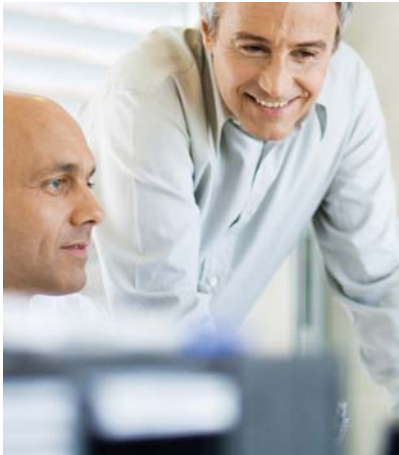


## Special Training Packages

Honeywell EMEA Automation College (AC) helps you reduce your employees' training costs.



Given the current challenging economic situation, Honeywell Process Solutions EMEA has established eight **attractively priced Special Training Packages (STP)** allowing students to take multiple courses within a particular package at significantly reduced prices. Each student will have the flexibility to attend any of the training courses of the defined STP **at any of the Honeywell EMEA AC facilities.**

Bookings for these STPs will be accepted effective immediately through the **end of September 2009.** Our Training Coordinators can assist you with the planning to ensure the **same student** completes his/her respective training package **by 31<sup>st</sup> December 2009.**

The below training packages are being offered at a **25% discount off European List Price:**

- [Experion System Implementation Package – Core](#) (Course code STP01R3XX)
- [Experion System Implementation Package – Focused](#) (Course code STP02R3XX)
- [Experion Safety Implementation Engineer Package – FSC or SM](#) (Course code STP03R3XX)
- [Experion Safety Maintenance Engineer Package – FSC or SM](#) (Course code STP04R3XX)
- [TPS System Engineer - Implementation Package](#) (Course code STP05R600 - APP)
- [TDC System Engineer - Implementation Package](#) (Course code STP06R600 - AM)
- [TDC2000/3000 System Engineer Maintenance Package](#) (Course code STP07R600)
- [TDC2000/3000 System Engineer Maintenance with Experion Front End Package](#) (Course code STP08R600)

For more information, please contact [automationcollege.hpsemea@honeywell.com](mailto:automationcollege.hpsemea@honeywell.com) or call +32(0)2.728.2589.

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# Experion Process Knowledge System (PKS) System Implementation Package - Core

Course number: STP01R3XX (R300 or R310)



This package consists of

- EXP02R3XX course (4.5 days)
- EXP20R3XX course (4.5 days)
- EXP03R3XX course (4 days)

## Course Overview

### Need to plan and implement your Experion PKS System?

Then attend this course package to cover Server Engineering, Controller Engineering and HMI Graphics Building.

Course package may be booked and taken over a period of time at any EMEA AC location – restrictions apply to the Safety Course location.

This Package will attract a 25% discount off ELP.

## Course Benefits

### Efficient Experion PKS System planning and implementation of your Server, Controllers and Operator Graphics

- Conceptual understanding of the server to enable optimum utilization
- Design and configure the server for optimum data collection
- Conceptual understanding of the C200 and C300 controllers to enable optimum utilization
- Design and configure the C200 and C300 controllers for optimum control
- Conceptual understanding of graphic building guidelines to enable efficient display design
- Design and construct displays to create an effective interface for Plant Operations

## Who Should Take this Course

### Experion PKS System Implementers

Experion System Engineering and configuration tasks can impact the following job roles. Other job roles performing these tasks could also participate.

- **Experion System or Application Engineer** responsible for configuring the server, adding to or changing the server configuration
- **Experion System or Application Engineer** responsible for configuring the C200, C300 controllers and ACE, adding to or changing the control system configuration

**System or Application Engineers** responsible for designing and creating Operator displays

## Prerequisite/ Skill Requirements

### Prerequisite Skills/Experience

- Working Knowledge of Windows 2003 Server and/or XP

### Desirable Skills and/or Experience:

- Plant, process, and Distributed Control System tag knowledge
- Plant, process or controls knowledge
- Operator display design or specification familiarity
- Configuration of a DCS controller

## Course Topics – EXP02R3XX

### You will be able to...

- Recognize the role of the major hardware and software components and learn how data flows through the Experion PKS Server
- Plan the Experion PKS Server and the Fault Tolerant Ethernet
- Configure Stations, Flex, Console, and Console Extensions
- Configure Report printers
- Use the Configuration Studio for Server configuration
- Configure the Experion PKS Server for Process Control functionality such as:
  - Enterprise Model including Assets and Alarm Groups
  - SCADA Controllers and Points
  - Configuring Alarm Settings
  - Alarm, Event, and Message Summaries
  - SCADA Point Algorithms
  - History Archiving
  - Group and Trend Displays
  - Point schedules

# Experion Process Knowledge System (PKS) System Implementation Package - Core



- Alarm Paging
- Recipes
- Configure additional functionality such as:
  - Distributed System Architecture which allows multiple Experion PKS servers to share point data
  - Data exchange with Microsoft Excel
  - Batch Reports
  - Configure integration functionality
  - Integration to Honeywell TPS systems
  - Connection to OPC Servers

## Course Topics – EXP20R3XX

### You will be able to...

- Recognize the role of the major hardware and software components and learn how data flows through the C200 and C300 controllers
- Plan the C200 and C300 controllers
  - Select appropriate components of the C200 and C300 controllers including processors, I/O and communications
- Configure the C200 and C300 controllers including:
  - Hardware
  - Control Modules, which incorporate Data Acquisition, Regulatory Control and Logic
  - Sequential Control Modules which are used to control process sequences, such as start up, shut down and batch operations
- Use Sync blocks in an SCM to facilitate parallel execution of your program
- Configure Interactive Instructions allowing a seamless combination of operator guided manual intervention and automatic control within an SCM
- Configure additional I/O functionality for Honeywell Process Manager I/O applicable to both the C200 and C300 controllers

## Course Topics – EXP03R3XX

### You will be able to...

- Develop a Display Design Guide considering performance and capacity available on your Experion PKS system:
  - Specify Operator interaction with displays
    - Design display level hierarchies, point manipulation options, navigation
  - Specify Shape Libraries
  - Specify Display Standards
  - Specify file naming conventions and directory structure for displays
- Build Displays using HMIWeb Display Builder:
  - Using the tools and navigation
  - Using the Shape Library
  - Using the Script Editor
  - Create display elements
  - Create templates, dynamic shape files, shape sequences, popups, faceplates, and attach scripts to objects
  - Create new operating displays
  - Insert shapes
  - Add Internet links and other navigation techniques
  - Use of Cascade Style Sheets
  - Use of Shortcut Menus
- Build Safeview configurations to manage displays

## Course Delivery Options

- EMEA In-Center Instructor-Based Training

## Additional Training

For more information, please contact [automationcollege.hpsemea@honeywell.com](mailto:automationcollege.hpsemea@honeywell.com) or call +32(0)2.728.2589

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# Experion Process Knowledge System (PKS) System Implementation Package - Focused

Course number: STP02R3XX (R300 or R310)



This package consists of

- EXP02R3XX course (4.5 days)
- EXP20R3XX course (4.5 days)

## Course Overview

### Need to plan and implement your Experion PKS System?

Then attend this course package to cover Server Engineering and Controller Engineering.

Course package may be booked and taken over a period of time at any EMEA AC location – restrictions apply to the Safety Course location.

This Package will attract a 25% discount off ELP.

## Course Benefits

### Efficient Experion PKS System planning and implementation of your Server and C200, C300 Controllers

- Conceptual understanding of the server to enable optimum utilization
- Design and configure the server for optimum data collection
- Conceptual understanding of the C200 and C300 controllers to enable optimum utilization
- Design and configure the C200 and C300 controllers for optimum control

## Who Should Take this Course

### Experion PKS System Implementers

Experion System Engineering and configuration tasks can impact the following job roles. Other job roles performing these tasks could also participate.

- **Experion System or Application Engineer** responsible for configuring the server, adding to or changing the server configuration
- **Experion System or Application Engineer** responsible for configuring the C200, C300 controllers and ACE, adding to or changing the control system configuration

## Prerequisite/ Skill Requirements

### Prerequisite Skills/Experience

- Working Knowledge of Windows 2003 Server and/or XP

## Desirable Skills and/or Experience:

- Plant, process, and Distributed Control System tag knowledge
- Plant, process or controls knowledge
- Configuration of a DCS controller

## Course Topics – EXP02R3XX

### You will be able to...

- Recognize the role of the major hardware and software components and learn how data flows through the Experion PKS Server
- Plan the Experion PKS Server and the Fault Tolerant Ethernet
- Configure Stations, Flex, Console, and Console Extensions
- Configure Report printers
- Use the Configuration Studio for Server configuration
- Configure the Experion PKS Server for Process Control functionality such as:
  - Enterprise Model including Assets and Alarm Groups
  - SCADA Controllers and Points
  - Configuring Alarm Settings
  - Alarm, Event, and Message Summaries
  - SCADA Point Algorithms
  - History Archiving
  - Group and Trend Displays
  - Point schedules
  - Alarm Paging
  - Recipes
- Configure additional functionality such as:
  - Distributed System Architecture which allows multiple Experion PKS servers to share point data
  - Data exchange with Microsoft Excel
  - Batch Reports

## Experion Process Knowledge System (PKS) System Implementation Package - Focused



- Configure integration functionality
  - Integration to Honeywell TPS systems
  - Connection to OPC Servers

### Course Delivery Options

- EMEA In-Center Instructor-Based Training

### Course Topics – EXP20R3XX

#### You will be able to...

- Recognize the role of the major hardware and software components and learn how data flows through the C200 and C300 controllers
- Plan the C200 and C300 controllers
  - Select appropriate components of the C200 and C300 controllers including processors, I/O and communications
- Configure the C200 and C300 controllers including:
  - Hardware
  - Control Modules, which incorporate Data Acquisition, Regulatory Control and Logic
  - Sequential Control Modules which are used to control process sequences, such as start up, shut down and batch operations
- Use Sync blocks in an SCM to facilitate parallel execution of your program
- Configure Interactive Instructions allowing a seamless combination of operator guided manual intervention and automatic control within an SCM
- Configure additional I/O functionality for Honeywell Process Manager I/O applicable to both the C200 and C300 controllers

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### Additional Training

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# Experion Process Knowledge System (PKS) System Implementation Engineer Package – FSC or Safety Manager



Course number: STP03R3XX (R300 or R310)

This package consists of

- EXP02R3XX course (4.5 days)
- FSC 4508 or SM 4551 course (4 days)

## Course Overview

### Need to plan and implement your Experion PKS Safety System?

Then attend this course package to cover Server Engineering and Safety Manager or FSC System Implementation.

Course package may be booked and taken over a period of time at any EMEA AC location – restrictions apply to the Safety Course location.

This Package will attract a 25% discount off ELP.

## Course Benefits

### Efficient Experion PKS System planning and implementation of your Server and Safety system

- Conceptual understanding of the Experion server to enable optimum utilization
- Design and configure the server for optimum data collection
- Conceptual understanding of the FSC or SM systems to enable optimum utilization
- Review the overall FSC or SM Philosophy
- Design of FSC or SM logic and configuration
- Learn to program FSC or SM
- Communications between Safety System and Experion PKS

## Who Should Take this Course

### Experion PKS System Implementers

Experion System Engineering and configuration tasks can impact the following job roles. Other job roles performing these tasks could also participate.

- **Experion System or Application Engineer** responsible for configuring the server, adding to or changing the server configuration
- **Experion System or Application Engineer** responsible for implementing the Fail Safe Controller 4508 or Safety Manager 4551 systems

## Prerequisite/ Skill Requirements

### Prerequisite Skills/Experience

- Working Knowledge of Windows 2003 Server and/or XP

### Desirable Skills and/or Experience:

- Plant, process, and Distributed Control System tag knowledge
- Plant, process or controls knowledge
- Configuration of a DCS controller
- Logic and configuration experience

## Course Topics – EXP02R3XX

### You will be able to...

- Recognize the role of the major hardware and software components and learn how data flows through the Experion PKS Server
- Plan the Experion PKS Server and the Fault Tolerant Ethernet
- Configure Stations, Flex, Console, and Console Extensions
- Configure Report printers
- Use the Configuration Studio for Server configuration
- Configure the Experion PKS Server for Process Control functionality such as:
  - Enterprise Model including Assets and Alarm Groups
  - SCADA Controllers and Points
  - Configuring Alarm Settings
  - Alarm, Event, and Message Summaries
  - SCADA Point Algorithms
  - History Archiving
  - Group and Trend Displays
  - Point schedules
  - Alarm Paging
  - Recipes

## Experion Process Knowledge System (PKS) System Implementation Engineer Package – FSC or Safety Manager



- Configure additional functionality such as:
  - Distributed System Architecture which allows multiple Experion PKS servers to share point data
  - Data exchange with Microsoft Excel
  - Batch Reports
- Configure integration functionality
  - Integration to Honeywell TPS systems
  - Connection to OPC Servers

### Course Topics – FSC 4508

- Overall FSC philosophy
- FSC configuration and structure
- FSC hardware
- Design of the functional logic diagrams
- FSC on-line package
- FSC database and database packages
- FSC programming
- Programming the FSC and SMM (TPS100) to enable data exchange, and TPS100 (SMM) diagnostics
- Setting up and using communication between FSC and Experion - PKS, including system diagnostics

### OR Course Topics – SM 4551

#### You will be able to...

- Create a Safety Manager application using Safety Builder
  - Configure a network
  - Configure Safety Manager hardware
  - Create and allocate points
  - Design Functional Logic Diagrams (FLD's)
  - Use application compiler
- Identify Safety Manager hardware and their functions
- Load an application via the off-line modification procedure
- Use the On-line environment of safety Builder
  - Reading FLD's
  - Implementing forces
- Make modifications to a Safety Manager application taking in account the appropriate Safety and Availability considerations
- Load an application via the on-line modification procedure
- Configure the connection between Safety Manager and Experion PKS using safety Builder and Quick Builder

### Course Delivery Options

- EMEA In-Center Instructor-Based Training

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### Additional Training

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# Experion Process Knowledge System (PKS) System Maintenance Engineer Package – FSC or Safety Manager



Course number: STP04R3XX (R300 or R310)

This package consists of

- EXP02R3XX course (4.5 days)
- FSC 4505 or SM 4550 course (4 days)

## Course Overview

**Need to plan and implement your Experion PKS system and maintain your Safety System?**

Then attend this course package to cover Server Engineering and Safety Manager or FSC System maintenance.

Course package may be booked and taken over a period of time at any EMEA AC location – restrictions apply to the Safety Course location.

This Package will attract a 25% discount off ELP.

## Course Benefits

**Efficient Experion PKS System planning and implementation of your Server and Safety system**

- Conceptual understanding of the Experion server to enable optimum utilization
- Design and configure the server for optimum data collection
- Conceptual understanding of the FSC or SM systems to enable optimum utilization
- Safety and availability considerations during maintenance of FSC or SM
- Complete Overview of FSC or SM system hardware
- Detailed explanation of FSC or SM modules
- Explanation of Functional Logic Diagrams (FLD)
- Learn how to Diagnose problems, Fault finding and repairing

## Who Should Take this Course

### Experion PKS System Implementers

Experion System Engineering and configuration tasks can impact the following job roles. Other job roles performing these tasks could also participate

- **Experion System or Application Engineer** responsible for configuring the server, adding to or changing the server configuration
- **Experion System Engineer** responsible for maintaining the Fail Safe Controller or Safety Manager systems

## Prerequisite/ Skill Requirements

### Prerequisite Skills/Experience

- Working Knowledge of Windows 2003 Server and/or XP

### Desirable Skills and/or Experience:

- Plant, process, and Distributed Control System tag knowledge
- Plant, process or controls knowledge
- DCS Maintenance experience

## Course Topics – EXP02R3XX

### You will be able to...

- Recognize the role of the major hardware and software components and learn how data flows through the Experion PKS Server
- Plan the Experion PKS Server and the Fault Tolerant Ethernet
- Configure Stations, Flex, Console, and Console Extensions
- Configure Report printers
- Use the Configuration Studio for Server configuration
- Configure the Experion PKS Server for Process Control functionality such as:
  - Enterprise Model including Assets and Alarm Groups
  - SCADA Controllers and Points
  - Configuring Alarm Settings
  - Alarm, Event, and Message Summaries
  - SCADA Point Algorithms
  - History Archiving
  - Group and Trend Displays
  - Point schedules
  - Alarm Paging
  - Recipes

## Experion Process Knowledge System (PKS) System Maintenance Engineer Package – FSC or Safety Manager



- Configure additional functionality such as:
  - Distributed System Architecture which allows multiple Experion PKS servers to share point data
  - Data exchange with Microsoft Excel
  - Batch Reports
- Configure integration functionality
  - Integration to Honeywell TPS systems
  - Connection to OPC Servers

### Course Topics – FSC 4505

- Overall FSC philosophy
- FSC configuration and structure
- FSC hardware
- Working with the functional logic diagram
- Programming and installing the FSC system
- Working with the FSC on-line package
- Diagnostics
- Loading applications / on-line modifications
- Working with the FSC and data exchange via FTE with Experion - PKS, including diagnostics
- Working with the FSC and Safety Manager Module (SMM) data exchanges, and TPS100 (SMM) diagnostics

### OR Course Topics – SM 4550

#### You will be able to...

- Identify Safety Manager hardware and their functions
  - Quad Processor Pack
  - Universal Safety Interface
  - Battery and Key switch Module
  - Input and Output modules
  - Power supply concept
- Connect a Safety Station to a Safety manager system
- Load an application via the off-line modification procedure
- Use the On-line environment of safety Builder
  - Reading FLD's
  - Implementing forces
- Troubleshoot a Safety Manager system taking in account the appropriate Safety and Availability considerations
  - Learn the Safety Manager fault reactions
  - Apply the Fault Detection procedure
  - Fix the detected faults
- Troubleshoot a Connection between Safety Manager

### Course Delivery Options

- EMEA In-Center Instructor-Based Training

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### Additional Training

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# TPS System Engineer Implementation Package

Course number: STP05R600 (APP)



This package consists of

- 5722 course (9.5 days)
- 5716 course (8 days)
- 5756 course (4.5 days)

## Course Overview

**Need to implement TPS for the first time, or provide on-going support for a TPS System consisting of an LCN, UCN with HPM, GUS and APP Nodes?**

This Global User Station (GUS)-based course Package provides a hands-on introduction to operating and configuring a TotalPlant Solution (TPS) System consisting of a Local Control Network (LCN), a Universal Control Network (UCN), APP Node and an HPM controller using the Data Entity Builder (DEB) as the configuration tool. Skills include operating points and cascades through the Native Window, configuring the TPS network and its nodes, building an HPM point database, creating basic GUS displays, configuring an operator keyboard and setting up history functions, Group displays, logs, journals, APP Node Implementation and reports.

Course package may be booked and taken over a period of time at any EMEA AC location offering TDC/TPS Training.

This Package will attract a 25% discount off ELP.

## Course Benefits

### Implement an LCN/UCN/APP system

- Gain basic operating skills
- Identify hardware components of the LCN and UCN
- Gain the basic skills required to implement an LCN and UCN from a power-on state to an operational state
- Utilize tools to facilitate system implementation and support functions
- Build all point types
- Design and implement advanced process control strategies for greater optimization
- Implement control strategies that require inputs from more than one Universal Control Network (UCN), Data Hi-way, or LCN
- Build AM Control Language Programs
- Initiate and monitor NT-resident applications for increased control capabilities
- Establish the complete foundation for further in-depth implementation, advanced or maintenance training

## Who Should Take this Course

### TPS implementation and support personnel

- New to TPS system implementation or require a full refresh of TPS Knowledge
- Responsible for implementing and/or supporting an existing Local Control Network (LCN) and Universal Control Network (UCN) using GUS and the DEB
- Requiring broad familiarization with much of the TPS system's capabilities
- Implement and configure Custom Controls in the APP/AM node and TPN Server / CL Server usage

## Prerequisite/ Skill Requirements

### Prerequisite Course(s)

- Good working knowledge of Microsoft Windows 2000

### Desirable Skills and/or Experience:

- Familiarization with own plant's process control environment
- Basic programming skills

## Course Topics - 5722

### You will be able to...

- Identify GUS, LCN and UCN hardware and their functions
- Navigate and manipulate Native Window operational and system displays including the Group, Detail, Alarm Summary, Console, System and UCN Status displays
- Manipulate LCN formatted files on the HM or Emulated Disk through the Command Processor
- Configure the GUS for TPS System operations using the Configuration Utility
- Create a Network Configuration File to establish fundamental system definitions
- Initialize a HM to establish it as the system file server and historical data collector

# TPS System Engineer Implementation Package



- Configure a UCN consisting of a NIM and HPM
- Operate and build HPM analog I/O, regulatory control and regulatory process variable type points, including cascade control loops
- Create a configurable GUS keyboard button file
- Define parameters for history collection on the HM
- Create a simple GUS graphic
- Define the Area Database to customize the operations environment including assigning units for operational control, building group displays, defining graphic invocation search paths and creating logs, journals and reports
- Optionally utilize system support and administration tools including the TPS Status display, Command Files, Exception Build files, the Documentation Tool, and Virtual Printers

## Course Topics - 5716

### You will be able to...

- Operate and configure HPM Digital Composite, Logic, Flag, Numeric, Timer, and Array points
- Operate a Process Module point by loading and running its associated HPM CL program
- Configure Process Module points and create their associated HPM CL programs
- Write and implement Abnormal Condition Handlers
- Operate and configure Device Control, Pulse Input, Sequence of Events, Smart Transmitter and Serial Interface Array points

## Course Topics – 5756 APP Implementation

### You will be able to...

- Build and operate the following AM point types: Regulatory, Numeric, Flag, and Custom
- Create a custom control algorithm using AM CL
- Create an indirect reference program using Custom Data Segments
- Create and use an AM CL package and custom enumeration
- Allocate AM memory and configure optional, custom, and background AM functions in the Network Configuration File (NCF)
- Initiate an NT-resident application from AM CL using the CL Server
- Use optional external Load Modules to read from, and write to, text files, access History Module (HM) continuous history and access higher level mathematical subroutines

## Course Delivery Options

- FlexTraining® - Manchester, Abu Dhabi or Amsterdam

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## Additional Training

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# TDC System Engineer Implementation Package

Course number: STP06R600 (AM)



This package consists of

- 3300 course (9.5 days)
- 5716 course (8 days)
- 3310 course (4.5 days)

## Course Overview

**Need to implement TDC for the first time, or provide on-going support for, a TDC System consisting of an LCN, UCN with HPM, US and AM Nodes?**

This Universal Station (US)-based course Package provides a hands-on introduction to operating and configuring a TotalPlant Solution (TDC) System consisting of a Local Control Network (LCN), a Universal Control Network (UCN) , AM Node and an HPM controller using the Data Entity Builder (DEB) as the configuration tool. Skills include operating points and cascades through the Native Window, configuring the TPS network and its nodes, building an HPM point database, creating basic US displays, configuring an operator keyboard and setting up history functions, Group displays, logs, journals, AM Node Implementation and reports.

Course package may be booked and taken over a period of time at any EMEA AC location offering TDC/TPS Training.

This Package will attract a 25% discount off ELP.

## Course Benefits

### Implement an LCN/UCN/AM system

- Gain basic operating skills
- Identify hardware components of the LCN and UCN
- Gain the basic skills required to implement an LCN and UCN from a power-on state to an operational state
- Utilize tools to facilitate system implementation and support functions
- Build all point types
- Design and implement advanced process control strategies for greater optimization
- Implement control strategies that require inputs from more than one Universal Control Network (UCN), Data Hiway, or LCN
- Build AM Control Language Programs
- Initiate and monitor AM-resident applications for increased control capabilities
- Establish the complete foundation for further in-depth implementation, advanced or maintenance training

## Who Should Take this Course

### TDC implementation and support personnel

- New to TDC system implementation or require a full refresh of TDC Knowledge
- Responsible for implementing and/or supporting an existing Local Control Network (LCN) and Universal Control Network (UCN) using US and the DEB
- Requiring broad familiarization with much of the TDC system's capabilities
- Implement and configure Custom Controls in the AM node linking to UCN HPM Points

## Prerequisite/ Skill Requirements

### Prerequisite Course(s)

- Good working knowledge of Microsoft Windows 2000

### Desirable Skills and/or Experience:

- Familiarization with own plant's process control environment
- Basic programming skills

## Course Topics - 3300

### You will be able to...

- Identify US, LCN and UCN hardware and their functions
- Navigate and manipulate Native Window operational and system displays including the Group, Detail, Alarm Summary, Console, System and UCN Status displays
- Manipulate LCN formatted files on the HM or Emulated Disk through the Command Processor
- Configure the GUS for TPS System operations using the Configuration Utility
- Create a Network Configuration File to establish fundamental system definitions

## TDC System Engineer Implementation Package



- Initialize a HM to establish it as the system file server and historical data collector
- Configure a UCN consisting of a NIM and HPM
- Operate and build HPM analog I/O, regulatory control and regulatory process variable type points, including cascade control loops
- Create a configurable GUS keyboard button file
- Define parameters for history collection on the HM
- Create a simple US graphic
- Define the Area Database to customize the operations environment including assigning units for operational control, building group displays, defining graphic invocation search paths and creating logs, journals and reports
- Optionally utilize system support and administration tools including the Command Files, Exception Build files, the Documentation Tool, and Virtual Printers

### Course Topics - 5716

#### You will be able to...

- Operate and configure HPM Digital Composite, Logic, Flag, Numeric, Timer, and Array points
- Operate a Process Module point by loading and running its associated HPM CL program
- Configure Process Module points and create their associated HPM CL programs
- Write and implement Abnormal Condition Handlers
- Operate and configure Device Control, Pulse Input, Sequence of Events, Smart Transmitter and Serial Interface Array points

### Course Topics – 3310 AM Implementation

#### You will be able to...

- Build and operate the following AM point types: Regulatory, Numeric, Flag, and Custom
- Create a custom control algorithm using AM Control Language
- Create an Indirect Reference Program using Custom Data Segments
- Create and use an AM Control Language Package and Custom Enumeration
- Allocate AM memory and configure optional, custom, and background AM functions in the Network Configuration File (NCF)
- Use optional External Load Modules to read from and write to text files, access HM continuous history and access higher level mathematical subroutines

### Course Delivery Options

- FlexTraining® - Manchester, Abu Dhabi or Amsterdam

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### Additional Training

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# TDC 3000/2000 System Engineer Maintenance Package



Course number: STP07R600

This package consists of

- 3900 course (5 days)
- 3600 course (5 days)
- As318 course (5 days)

## Course Overview

**Need to Maintain TDC for the first time, or provide on-going support for, a TDC3000/2000 System consisting of an LCN, UCN with HPM, US, Hi-Way and AM Nodes?**

This Universal Station (US)-based course Package provides a hands-on introduction to operating and maintaining a TotalPlant Solution (TDC) System consisting of a Local Control Network (LCN), a Universal Control Network (UCN), AM Node and a HPM controller. Skills include operating points and cascades through the Native Window, Maintaining the TPS network and its nodes, you can attend the courses over a period of time at EMEA AC centers offering TPS training.

Course package may be booked and taken over a period of time at any EMEA AC location offering TDC/TPS Training.

This Package will attract a 25% discount off ELP.

## Course Benefits

- Gain basic operating skills
- Identify hardware components of the LCN, Hi-way and UCN
- Gain the basic skills required to Maintain an LCN, Hi-way and UCN from a power-on state to an operational state
- Utilize tools to facilitate system maintenance and support functions
- Operate all point types
- Establish the complete foundation for further in-depth implementation, implementation or advanced training

## Who Should Take this Course

### TDC Operations and support personnel

- New to TDC system implementation or require a full refresh of TDC Knowledge including Hi-way
- Responsible for supporting an existing Local Control Network (LCN) and Universal Control Network (UCN) using US and Hi-way
- Requiring broad familiarization with much of the TDC system's capabilities

## Prerequisite/ Skill Requirements

### Prerequisite Course(s)

- Good working knowledge of Microsoft Windows 2000

### Desirable Skills and/or Experience:

- Familiarization with own plant's process control environment

## Course Topics - 3900

### You will be able to...

- Identify US, LCN and UCN hardware and their functions
- Navigate and manipulate Native Window operational and system displays including the Group, Detail, Alarm Summary, Console, System and UCN Status displays
- Operate basic point types on the TDC system
- Operate HPM Digital Composite, Logic, Flag, Numeric, Timer, and Array points
- Operate a Process Module point by loading and running its associated HPM CL program

## Course Topics - 3600

### You will be able to...

- Identify LCN system components to the board level
- Identify system failures
- Troubleshoot failures using status displays and error codes
- Develop correct troubleshooting techniques

## TDC 3000/2000 System Engineer Maintenance Package



### Course Topics – As318

#### You will be able to...

- Maintain a UCN consisting of a NIM and HPM
- Maintain a Hi-way consisting of a BC, MC and HLPIU
- ID HG & Hi-way Hardware
- ID CB Hardware
- ID CB/UAC Hardware
- CB/UAC Commands
- HTD/PAE Operate
- HTD Hardware
- ID MC Hardware
- ID HLPIU Hardware
- Troubleshoot CB, MC and HLPIU

### Course Delivery Options

- FlexTraining® - Manchester, Abu Dhabi or Amsterdam

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### Additional Training

For more information, please contact [automationcollege.hpsemea@honeywell.com](mailto:automationcollege.hpsemea@honeywell.com) or call +32(0)2.728.2589

To increase your knowledge and skills, there are additional courses available from the Automation College. Please visit our Training Management System for further details [www.honeywell.com/tms](http://www.honeywell.com/tms).

# TDC 3000/2000 System Engineer Maintenance with Experion Front End Package



Course number: STP08R600

This package consists of

- EXP12R3XX course (3 days)
- 3600 course (5 days)
- As330 course (5 days)

## Course Overview

**Need to Maintain TDC system with an Experion Front end for the first time, or provide on-going support for a Experion/TDC3000/2000 System consisting of an Experion Stations, LCN, UCN with HPM, US, Hi-Way and AM Node?**

This Experion Station (E-ST)-based course Package provides a hands-on introduction to operating and maintaining a TotalPlant Solution (TDC) System consisting of an Experion Front end, Local Control Network (LCN), a Universal Control Network (UCN), AM Node and a HPM controller. Skills include operating points and cascades through the Experion Station (E-ST), Maintaining the TPS network and its nodes, you can attend the courses over a period of time at EMEA AC centers offering TPS training.

Course package may be booked and taken over a period of time at any EMEA AC location offering Experion/TDC/TPS Training.

This Package will attract a 25% discount off ELP.

## Course Benefits

- Gain Experion (E-ST) operating skills
- Identify hardware components of the Experion, LCN, Hi-way and UCN
- Gain the basic skills required to Maintain an LCN, Hi-way and UCN from a power-on state to an operational state
- Utilize tools to facilitate system maintenance and support functions
- Operate all point types
- Establish the complete foundation for further in-depth implementation, implementation or advanced training

## Who Should Take this Course

### EPKS/TDC/TPS Operations and support personnel

- New to Experion/TPS system implementation or require a full refresh of Experion/TPS system Knowledge including Hi-way
- Responsible for supporting an existing Local Control Network (LCN) and Universal Control Network (UCN) using US and Hi-way

- Requiring broad familiarization with much of the Experion/TPS system's capabilities

## Prerequisite/ Skill Requirements

### Prerequisite Course(s)

- Good working knowledge of Microsoft Windows 2000

### Desirable Skills and/or Experience:

- Familiarization with own plant's process control environment

## Course Topics – EXP12R3XX

### You will be able to...

- Log on and off the EXPERION PKS Station for TPS, including Station and Operator based logon
- Use window navigation tools
- Manage windows using the SafeView control environment
- Use standard operating displays including the EXPERION PKS TPS Faceplates, Group displays, and Point Detail displays
- Use Point Detail display and faceplates to make process changes
- Identify control conventions (automatic, manual, cascade, PV tracking, and program)
- Navigate through standard operating displays
- Identify color conventions
- Use Alarm displays and HMIWeb displays to identify and respond to abnormal conditions
- Use the Enterprise Model concepts to manage plant Assets
- Identify and use tools available on the EXPERION PKS system to analyze process upsets. Use Trend displays
- Use the many Reporting and Event retrieval tools to customize reports and displays
- Access the built in online Help documents

## TDC 3000/2000 System Engineer Maintenance with Experion Front End Package



### Course Topics – 3600

#### You will be able to...

- Identify LCN system components to the board level
- Identify system failures
- Troubleshoot failures using status displays and error codes
- Develop correct troubleshooting techniques

### Course Topics – As330

#### You will be able to...

- Maintain a UCN consisting of a NIM and HPM
- Maintain a Hi-way consisting of a BC, MC and HLPIU
- ID HG & Hi-way Hardware
- ID CB Hardware
- ID CB/UAC Hardware
- CB/UAC Commands
- HTD/PAE Operate
- HTD Hardware
- ID MC Hardware
- ID HLPIU Hardware
- Troubleshoot CB, MC and HLPIU

### Course Delivery Options

- FlexTraining® - Manchester, Abu Dhabi or Amsterdam

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### Additional Training

For more information, please contact [automationcollege.hpsemea@honeywell.com](mailto:automationcollege.hpsemea@honeywell.com) or call +32(0)2.728.2589

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