- Exercises

Day 5

- Define Sequence Control Elements
- Define and Configure Sequence Function Blocks
- Define and Configure Switch Instruments
- Exercises

Day 6 and 7

- Course Project with Feedback and Control Function Blocks

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