

CNC Power Engineering

Always on the move



CNC, Drives, and Software Training Catalogue 2024

Who besides you has the best expertise in your area of business?

The answer is obvious and quite simple: you are the expert in your field. Similarly, no one other than NUM could claim to have the deepest expertise of our extended range of drives and CNCs. After all, this has been our business for fifty years. This is why we are your number one partner for the training of your teams.

Whether you are a User, an OEM, a Maintenance specialist or a System builder, NUM has in its catalogue all kind of training sessions dedicated to your applications and this for all generation of NUM products making parts on today machines.

Of course, each customer has its own requirements, each machine and each application has its own specificities, and this is why we can also offer customized training sessions focused on your particular needs.

As a provider of CNC High End Applications, we have organized our training sessions by features and level of knowledge required, in order to help you to get all the data you need and only the data you need to be the most efficient. These sessions are conducted by training specialists and applications engineers so you can be assured that you will always get the most accurate and professional answers, whatever your question or concern might be. These sessions will give a chance to develop a durable relationship between our companies to further develop cooperation for the full benefit of all.

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Training with NUM: your advantages

- Technical data are up to date
- Should you need a specific function, you will get in depth information
- Partnership development
- You will be in touch with the experts in every domain of NUM activity
- Whatever your area of expertise might be (Maintenance, Service, Programming, Setup...), you will find the courses you need
- Full range of products and software in one location

Training Centres

All NUM technical centres are equipped to provide training. These sessions will take place either in our premises or in your facility.



Some training facilities



Training Courses

The different training modules are linked in a way to provide a logical path for mastering our application solutions in your area of expertise.

	FX	TR	3	0	1
Control Series					
Flexium ⁺ und FlexiumPro	FX				
Flexium ⁺	FL				
FlexiumPro	FP				
Training					
Type					
Product Knowledge			1		
Operation and Diagnostics			2		
Maintenance			3		
Engineering and Integration			4		
Modifier					
Expertice Level					
Beginner					1
Advanced					2
Specialist					3

Generic Training Sessions

FXTR101	Flexium system description
FXTR102	Flexium and Safety
FXTR201	Operation and basic maintenance
FXTR202	Advanced part programming
FXTR213	Flexium 3D
FXTR223	Dynamic operators in C
FXTR233	High speed cutting – 5-axis functions
FXTR301	Flexium system maintenance
FXTR433	Extended NCK Access (ENA)
FXTR463	Safety including NUM-SAMX

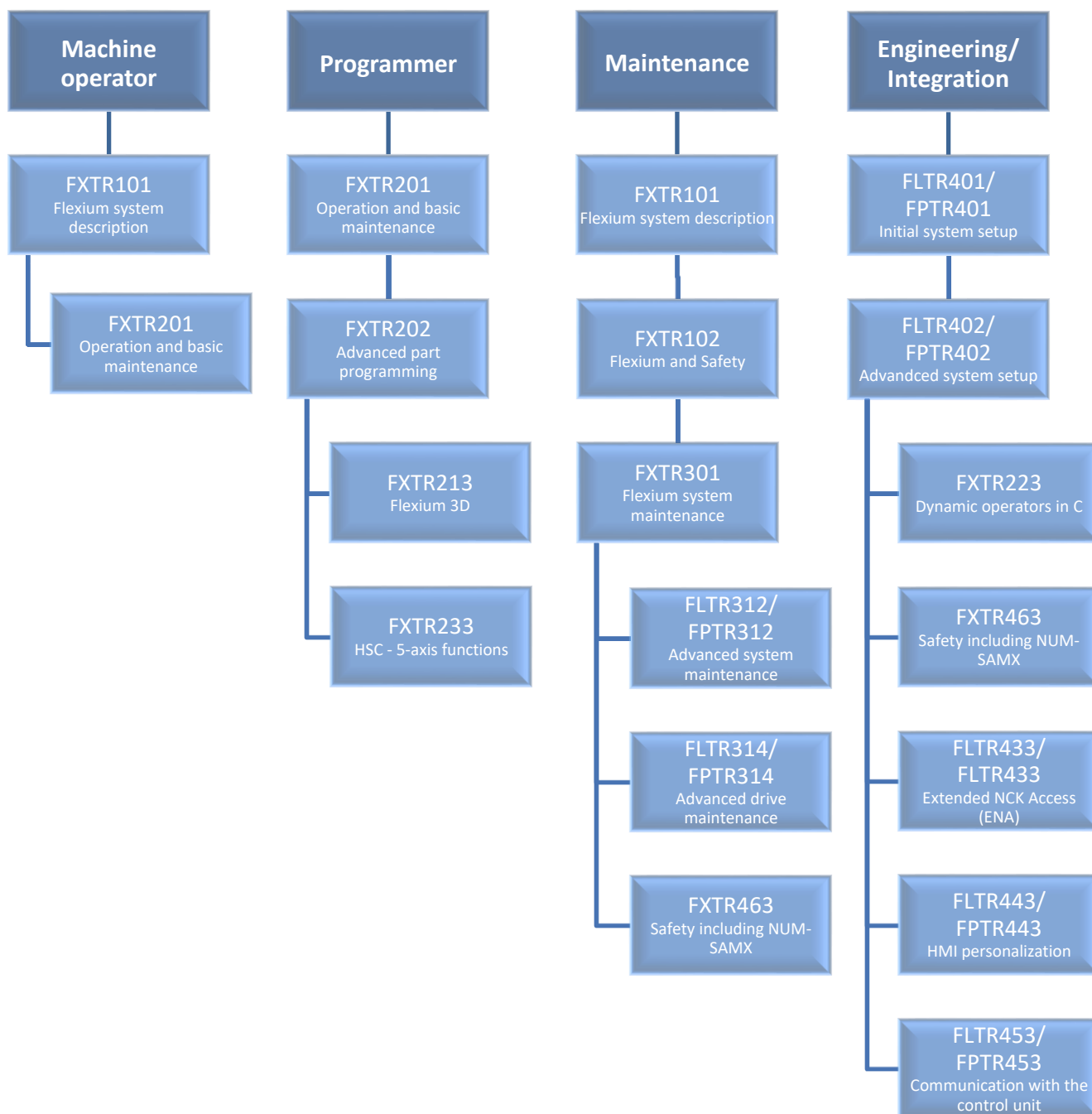
Flexium⁺-specific Training Sessions

FLTR312	Flexium ⁺ system advanced maintenance
FLTR314	NUMDrive X advanced maintenance
FLTR401	Flexium ⁺ system initial setup
FLTR402	Flexium ⁺ system advanced setup
FLTR443	Flexium ⁺ HMI personalization
FLTR453	Communication with Flexium ⁺

FlexiumPro-specific Training Sessions

FPTR312	FlexiumPro system advanced maintenance
FPTR314	NUM DrivePro advanced maintenance
FPTR401	FlexiumPro system initial setup
FPTR402	FlexiumPro system advanced setup
FPTR443	FlexiumPro HMI personalization
FPTR453	Communication with FlexiumPro

Proposed Training Paths



Your Training Contacts

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For other countries, please contact your local sales representative or NUM Switzerland (sales.ch@num.com).

Training Organization

Quotation

Offers can be asked at your training contacts (see section 'Your Training Contacts').

Date and timetable

Training dates and timetables will be part of a quotation.

Journey

Your local sales representative of NUM will provide you with journey information.

Hotels

Your local sales representative of NUM can recommend you hotels near to the training places.

Flexium system description

FXTR101

Your area of interest	Prerequisite
General knowledge	None
Objectives	Supports
<ul style="list-style-type: none"> ✓ Understanding the Flexium range structure (CNCs and Drives) ✓ Understanding the main functions ✓ Ability to define a configuration with the Flexium catalogue 	<p>Training materials</p> <ul style="list-style-type: none"> ○ Individual components ○ Simulator <p>Deliveries</p> <ul style="list-style-type: none"> ○ Course presentation (on memory stick) ○ Flexium catalogue (on memory stick)
Training Content	
<p>Flexium CNC presentation</p> <ul style="list-style-type: none"> ○ The different models of CNCs ○ Hardware structure – Software functions <p>The panels</p> <ul style="list-style-type: none"> ○ PC Panels ○ Machine panels <p>The PLC</p> <ul style="list-style-type: none"> ○ Structure ○ Programming languages ○ IOs <p>NUMDrive X presentation</p> <ul style="list-style-type: none"> ○ Hardware structure ○ Drives functions and performances ○ Axes and spindle motors 	<p>NUM DrivePro presentation</p> <ul style="list-style-type: none"> ○ Hardware structure ○ Drives functions and performances ○ Axes and spindle motors <p>Tools</p> <ul style="list-style-type: none"> ○ PLC programming ○ Web tools <p>Applications</p> <ul style="list-style-type: none"> ○ From the single unit CNC to the multi CNC - multi panels configurations <p>Questions and answers (1/2 hour)</p>
Duration	Date / Costs
1 day	Please consult your local training contact

Flexium and Safety

FXTR102

Your area of interest	Prerequisite
General knowledge	None
Objectives	Supports
<ul style="list-style-type: none"> ✓ Understanding the Flexium safety concepts ✓ Understanding the various safety features ✓ Ability to define the components and development required for a particular configuration 	<p>Training materials</p> <ul style="list-style-type: none"> ○ Individual components ○ Simulator <p>Deliveries</p> <ul style="list-style-type: none"> ○ Course presentation (on memory stick) ○ Flexium catalogue (on memory stick)
Training Content	
<p>Safety: What is it?</p> <ul style="list-style-type: none"> ○ Safety PLCs ○ Safe motions ○ Safety level <p>General on EtherCAT and FSoE</p> <p>The Safe PLC</p> <ul style="list-style-type: none"> ○ Structure ○ Programming languages ○ I/Os 	<p>Safety and Motions</p> <ul style="list-style-type: none"> ○ SAMX, STOX and NUMDrive X or NUM DrivePro <p>Questions and answers (1/2 hour)</p>
Duration	Date / Costs
1 day	Please consult your local training contact

Operation and basic maintenance

FXTR201

Your area of interest	Prerequisite
Machine operator – 1 st level maintenance	Knowledge of NUM products or FXTR101
Objectives	Supports
<ul style="list-style-type: none"> ✓ Ability to run a machine equipped with Flexium system ✓ Understanding and adjusting the coordinate systems and tools offsets ✓ Understanding operators message and status indicators to perform a first level maintenance 	<p>Training materials</p> <ul style="list-style-type: none"> ○ Individual components ○ Simulator <p>Deliveries</p> <ul style="list-style-type: none"> ○ Course presentation (on memory stick) ○ Programming manual (on memory stick)
Training Content	
<p>Using the HMI</p> <ul style="list-style-type: none"> ○ Structure of the HMI ○ Modes of operation ○ ISO concepts (interpolation – feedrate – tools offsets – main canned cycles) ○ Coordinate systems – programmable axes ○ Work preparation, tools offsets, origin presets ○ Basic of parametric programming <p>First level of maintenance</p> <ul style="list-style-type: none"> ○ Status indicators ○ Operators messages ○ LED indications ○ Backup of essential data ○ Adding a system option 	<p>Tools</p> <ul style="list-style-type: none"> ○ Web tools ○ Flexium license loader <p>Questions and answers (2 hours)</p>
Duration	Date / Costs
3 days	Please consult your local training contact

Advanced part programming

Your area of interest

Advanced part programming – custom macros – special functions for OEM

Prerequisite

Level FXTR201

Objectives

- ✓ Mastering the advanced ISO functions of the system
- ✓ Ability to create a custom macro (tool changer – milling head exchange – probing etc.)

Supports

Training materials

- Individual components
- Simulator

Deliveries

- Course presentation (on memory stick)
- Programming and advanced programming manual (on memory stick)

Training Content

Advanced ISO functions

- Polar programming
- Probing management
- Pocket cycles
- Complements on parametric programming
 - Detailed information on E parameters
 - Relation with the outside via the PLC
- Structured programming
- Dynamic operators
- Customized G codes

Questions and answers

Exercises

Duration

4 days

Date / Costs

Please consult your local training contact

Flexium 3D

Your area of interest	Prerequisite
Machine operation - Programming	Knowledge of NUM products or FXTR201
Objectives	Supports
<ul style="list-style-type: none"> ✓ Using Flexium 3D to simulate and validate a part program ✓ Interacting with Flexium HMI to correct possible programming faults ✓ Optional: Customizing Flexium 3D for machine simulation 	<p>Training materials</p> <ul style="list-style-type: none"> ○ Simulator <p>Deliveries</p> <ul style="list-style-type: none"> ○ Course presentation (on memory stick)
Training Content	
<p>Flexium 3D presentation</p> <ul style="list-style-type: none"> ○ Principle of operation ○ The different screens <p>Running Flexium 3D</p> <ul style="list-style-type: none"> ○ Program configuration ○ Defining the blank and the tools ○ Off line and On line simulation <p>Exercises</p> <p>Optional</p> <ul style="list-style-type: none"> ○ Designing a machine model 	<p>Questions and answers (2 hours)</p>
Duration	Date / Costs
1 day + 1 day optional	Please consult your local training contact

Dynamic operators in C

FXTR223

Your area of interest	Prerequisite
Customized CNC extensions	FXTR202 and C language
Objectives	Supports
<ul style="list-style-type: none"> ✓ Develop an application using dynamic operators in C 	<p>Training materials</p> <ul style="list-style-type: none"> ○ Individual components ○ Simulator <p>Deliveries</p> <ul style="list-style-type: none"> ○ Course presentation (on memory stick) ○ Flexium catalogue (on memory stick)
Training Content	
<ul style="list-style-type: none"> ○ Principle of dynamic operators ○ Short example using classic dynamic operators ○ Review list of parameters ○ The compiler ○ Examples ○ Trace and debug 	
Duration	Date / Costs
1 day	Please consult your local training contact

High Speed Cutting – 5-axis functions

Your area of interest	Prerequisite
5-axis parts machining	FXTR202 and FPTR401
Objectives	Supports
<ul style="list-style-type: none"> ✓ Mastering 5-axis machining functions ✓ RTCP (Rotating Tool Centre Point) ✓ Inclined plane ✓ High speed cutting 	<p>Training materials</p> <ul style="list-style-type: none"> ○ Individual components ○ Simulator <p>Deliveries</p> <ul style="list-style-type: none"> ○ Course presentation (on memory stick) ○ Flexium catalogue (on memory stick)
Training Content	
<ul style="list-style-type: none"> ○ 5-axis NC functions ○ RTCP and inclined plane parameterization ○ Application ○ High speed machining functions ○ Speed and acceleration controls ○ Optimization of parameters 	<ul style="list-style-type: none"> ○ Axes adjustments ○ Flexium tools instruments ○ Practical case <p>Questions and answers (1/2 hour)</p>
Duration	Date / Costs
2 days	Please consult your local training contact

Flexium system maintenance

FXTR301

Your area of interest	Prerequisite
Maintenance	Level FXTR101
Objectives	Supports
<ul style="list-style-type: none"> ✓ Ability to detect and replace defective components in a short time ✓ Predictive maintenance 	Training materials <ul style="list-style-type: none"> ○ Simulator Deliveries <ul style="list-style-type: none"> ○ Course presentation (on memory stick)
Training Content	
Flexium system maintenance <ul style="list-style-type: none"> ○ System structure ○ Components ○ System start up ○ Diagnostics ○ Software updates ○ Service tool ○ Safety ○ Part replacement 	Questions and answers (1 hour)
Drives maintenance <ul style="list-style-type: none"> ○ Product knowledge ○ Drives exchange procedure 	
Duration	Date / Costs
3 days	Please consult your local training contact

Flexium+ system advanced maintenance

FLTR312

Your area of interest	Prerequisite
Maintenance	Level FXTR301
Objectives	Supports
<ul style="list-style-type: none"> ✓ Ability to detect and replace defective components in a short time 	Training materials <ul style="list-style-type: none"> ○ Simulator
<ul style="list-style-type: none"> ✓ Predictive maintenance 	Deliveries <ul style="list-style-type: none"> ○ Course presentation (on memory stick)
Training Content	
Flexium+ system maintenance <ul style="list-style-type: none"> ○ Detailing the product structure ○ Exchange zone ○ Troubleshooting with Flexium HMI ○ Flexium Tools ○ Parameters modification ○ Debugging with the PLC ○ PLC program adjustments ○ Backup and restore 	NUMDrive X drives advanced maintenance <ul style="list-style-type: none"> ○ Detailed analysis ○ Drives instruments ○ Drives exchange procedure ○ Safety application maintenance Questions and answers (1 hour)
Duration	Date / Costs
3 days	Please consult your local training contact

FlexiumPro system advanced maintenance

FPTR312

Your area of interest

Maintenance

Prerequisite

Level FXTR301

Objectives

- ✓ Ability to detect and replace defective components in a short time
- ✓ Predictive maintenance

Supports

- Training materials
- Simulator
- Deliveries
- Course presentation (on memory stick)



Training Content

FlexiumPro system maintenance

- Detailing the product structure
- Exchange zone
- Troubleshooting with Flexium HMI
- Flexium Tools
- Parameters modification
- Debugging with the PLC
- PLC program adjustments
- Backup and restore

NUM DrivePro drives advanced maintenance

- Detailed analysis
- Drives instruments
- Drives exchange procedure
- Safety application maintenance

Questions and answers (1 hour)

Duration

3 days

Date / Costs

Please consult your local training contact

NUMDrive X advanced maintenance

FLTR314

Your area of interest	Prerequisite
Machine maintenance	Level FXTR301
Objectives	Supports
<ul style="list-style-type: none"> ✓ Ability to detect and replace components or adjust parameters 	Training materials <ul style="list-style-type: none"> ○ Simulator Deliveries <ul style="list-style-type: none"> ○ Course presentation (on memory stick)
Training Content	
Review <ul style="list-style-type: none"> ○ Range description ○ Troubleshooting with Flexium HMI Components connections <ul style="list-style-type: none"> ○ Structure of a NUMDrive X application Adjustments <ul style="list-style-type: none"> ○ Using Flexium Tools for diagnostic ○ Main drive parameters ○ Adjustment and control 	Questions and answers
Duration	Date / Costs
3 days	Please consult your local training contact

NUM DrivePro advanced maintenance

FPTR314

Your area of interest	Prerequisite
Machine maintenance	Level FXTR301
Objectives	Supports
<ul style="list-style-type: none"> ✓ Ability to detect and replace components or adjust parameters 	Training materials <ul style="list-style-type: none"> ○ Simulator Deliveries <ul style="list-style-type: none"> ○ Course presentation (on memory stick)
Training Content	
Review <ul style="list-style-type: none"> ○ Range description ○ Troubleshooting with FlexiumPro HMI 	Questions and answers
Components connections <ul style="list-style-type: none"> ○ Structure of a NUM DrivePro application 	
Adjustments <ul style="list-style-type: none"> ○ Using FlexiumPro Tools for diagnostic ○ Main drive parameters ○ Adjustment and control 	
Duration	Date / Costs
3 days	Please consult your local training contact



Flexium+ system initial setup

FLTR401

Your area of interest	Prerequisite
Setting up and programming of a Flexium+	FXTR201
Objectives	Supports
<ul style="list-style-type: none"> ✓ Create a first Flexium+ application for a simple machine ✓ Control basic functions – Run two axes and a spindle 	<p>Training materials</p> <ul style="list-style-type: none"> ○ Simulator <p>Deliveries</p> <ul style="list-style-type: none"> ○ Course presentation (on memory stick) ○ Installation manual – Commissioning manual – Flexium Tools (all on memory stick)
Training Content	
<p>Understanding Flexium+ structure</p> <p>Flexium Tools presentation</p> <ul style="list-style-type: none"> ○ Getting familiar with the package ○ Languages ○ Variables ○ Structure of a project <p>Practical exercise</p> <ul style="list-style-type: none"> ○ Creating the control structure ○ Integrating IOs (CANopen and Ethernet) ○ Integrating a panel ○ Handling modes, manual and automatic commands ○ Operator messages ○ Power on, security ○ Integrating axes and spindle ○ First level of parameterization ○ Running a simple part program ○ Introduction to the custom visualization 	<p>Questions and answers</p>
Duration	Date / Costs
5 days	Please consult your local training contact

Flexium+ system advanced setup

FLTR402

Your area of interest	Prerequisite
Setting up and programming of a Flexium+	FPTR401
Objectives	Supports
<ul style="list-style-type: none"> ✓ Commissioning a Flexium system on any kind of machine 	<p>Training materials</p> <ul style="list-style-type: none"> ○ Simulator <p>Deliveries</p> <ul style="list-style-type: none"> ○ Course presentation (on memory stick) ○ Full set of Flexium manuals – Flexium Tools – Example project (all on memory stick)
Training Content	
<p>Detailed analysis of exchange variables</p> <p>Flexium Tools complements</p> <ul style="list-style-type: none"> ○ Project simulation and debug ○ Application control (Tasks – automated checks) ○ Field bus control ○ Advanced functions (Probing – tool wear – shutdown etc.) ○ Custom screens complements ○ Optional functions (multi NCK – multi panels etc.) ○ Writing custom libraries 	<p>Questions and answers</p>
Duration	Date / Costs
5 days	Please consult your local training contact

FlexiumPro system initial setup

FPTR401

Your area of interest

Setting up and programming of a FlexiumPro

Objectives

- ✓ Create a first FlexiumPro application for a simple machine
- ✓ Control basic functions – Run two axes and a spindle

Prerequisite

FXTR201

Supports

Training materials

- Simulator

Deliveries

- Course presentation (on memory stick)
- Installation manual – Commissioning manual – Flexium Tools (all on memory stick)



Training Content

Understanding FlexiumPro structure

FlexiumPro Tools presentation

- Getting familiar with the package
- Languages
- Variables
- Structure of a project

Practical exercise

- Creating the control structure
- Integrating IOs (CANopen and Ethernet)
- Integrating a panel
- Handling modes, manual and automatic commands
- Operator messages
- Power on, security
- Integrating axes and spindle
- First level of parameterization
- Running a simple part program
- Introduction to the custom visualization

Questions and answers

Duration

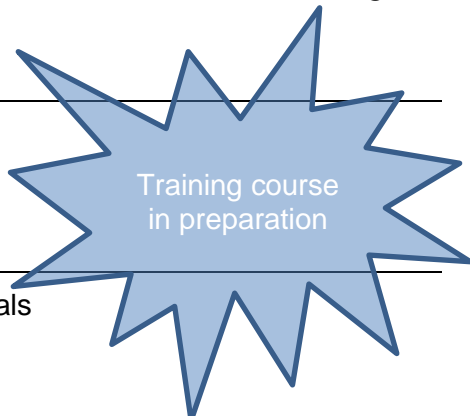
5 days

Date / Costs

Please consult your local training contact

FlexiumPro system advanced setup

FPTR402



Your area of interest

Setting up and programming of a FlexiumPro

Prerequisite

FPTR401

Objectives

- ✓ Commissioning a Flexium system on any kind of machine

Supports

- Training materials
- Simulator
- Deliveries
- Course presentation (on memory stick)
 - Full set of Flexium manuals – Flexium Tools – Example project (all on memory stick)

Training Content

Detailed analysis of exchange variables

Questions and answers

- FlexiumPro Tools complements
- Project simulation and debug
 - Application control (Tasks – automated checks)
 - Field bus control
 - Advanced functions (Probing – tool wear – shutdown etc.)
 - Custom screens complements
 - Optional functions (multi NCK – multi panels etc.)
 - Writing custom libraries

Duration

5 days

Date / Costs

Please consult your local training contact

Extended NCK Access (ENA)

FXTR433

Your area of interest	Prerequisite
Setting up and programming of a Flexium	FXTR402 required
Objectives	Supports
<ul style="list-style-type: none"> ✓ Exchange of additional data between NCK and PLC 	Training materials <ul style="list-style-type: none"> ○ Simulator
	Deliveries <ul style="list-style-type: none"> ○ Course presentation (on memory stick) ○ Flexium Tools – Example project
Training Content	
Structure of internal communication in Flexium systems	Questions and answers
ENA library <ul style="list-style-type: none"> ○ Available parameters and functions 	
Application <ul style="list-style-type: none"> ○ Reading parameters ○ Writing parameters ○ Files management 	
Duration	Date / Costs
2 days	Please consult your local training contact

Flexium+ HMI personalization

FLTR443

Your area of interest

Setting up and programming of a Flexium+

Prerequisite

- FXTR101
- Windows knowledge
- Programming knowledge of script languages

Objectives

- ✓ Creating Flexium HMI custom pages in HTML/JavaScript

Supports

Training materials

- Simulator

Deliveries

- Course presentation (on memory stick)
- Software Development Kit access
- Example (on memory stick)

Training Content

Introduction in the architecture of Flexium+ HMI

Explanation of the Flexium+ HMI components

- FXBrowser
- FXServer
- FXLib
- FXLog

Structure of configuration files

- FXServer.ini
- FXUser.ini

Explanation of the FXServer architecture

- Event handling
- task management
- ...

Abstract of development tools

Exercises related to practice using HTML and JavaScript

- Object instancing of the classes of the development components
- Using of the development components
- Characteristics of the array structure of event classes
- Programming examples

Questions and answers

Duration

3 days

Date / Costs

Please consult your local training contact

Communication with Flexium+

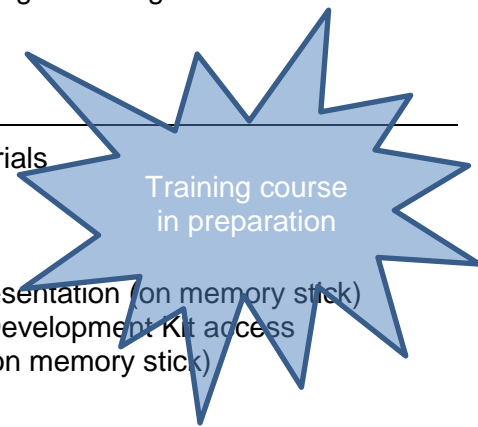
FLTR453

<p>Your area of interest</p> <hr/> <p>Setting up and programming of a Flexium+</p>	<p>Prerequisite</p> <hr/> <ul style="list-style-type: none"> ○ FXTR101 ○ Windows knowledge ○ Knowledge of object oriented programming (OOP) and use of COM server
<p>Objectives</p> <hr/> <ul style="list-style-type: none"> ✓ Using of FXServer for the communication with the different components of Flexium+. This allows connections to other systems, independent HMIs, etc. to be realized. 	<p>Supports</p> <hr/> <p>Training materials</p> <ul style="list-style-type: none"> ○ Simulator <p>Deliveries</p> <ul style="list-style-type: none"> ○ Course presentation (on memory stick) ○ Software Development Kit access ○ Programming examples in C# and C++ (on memory stick)
<p>Training Content</p> <hr/> <p>Introduction in the architecture of FXServer</p> <p>Explanation of the Flexium+ components (FXServer, FXLib, FXLog) and configuration file (FXServer.ini)</p> <p>Explanation of the FXServer architecture (Event handling, task management, ...)</p>	<p>Exercises related to practice using C#</p> <ul style="list-style-type: none"> ○ Object referencing and instancing of the classes of the development components ○ Using of the development components ○ Characteristics of the array structure of event classes ○ Programming examples <p>Questions and answers</p>
<p>Duration</p> <hr/> <p>2 days</p>	<p>Date / Costs</p> <hr/> <p>Please consult your local training contact</p>

FlexiumPro HMI personalization

FPTR443

Your area of interest	Prerequisite
Setting up and programming of a FlexiumPro	<ul style="list-style-type: none"> ○ FXTR101 ○ Windows knowledge ○ Programming knowledge of C#
Objectives	Supports
<ul style="list-style-type: none"> ✓ Creating FlexiumPro HMI custom pages in C# 	<p>Training materials</p> <ul style="list-style-type: none"> ○ Simulator <p>Deliveries</p> <ul style="list-style-type: none"> ○ Course presentation (on memory stick) ○ Software Development Kit access ○ Example (on memory stick)
Training Content	
<p>Introduction in the architecture of FlexiumPro HMI</p> <p>Explanation of the FlexiumPro HMI architecture</p> <p>Structure of configuration files</p>	<p>Abstract of development tools</p> <p>Exercises related to practice using C#</p> <ul style="list-style-type: none"> ○ Programming examples <p>Questions and answers</p>
Duration	Date / Costs
3 days	Please consult your local training contact



Communication with FlexiumPro

FLTR453

Your area of interest

Setting up and programming of a FlexiumPro

Objectives

- ✓ Use of the FlexiumPro SDK for communication with the various FlexiumPro components. This allows connections to other systems, independent HMIs, etc. to be realized.

Prerequisite

- FXTR101
- Windows knowledge
- Programming knowledge of C#

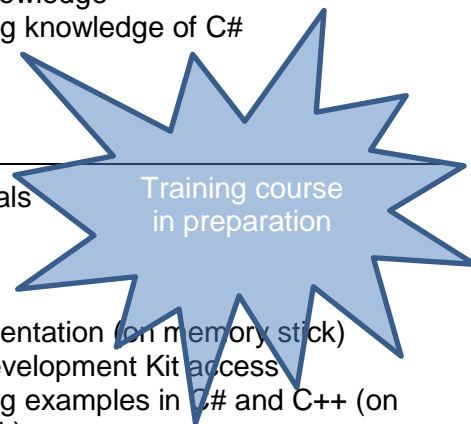
Supports

Training materials

- Simulator

Deliveries

- Course presentation (on memory stick)
- Software Development Kit access
- Programming examples in C# and C++ (on memory stick)



Training Content

Introduction in the architecture of FlexiumPro SDK

Exercises related to practice using C#

- Programming examples

Questions and answers

Duration

2 days

Date / Costs

Please consult your local training contact

Safety including NUM-SAMX

Your area of interest	Prerequisite
Setting up and programming of a Flexium	FXTR102 or FPTR402
Objectives	Supports
<ul style="list-style-type: none"> ✓ Understand concept. ✓ Program and setup a safety application on a Flexium+ or FlexiumPro system 	<p>Training materials</p> <ul style="list-style-type: none"> ○ Simulator <p>Deliveries</p> <ul style="list-style-type: none"> ○ Course presentation (on memory stick) ○ Software Development Kit access ○ Example (on memory stick)
Training Content	
<p>Hardware structure</p> <p>Safety functions</p> <p>Safety application concept</p> <p>Safe PLC programming</p> <p>Drive functions</p> <ul style="list-style-type: none"> ○ NUM-STOX setup ○ NUM-SAMX setup 	<p>Questions and answers</p>
Duration	Date / Costs
2 days	Please consult your local training contact

Individual trainings

Your area of interest	Prerequisite
Something around NUM controls	Depending on the training content
Objectives	Supports
✓ Will be defined with you	Training materials <ul style="list-style-type: none"> ○ Simulator Deliveries <ul style="list-style-type: none"> ○ Course presentation (on memory stick) ○ Example (on memory stick) if available
Training Content	
Will be developed with you	
Duration	Date / Costs
To be defined	Please consult your local training contact

Individual trainings can happen at NUM locations or customer site.

Booking Form

For booking of training please send an e-mail to one of the following address with content below:

France: centre.formation@num.com

Germany: timo.zaiser@num.com

Italy: alessandra.villa@num.com

Switzerland: sales.ch@num.com

United Kingdom: sales.uk@num.com

For other countries, please contact your local sales representative or NUM Switzerland (sales.ch@num.com).

E-mail content

Company name:

Contact person:

Function:

Phone:

Address:

Your order number:

Training number:

Training date:

Training location:

Names of the participants: