Training Services

2022/2023

OMRON


OMRON
Control Cabinet Components
Safety Technology
Sensors
Automation & Drives
Robotics
Vision

Omron Training Services

Explore our extensive training portfolio and sign up to our training courses to learn more about Industrial Automation:

Whether you need training in Automation, Safety, Robots or Vision, we offer the same learning outcome Remotely, in one of our Training Centres or On-Site at the Customer premises.

To support your learning, online training courses are facilitated through our eLearning platform. Login to a standalone course or gain access to the course materials made available to you during one of our classroom-based training courses.

Variety of our Training Courses can be found from this document: categorised by software's and product groups.

For more information: check our web-pages or contact our customer service.

Classroom

We provide a wide selection of classroom-based courses within our training facility. The following pages shows a variety of the training courses available.

On-site

It is often inconvenient for a company to have staff members away from site for training activities, and this is especially true if a large number of staff members need training.

As well as providing in-house instruction at our training facilities or remote training, we can deliver training at your own site. We can provide standard course structures but can also produce tailor-made courses to meet more exacting customer requirements.

Remote

With our remote training services, you will have the access to our wide portfolio of training courses, being delivered to the comfort of your home, office or factory.

Remote training does not require any additional tools from your side, but an internet connection and a laptop or pc. Basically, all of our courses can be offered either remotely or with classroom face to face sessions.

Online Training Services

Learn online about our factory automation technology, devices, and solutions. Our online offering of 52 courses can be accessed anytime, anywhere.

Features

Basic and Advanced Courses
Introductory level courses focusing on the basics of our technology, are available, as well as courses explaining the use (operations & setting) of each product.

Assessment Questions
Each course has several review questions, at the end of each chapter. An assessment is also available at the end of course.

Course Offering
The Omron eLearning training platform covers the entire range of Omron products: automation systems, control components, motion & drives, power supplies, relays, switches, safety components, sensors, vision systems, energy saving and measurement

For more information: check our web-pages or contact our customer service.

eLearning PLUS

eLearning Plus is the advanced level for course management of the Omron eLearning platform.

With an eLearning Group License (valid 1 year at a time), teacher can use our eLearning environment to support school's curriculum. Online education management with eLearning Plus can be setup quickly:

- Structuring a class by uploading teacher and student information with a simple excel sheet
- Monitor student progress in the platform with a standard reports
- See which courses students attend and for how long. What results are achieved with relative score
- Possibility of building a personalized training program or a course for the school

Pre-requisites

Online courses are used as pre-requisites to our Classroom, Remote, or On-site training courses. Prior to the booked training course, it is recommended to finalise the correct online courses. Pre-requisites are marked on the course details of this document.

OMRON

Automation

PLC Programming - Part 1

AIMS

- Knowledge of the CX-One environment, particularly in CX-Programmer
- Creating, testing and online editing of simple PLC programs

COURSE CONTENT

- CP hardware; introduction to CX-Programmer (window, adaptation, simulator, program input, editing, icons and comments, online, settings, data view, search), hands-on
- CP1L address ranges/displaying address ranges, bit commands, timers, counters, comparisons, copying data, increment/decrement, arithmetic commands, floating point, hands-on

TC01 PLC BASIC

TARGET GROUP

- Commissioning and service personnel
- People with no knowledge of the Omron environment and PLC programming

PRIOR KNOWLEDGE REQUIRED

Digital technology (AND, OR, NOT, hex, bin, Word)

PRIOR E-LEARNING MATERIAL

Prior to this course we advise you going through the following e-learning material

A009 - Introduction to Factory Automation

B010 - PLC Basics

COURSE DURATION

1 day

COURSE FEE

Please check our website for price indication

TRAINING LOCATION

Local Omron sales-office

OMRON

Automation

PLC Programming - Part 2

AIMS

- Knowledge of the CX-One environment, particularly in CX-Programmer
- Creating, testing and online editing of simple PLC programs

COURSE CONTENT

- CJ hardware, address ranges, I/O assignment for CJ, using function blocks, scaling with FB,
- step sequence with SET/RSET, step sequence with STEP/SNXT, indirect addressing, arrays,
- FOR/NEXT - grinding, user-defined data structures, hands-on
- CX-One programming with structured text, hands-on

TC02 PLC ADV

TARGET GROUP

- Commissioning and service personnel
- People with no knowledge of the Omron environment and PLC programming

PRIOR KNOWLEDGE REQUIRED

PLC programming part 1

PRIOR E-LEARNING MATERIAL

Prior to this course we advise you going through the following e-learning material

C011 - CP1 Operation

C039 - Programmable Controller Set-up and Operation -CJ2 Series

COURSE DURATION

1 day

COURSE FEE

Please check our website for price indication

TRAINING LOCATION

Local Omron sales-office

OMRON

Automation

PLC Structured Text

COURSE OVERVIEW

Designed as an introduction for engineers and technicians, the course covers the Structured Text language used in the CP, CJ and CS PLCs

COURSE CONTENT

Introduction to the ST language:

- The Structured Text language syntax
- When to use Structured Text (ST)

Sysmac Studio:

- Creating function blocks in ST for the CP and CJ/CS PLC families
- Use of Structured Text In programs (CJ)
- Practical examples of ST programming
- Debugging code in a simulator

The primary objective of the course is to provide a comprehensive introduction to use of the Structured Text language in the Omron PLC (CP/CJ/CS)

TC04 PLC STRUCTURED TEXT

TARGET GROUP
Designed as an introduction for engineers and technicians, the course covers the Structured Text language used in the CP, CJ and CS PLCs

PRIOR KNOWLEDGE REQUIRED
The course is suitable for engineers and technicians who have attended the TC01/TC02 course

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
B046 - IEC 61131-3 Compliant ST Language Basics

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

Automation

PLC SFC Programming

COURSE OVERVIEW

- This course is designed to introduce the engineer to the advantages of using SFC (Sequential Flow Chart) programming. The trainee is shown how to implement an application in the SFC language

COURSE CONTENT

- An introduction to SFC programming
- Using the SFC editor in CX-Programmer
- Understanding the basic concepts of SFC

Writing an SFC program using Flow to describe:

- The "Process" coding actions (ladder)
- Coding transitions (ladder)
- Parallel flow
- Variable names - global/local
- Validating symbols
- Variable declarations (auto-allocation)

The primary objective of the course is to provide a comprehensive introduction to use of the Structured Text language in the Omron PLC (CP/CJ/CS)

TC05 PLC SFC PROGRAMMING

TARGET GROUP
This course is designed to introduce engineers to the advantages of using SFC (Sequential Flow Chart) programming

PRIOR KNOWLEDGE REQUIRED
This course is suitable for those with a good knowledge of PLC programming or who have attended the TC01/TC02 course

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
B046 - IEC 61131-3 Compliant ST Language Basics

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

Automation

Basic HMI Programming

COURSE OVERVIEW

- An application course for engineers using the NS HMI (human-machine interface) and the CX-Designer software package. The course focuses on the integration of a PLC and HMI.
  The course is a mixture of theory and practical, covering all the basic aspects of NS operations

COURSE CONTENT

- Introduction to the NS hardware range
- Introduction to the CX-Designer software package
- NS menu settings
- Bit buttons, word buttons, command buttons and lamps
- Numerical input/display
- Test tool
- NS project upload and download
- Simulation

TC11 HMI BASIC

TARGET GROUP
This course focuses on the integration of a PLC and HMI using the CX-Designer software

PRIOR KNOWLEDGE REQUIRED
This course is suitable for personnel with a basic knowledge of the PLC who now want to understand or modify an NS application. Ideally, trainees should first attend the TC01 course

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
C011 - CP1 Operation

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

Automation

Advanced HMI Programming

COURSE OVERVIEW

- An application course for engineers using the NS human-machine interface and the CX-Designer software package. The course focuses on the integration of a PLC and HMI. The course is a mixture of theory and practical, covering all the advanced aspects of NS operations

COURSE CONTENT

- Setting alarms
- Setting data block for recipes
- Customizing image handling
- Ethernet communication between the NS and the PLC
- Networking with the NS
- The NS web interface
- Simulation

TC12 HMI ADVANCED

TARGET GROUP
This course focuses on the integration of a PLC and HMI using the CX-Designer software

PRIOR KNOWLEDGE REQUIRED
This course is suitable for personnel with a basic knowledge of the PLC and HMI, who now want to design interfaces. It is ideal for those who have attended the TC01/TC11 courses

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
C039 - Programmable Controller Set-up and Operation -CJ2 Series

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

Automation

NB Series Operator Terminals

AIMS

- Knowledge of the visualization capabilities of NB-Designer
- Create, test and edit visualizations

COURSE CONTENT

- Hardware and system design, communication
- Language settings, user administration, creating a project
- Declarations, elements, data, objects
- Creating pages
- Program checks, online and offline test

TC13 HMI NB

TARGET GROUP

- Commissioning and service personnel
- People with no knowledge of the Omron environment and PLC programming

PRIOR KNOWLEDGE REQUIRED

Digital technology (AND, OR, NOT, hex, bin, Word)

PRIOR E-LEARNING MATERIAL

Prior to this course we advise you going through the following e-learning material

C031 - NB Setup and Basic Operation

COURSE DURATION

1 day

COURSE FEE

Please check our website for price indication

TRAINING LOCATION

Local Omron sales-office

OMRON

Drive Technology

Basic Course on Variable Speed Drives

COURSE OVERVIEW

- The course is hands-on, with each trainee operating their own inverter drive training unit.
  The course will start by explaining, in non-mathematical terms, how an AC electric motor works and why varying the frequency causes a change in speed. By the end of the course, trainees will have gained an understanding of the application and operation of variable speed drives

COURSE CONTENT

- Overview of variable speed drives and electric motors
- Location and installation
- Supply wiring
- Control wiring
- Using the digital operator
- Mode selection
- Parameter settings
- Troubleshooting

TC25 VARIABLE SPEED DRIVES BASIC

TARGET GROUP
This course is aimed at maintenance technicians and engineers who have no experience of inverter drives, and system builders who are new to the application and control of variable speed drives

PRIOR KNOWLEDGE REQUIRED
None

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
A009 - Introduction to Factory Automation
B006 - AC Drives Basics

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

Drive Technology

Frequency converter - advanced

COURSE OVERVIEW

- The course is carried out directly on a frequency converter. The frequency converter and its functions and limits are described in detail. The participant learns how the different functions are parameterized and handled. The experience with the different Software tools will be explained.

COURSE CONTENT

- Assembly and commissioning
- Control structure
- Parameterization via control unit and Software
- Security concept
- Programming via Software Tool
- Troubleshooter

TC26 VARIABLE SPEED DRIVES ADVANCED

TARGET GROUP
This course is aimed at maintenance technicians and engineers who have no experience of inverter drives, and system builders who are new to the application and control of variable speed drives

PRIOR KNOWLEDGE REQUIRED
None

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
B006 - AC Drives Basics

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

TC27 SERVO MOTORS AND DRIVES INT

Drive Technology

Servo drives - basics (1S or Accurax G5)

COURSE OVERVIEW

- The course is largely based on a servo system and the associated PC software carried out. The servo system and its functions and limits are discussed in detail. The The participant learns how the different functions are parameterized and handled. The first experiences are gained with the PC Software belonging to the servo system.

COURSE CONTENT

- Installation and commissioning
- Operating structure
- Parameterization
- Auto tuning and test operation
- Safety functions - wired and FSoE (FailSafe over EtherCAT)
- Error diagnosis

TARGET GROUP
This course is aimed at maintenance technicians and engineers who have no experience of servo motors and drives, and system builders who are new to the application and control of drives

PRIOR KNOWLEDGE REQUIRED
None

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
B020 - Servo Basics

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

Control Cabinet Components

Basic Training

AIMS

- Basic training on components for cabinet design
- Learn about the product range

COURSE CONTENT

- History: from the time relay for x-ray equipment to the world market leader in industrial components
- The importance of industrial components for OMRON: market volume and core areas of expertise
- Omron components in mechanical engineering: Why Omron is actually a full-service provider
- Positioning of industrial components in the market
- Product overview

TC31 COMPONENTS BASIC

TARGET GROUP
Beginners

PRIOR KNOWLEDGE REQUIRED
None

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
A009 - Introduction to Factory Automation
B003 - Power Supplies
B005 - General Purpose Relays

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

Control Cabinet Components

Temperature Controllers

TC37 TEMP CONTROL BASIC

AIMS

- Communication of basic information about the Omron temperature controllers, based on the Omron E5_C and E5_D
- Learn about the basic functions
- Independent parameterization of basic functions
- Simple commissioning via auto-tuning
- Brief introduction to the CX-Thermo software

COURSE CONTENT

- Overview of our range of controllers
- Basic knowledge of temperature controllers: control/regulation, components, inputs, outputs, semiconductor relays
- Definition of terms: 2-point and 3-point control, PID
- Controller functions: AT/ST/RT/HB/logic operator
- Hands-on E5CC-Q_ training: initial start-up, alarm settings, event input, auto-tuning, CX-Thermo

TARGET GROUP
Beginners

PRIOR KNOWLEDGE REQUIRED
None

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
B062 - Temperature Controller Basics

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

Vision

Vision Sensor Basic

COURSE OVERVIEW

- The course is an introduction to Omron vision sensors. It utilizes programming/simulator software on laptops. Participants will have access to training examples so that they can familiarize themselves with navigation around the software and learn about commonly used tools and parameters

COURSE CONTENT

- Introduction to Omron vision sensors, vision sensor models and principle
- Using the PC programming/simulator software, understanding and navigating the programming/operating environment
- General overview of inspection tools and program configuration: programming examples to provide an understanding of the main tools, running through application examples in more detail using logged images
- Logging images and loading/backing up scenes
- How to save programs to/from a controller, saving images for records/review
- Inputs and outputs: wiring and overview of I/O
- Lighting basics

TC41 VISION SENSOR BASIC

TARGET GROUP
This course is an introduction to the Omron vision sensors. It is intended for technicians, engineers and operators who have either little or no experience of the hardware and programming environment

PRIOR KNOWLEDGE REQUIRED
This course is for technicians, engineers and operators who have either little or no experience of the hardware and programming environment

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
B016 - Vision Basics

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

Vision

Vision System Basic

COURSE OVERVIEW

- The course is an introduction to the FH vision system for technicians and engineers who have either little or no experience of the FH programming environment. Hands-on training examples allow participants to familiarize themselves with navigation around the software and to learn about commonly used tools and controller operation

COURSE CONTENT

- Introduction to the FH/FZ system and hardware: controller models, lighting basics, camera types and lenses
- Using the PC simulator software: firmware versions, navigation and understanding the programming/operating environment
- General overview of inspection tools and configuring scenes (programs): review of available tools, learning about the key commonly used tools, more detailed look at application examples using stored application images on the simulator
- Logging images and backing up scenes to USB: how to save programs to/from a controller, saving images for records/review
- Inputs and outputs: wiring, overview of inputs and outputs via communication protocols

TC42 VISION SYSTEMS BASIC

TARGET GROUP
This course is an introduction to the Omron vision systems. It is intended for technicians, engineers and operators who have either little or no experience of the hardware and programming environment

PRIOR KNOWLEDGE REQUIRED
This course is for technicians, engineers and operators who have either little or no experience of the hardware and programming environment

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
C045 - FH Setup and Operation

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

Sensors

Theoretical Training

TC46 SENSORS BASIC

AIMS

- Knowledge of the basics of inductive, capacitive and optical sensors

COURSE CONTENT

- Physical principles of inductive sensors: physical design, functional principles, types
- Physical principles of optoelectronics: theory of optics

TARGET GROUP
Beginners

PRIOR KNOWLEDGE REQUIRED
None

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
B001 - Photoelectric Sensors
B002 - Proximity Sensors

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

Sensors

Practical Training

AIMS

- Familiarity with sensors in the product range
- Setting different amplifier types
- Confident use of all sensors

COURSE CONTENT

- Selection criteria for the correct sensor
- Operation of sensors: sensor settings, selection and correct setting of fiber optics and amplifiers, application examples, practical examples
- Independent testing with sensors

TC47 SENSORS ADV

TARGET GROUP
Beginners

PRIOR KNOWLEDGE REQUIRED
None

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
B001 - Photoelectric Sensors
B002 - Proximity Sensors

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

TC51 SYSMAC CONTROL BASIC

Sysmac

Sysmac Automation Platform

AIMS

- Knowledge of the Sysmac programming environment
- Creating, testing and online editing of simple programs

COURSE CONTENT

- Basic use of the OMRON Sysmac NJ machine controller and the System Studio programming software. The participant will then be able to design automation solutions in the high-end control sector independently using the basic command set of the OMRON machine controller, and to create and test these solutions using the Sysmac Studio programming software
- Introduction and system overview
- Functions, function blocks and libraries, programming language

TARGET GROUP

- Beginners
- Commissioning and service personnel
- Hardware and software developers

PRIOR KNOWLEDGE REQUIRED

Digital technology (AND, OR, NOT, hex, bin, Word)

PRIOR E-LEARNING MATERIAL

Prior to this course we advise you going through the following e-learning material

A009 - Introduction to Factory Automation

B027 - Introduction to Sysmac Automation Platform

COURSE DURATION

2 days

COURSE FEE

Please check our website for price indication

TRAINING LOCATION

Local Omron sales-office

OMRON

TC52 SYSMAC CONTROL ADVANCED

Sysmac

Sysmac Automation Platform

COURSE OVERVIEW

- This course is designed to cover the full Sysmac solution and its benefits. It includes the PLCopen library function blocks and the basics of motion technology, especially in servo and encoder applications. The course uses a hands-on approach. Software design and documentation are covered in detail, along with the diagnostic and simulation tools available in Sysmac Studio

COURSE CONTENT

- Introduction to motion theory
- Axis identification, motion commands, axis additions and settings
- Servo drive and auto-tuning operations
- PLC open commands
- Test mode and applications

TARGET GROUP
This course is ideally suited to those who require advanced knowledge of Sysmac Studio. It is recommended that participants are familiar with basic PLC concepts

PRIOR KNOWLEDGE REQUIRED
This course is ideal for those who have attended the TC51 course

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
C029 - Sysmac Studio Operation

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

Sysmac

Sysmac I/O and Safety

COURSE OVERVIEW

- The course assumes some knowledge of machine safety but includes a brief overview of the key legislation that affects the use of programmable safety systems. Participants will finish the course with the ability to configure, program, download, upload, verify, modify and expose data to standard Sysmac controller products and fully simulate safety software in Sysmac Studio

COURSE CONTENT

- Introduction to Sysmac Safety
- Effects of legislation on programmable safety system configuration
- The Sysmac Safety hardware platform. An overview of the products in the Sysmac Safety range and correct selection of these products
- Sysmac Safety IO configuration. How to configure the various input and output options for safety systems
- Sysmac Safety logic configuration, including download and construction procedures. This module ends with a working safety system in one of our training rigs
- Safety software simulations. Simulation of the full program previously tested in the training rigs
- Interface to standard NJ/NX platform controllers. Exposure of data, reading and writing to safety controllers
- System modification. How to upload and modify existing Sysmac Safety programs

TC53 SYSMAC NX IO AND SAFETY

TARGET GROUP

This is intended for technicians and software engineers who are already familiar with the Omron Sysmac Studio software platform and the associated hardware

PRIOR KNOWLEDGE REQUIRED

This course is ideal for those who have attended the TC51 course

PRIOR E-LEARNING MATERIAL

Prior to this course we advise you going through the following e-learning material
C060 - Sysmac Studio Operation -with the NX Series Safety Control Unit-
A063 - Introduction to Safety

COURSE DURATION

1 day

COURSE FEE

Please check our website for price indication

TRAINING LOCATION

Local Omron sales-office

OMRON

Sysmac
Motion Control

COURSE OVERVIEW
- The course discusses simple motion types (position, speed and torque) and how to use Sysmac and the PLCopen motion control library to achieve them. The primary objective of the course is to provide a comprehensive introduction to Omron Sysmac motion control, for single axis motion

COURSE CONTENT
- Introduction to motion: an explanation of motion types (linear and rotary). An explanation of control types (position, speed and torque control). Discussion of the types of hardware axes in Sysmac (servo, encoder and pulse)
- Sysmac motion: explanation of deterministic motion over EtherCAT, configuration of the hardware axis (servo), configuration and use of the Sysmac axis object for rotary and linear motion types

PLCopen library:
- Practical hands-on experience of the basic motion commands
- Enabling and homing an axis, axis jogging
- Single axis motion (position, velocity and torque control)
- Axis position latches, feed control
- Detecting EtherCAT and motion errors, and how to handle them
- Servo safety principles - wired and FSoE (Safety over EtherCAT)

TC54 SYSMAC MOTION CONTROL

TARGET GROUP
This course is designed to introduce engineers and technicians to the fundamentals of Sysmac motion control

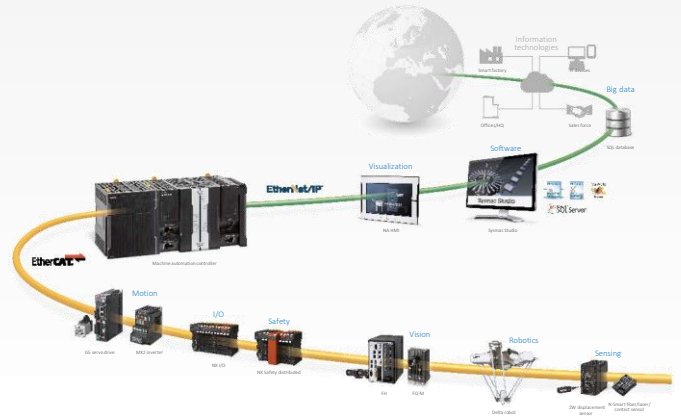
PRIOR KNOWLEDGE REQUIRED
This course is ideal for those who have attended the TC51 course

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
B071 - EtherCAT® Basics
B008 - Basic Motion Control

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office



OMRON

Sysmac

NA Series Operator Terminals

AIMS

- Knowledge of the visualization capabilities of Sysmac Studio
- Create, test and edit visualizations

COURSE CONTENT

- Hardware and system design, communication
- Language settings, user administration, creating a project
- Declarations, elements, data, objects
- Creating pages
- Program checks, online and offline test

TC55 SYSMAC NA HMI

TARGET GROUP

- Commissioning and service personnel
- People with no knowledge of the Omron environment and PLC programming

PRIOR KNOWLEDGE REQUIRED

Digital technology (AND, OR, NOT, hex, bin, Word)

PRIOR E-LEARNING MATERIAL

Prior to this course we advise you going through the following e-learning material

C049 - NA Basic Operation

COURSE DURATION

1 day

COURSE FEE

Please check our website for price indication

TRAINING LOCATION

Local Omron sales-office

OMRON

Sysmac

Sysmac SQL

COURSE OVERVIEW

- Designed to illustrate the powerful yet easy implementation of the Sysmac SQL data connection. The course is primarily hands-on using dedicated training equipment, incorporating our NJ Sysmac controller

COURSE CONTENT

Introduction to SQL in Sysmac NJ:

- The Sysmac NJ SQL controller
- Overview of the Sysmac SQL server interface

NJ SQL programming:

- Connecting Sysmac NJ to the SQL server
- Using the SELECT, INSERT, DELETE and UPDATE commands in Sysmac NJ to query and update an SQL database
- Discussion of INSERT using triggers (utilizing SQL stored procedures)

Working with SQL:

- Monitoring the performance and status of the SQL connection
- Handling lost connections with spooling
- SQL debugging and logging features in Sysmac NJ
- Common SQL configuration problems

TC56 SYSMAC SQL

TARGET GROUP
Designed as an introduction for engineers and technicians, the course covers the SQL functionality used in Sysmac Studio

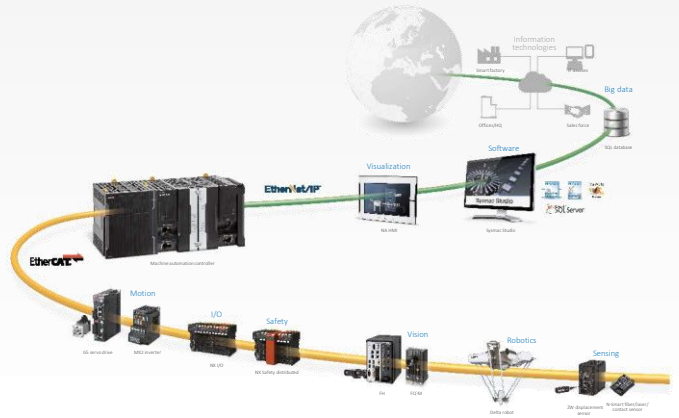
PRIOR KNOWLEDGE REQUIRED
This course is ideal for those who have attended the TC51 course

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
B012 - OMRON FA Network Basics

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office



OMRON

TC57 SYSMAC STRUCTURED TEXT

Sysmac

Sysmac Structured Text

COURSE OVERVIEW

- The course is primarily hands-on, based on working examples. The primary objective of the course is to provide a comprehensive introduction to use of the Structured Text language in Sysmac Studio

COURSE CONTENT

Introduction to the ST language:

- The Structured Text language syntax
- When to use Structured Text (ST)

Sysmac Studio:

- Structured Text in ladder logic (inline ST)
- Use of Structured Text in programs
- Creating functions and function blocks in ST
- Practical examples of ST programming
- String handling in ST
- Debugging code in a simulator

TARGET GROUP
Designed as an introduction for engineers and technicians, the course covers the Structured Text language used in Sysmac Studio

PRIOR KNOWLEDGE REQUIRED
This course is ideal for those who have attended the TC51 course

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
C065 - Sysmac Studio Operation (ST Program)

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

Safety Technology

Safety Sensors

AIMS

- Basic knowledge of the function and wiring of light grids and laser scanners
- Selecting the right light grid for different applications

COURSE CONTENT

- Technical training about wiring and setting F3SG, F3S-TGR-CL and F3SJ-A light grids and OS32C laser scanners
- Building a muting application

TC81 SAFETY SENSORS

TARGET GROUP
Beginners

PRIOR KNOWLEDGE REQUIRED
None

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
B025 - Safety Light Curtain Basics

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

Safety Technology

Safety Logic Units

AIMS

- Basic knowledge about the requirement for a secure connection according to performance level
- Wiring and programming of Omron modules and safe controllers

COURSE CONTENT

- Wiring and functions of the G9SE and G9SR safety modules, wiring and programming the G9SP safe controller and the NX-S, and explanation of the software

TC82 SAFETY STANDALONE CTR

TARGET GROUP
Beginners

PRIOR KNOWLEDGE REQUIRED
None

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
C060 - Sysmac Studio Operation -with the NX Series Safety Control Unit-

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

TC84 SAFETY MACHINE SYSTEM

Safety Technology

Basics of Machine Safety

AIMS

- Communication of the legal foundations and supporting harmonized standards in the field of machine safety

COURSE CONTENT

- Ordinance on Industrial Safety and Health (BetrSichV)
- Machinery Directive 2006/42/EC
- Risk assessment according to EN ISO 12100
- Performance level according to EN ISO 13849-1
- Risk reduction measures
- Door monitoring and locking
- Non-contact protective devices
- Tactile protective devices
- Stationary and mobile protective devices

TARGET GROUP
Beginners

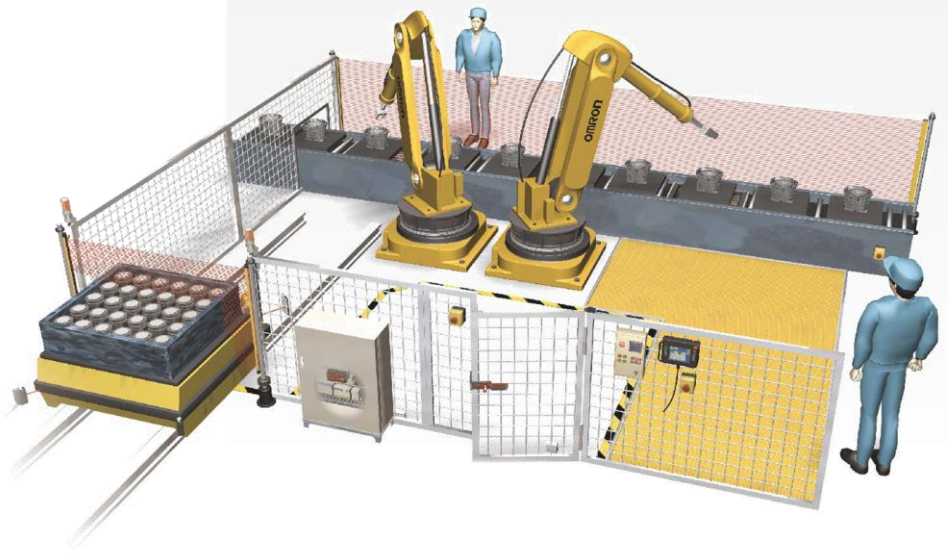
PRIOR KNOWLEDGE REQUIRED
None

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
A063 - Introduction to Safety

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office



OMRON

Automation

Networking - Fieldbus and EIP

COURSE OVERVIEW

- This one-day training course covers the wiring, installation, commissioning and programming of networks. The hands-on course involves building a physical network and then programming it from scratch. The networks available to choose from are: Controller Link, CompoBus and CompoNET, Sysmac Link, Ethernet/IP, Profibus and Profinet

COURSE CONTENT

- System specification
- System wiring
- DeviceNet configurator (CX-Integrator)
- The system status area
- Network troubleshooting

TC91 NETWORKING FIELDBUS AND EIP

TARGET GROUP
This course is aimed at engineers who are familiar with Omron PLCs and software, and who would like to learn more about networks

PRIOR KNOWLEDGE REQUIRED
This course is ideal for those who have attended the TC01 and TC02 courses

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
A069 - Introduction to FA Open Networks

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

EtherNet/IP™

OMRON

Automation

Networking - DeviceNet

COURSE OVERVIEW

- This one-day training course covers the wiring, installation, commissioning and programming of a DeviceNet system. The hands-on course involves building a physical DeviceNet network and then programming it from scratch

COURSE CONTENT

- Setting alarms
- Setting data block for recipes
- Customizing image handling
- Ethernet communication between the NS and the PLC
- Networking with the NS
- The NS web interface
- Simulation

TC93 NETWORKING DEVICENET

TARGET GROUP
This course is aimed at engineers who are familiar with Omron PLCs and software, and who would like to learn more about DeviceNet and DeviceNet remote I/O

PRIOR KNOWLEDGE REQUIRED
This course is ideal for those who have attended the TC01 and TC02 courses

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
B012 - OMRON FA Network Basics

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

DeviceNet™

Maintenance Training Courses

2021/2022

OMRON

Maintenance Training

Specific to Vision

COURSE OVERVIEW

- The course covers the practical functionality part of Omron Vision Systems. The focus is on the Omron FH and FHV7 range of products but the content is quite generic and covers the basics of Machine Vision. Therefore, the objective is to give the attendee a good understanding of light, lighting, lenses and cameras, and the methods of evaluating images taken.

COURSE CONTENT

- Understand light and its aspects in Vision applications
- Apply different methods of lighting
- Use optics, lenses and cameras
- Work with the Machine Vision Application
- Create a small Machine Vision Application

TC43 VISION INT

TARGET GROUP
Maintenance and service personnel
People with no knowledge of the Omron environment and Vision programming

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
B016 - Vision Basics

PRIOR KNOWLEDGE REQUIRED
None

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

TC121 MNT SYSMAC

Maintenance Training

Sysmac Automation Platform

COURSE OVERVIEW

- The course covers the practical functionality of NX/NJ controllers and Sysmac Studio. The focus is on maintaining a machine controlled by an NX/NJ controller. Therefore, the objective is to give the participant a good understanding of all the tools available for maintenance and troubleshooting

COURSE CONTENT

- Hardware installation of NX/NJ controllers
- Knowledge of the programming and configuration structure of Sysmac Studio
- Going online, and monitoring and manipulating variables used in programs
- Evaluating log files, checking EtherCAT network health
- Backing up and restoring the NX/NJ project

TARGET GROUP
Maintenance and service personnel
People with no knowledge of the Omron environment and PLC programming

PRIOR KNOWLEDGE REQUIRED
None

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
B027 - Introduction to Sysmac Automation Platform

COURSE DURATION
2 days

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

Maintenance Training

Fixed Robots in Pick-and-Place Applications

COURSE OVERVIEW

- The course provides an overview of different robot types: how they move and what the robots' actual limitations are in terms of speed and load. It also explains how to maintain and optimize the robotics application in terms of monitoring and improving the path of the robot while it is handling the load. An important feature of robotics is the recognition of objects, so there is a brief introduction to vision and the configuration of the vision system

COURSE CONTENT

- Different types of robots and their specific features
- Focus is on the SCARA robot although most of the content also applies to other types of robot
- Hardware configuration of a robot
- Coordinate system (XYZ) of a robot
- Simple programming of a robot using a wizard
- Vision; checking and configuring the vision system

TC122 MNT FIXED ROBOTS

TARGET GROUP
Maintenance and service personnel
People with no knowledge of the Omron environment and PLC/robot programming

PRIOR KNOWLEDGE REQUIRED
None

PRIOR E-LEARNING MATERIAL
Prior to this course we advise you going through the following e-learning material
A009 - Introduction to Factory Automation

COURSE DURATION
2 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

Robotics Training Program

2021/2022

ROBOTICS - PROGRAMMING

eV+ is the further development of V+ for the SmartController EX and the eSeries robots. It is a combination of a real-time multitasking operating system and a programming language. The eV+ operating system controls all processes at system level, for example, input/output management, program execution, task and memory management, and file management. The eV+ programming language features an extensive command set and has evolved over decades to become an extremely powerful, secure and predictable robot programming language. The course teaches students about aspects of this programming language and how to use the eV+ operating system. Practical workshops enable participants to learn about the structures and application possibilities of this programming language. Participants create sample programs and have ample opportunity to test these extensively on the robot. Both Viper and Cobra 600 robots are available in our training room.

ROBOTICS - IMAGE PROCESSING

ACESight is an easy-to-use, PC-based image processing program for guidance of our robot systems. ACESight also provides a powerful development environment for all image processing applications. Its intuitive graphical programming interface enables highly accurate applications to be realized in minimal time.

Flexible part feeding, high quality requirements, tight component tolerances - all challenges that are often only feasible if "seeing robots" are used. ACESight makes it much simpler to implement robot applications of this type with image processing, not least thanks to its detection algorithms, which provide precise results even under extreme lighting conditions and in complex scenarios.

ROBOTICS - SERVICE AND MAINTENANCE

Trained employees who can react immediately in the event of a system failure on site are good insurance against long downtimes.

Our service and maintenance courses will help to ensure that your employees can independently locate and remedy faults in the robot and in the controller. And even if a trained employee cannot solve a problem themselves, their knowledge of the system functionality will be useful both for fault diagnosis and when communicating with our service technicians.

OMRON

TCD21 PROG E V+ PROF

Robotics - Programming and Operation

eV+ Professional Programming

AIMS

- Use of the eV+ operating system
- Input/output management
- Structures and application options
- Program execution and file management
- Task and memory management

COURSE CONTENT

- Starting and calibrating the system
- Adept ACE development environment
- Robot motion commands
- Multitasking
- Digital interrupts
- Fault handling
- Creating a graphical user interface
- Communication with the PLC via IO
- Palletizing
- Digital inputs/outputs
- Modifying positions
- Debugger
- TCP/IP communication
- Serial communication

TARGET GROUP
Engineers and programmers of Omron/Adept robot systems

PRIOR KNOWLEDGE REQUIRED
Programming experience in at least one higher-level programming language such as Basic, Pascal, C, etc.

COURSE DURATION
4.5 days

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

TCD22 PROG VIPER

Robotics - Programming and Operation

Special Features in the Programming of Six-Axis Robots

AIMS

- Learn tips and tricks for programming six-axis robots (supplement to eV+ programming course)

COURSE CONTENT

- Special V+ commands for controlling six-axis robots
- Precision points
- Singularities

TARGET GROUP
Engineers and programmers of Omron/Adept six-axis robot systems

PRIOR KNOWLEDGE REQUIRED
Programming experience and participation in the course on "eV+ professional"

COURSE DURATION
0.5 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

TCD23 PROG ACE OPERATORS

Robotics - Programming and Operation

ACE Operator and Maintenance Training

AIMS

- Basic hardware knowledge of robot systems with the ACE development environment
- Basic command set of the eV+/V+ programming language
- Use of peripheral devices
- Simple application examples of the eV+/V+ programming language
- Prescribed maintenance work

COURSE CONTENT

- System overview: interfaces, cabling
- Modification/teaching of positions (basics)
- Hand-held device
- Safety devices
- Monitoring commands
- Application examples of V+
- Maintenance of programming language

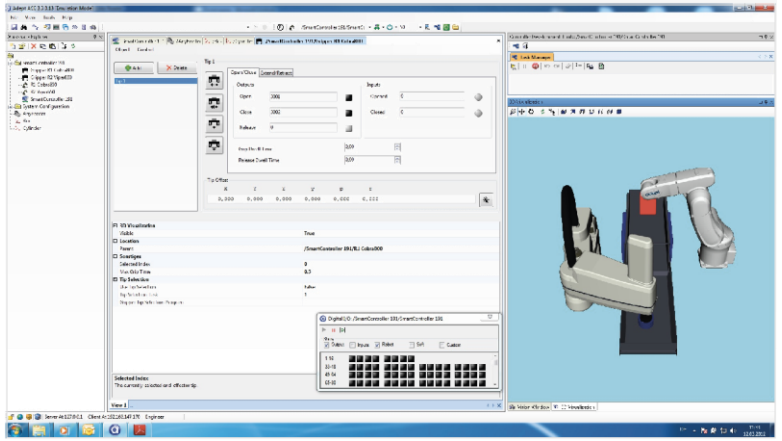
TARGET GROUP
Electricians and maintenance technicians who work with Omron/Adept robot systems

PRIOR KNOWLEDGE REQUIRED
None

COURSE DURATION
2 days

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office



OMRON

TCD26 PROG PACKEXPERT

Robotics - Programming and Operation

ACE PackXpert

AIMS

ACE PackXpert is a software tool for easy programming and parameterization of complex high-speed packaging applications. All required functionalities are integrated in ACE PackXpert. In place of traditional programming, parameterization of the application-specific packaging tasks is performed through an intuitive graphical user interface. Regardless of whether one robot or multiple robots are used, different cameras are employed and the robots are installed synchronously or in cyclic operation - ACE PackXpert has full functionality built in for almost any application

COURSE CONTENT

- Software structure
- ACE development environment
- Creating and configuring the required objects, such as robots, conveyor, camera
- Image processing: creating various models
- Creating and configuring processes
- Creating the specific customer application

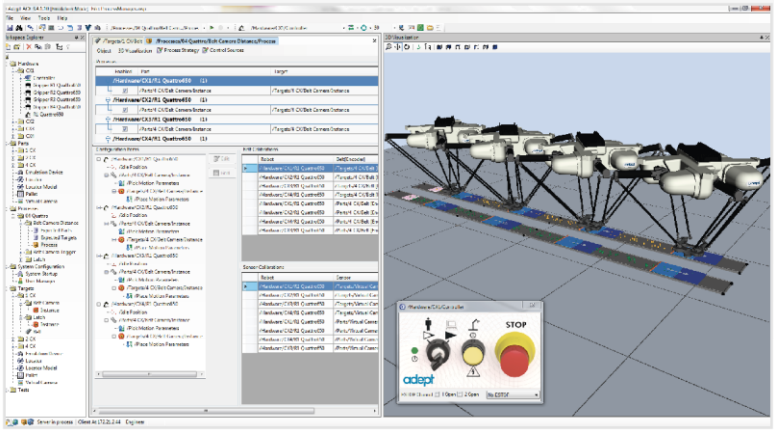
TARGET GROUP
Programmers and users who develop packaging solutions

PRIOR KNOWLEDGE REQUIRED
PC basics

COURSE DURATION
4.5 days

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office



OMRON

TCD24 PROG MOBILE ROBOTS

Robotics - Programming and Operation

AIMS

- Programming, handling and operating a mobile robot
- Configuring, viewing and editing map files
- Planning navigable routes
- Using the graphical user interface to communicate with the robot
- Controlling mobile activities

COURSE CONTENT

- Integrating a mobile robot in the IT infrastructure using the SetNet-Go web interface
- User connections on MobileCore (interfaces and digital inputs/outputs) to automate the payload
- Setting up the system
- Updating the mobile software suite
- MobileEyes, MobilePlanner software
- Adapting sonar sensors to the environment
- Producing maps by scanning the environment
- Debugging (debug info files)
- Advanced Robotics Command Language (ARCL) interface
- Editing maps - creating traffic rules
- Using side lasers
- Using robot tasks and macros at target points (goals)
- Configuration parameters
- Connecting and using touchscreens
- Setting up mobile call buttons
- Using Acuity localization in dynamically changing environments

TARGET GROUP
Engineers and programmers who integrate mobile robots into the production environment

PRIOR KNOWLEDGE REQUIRED
PC basics

COURSE DURATION
4 days

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

TCD25 PROG ENTERPRISE MGR

Robotics - Programming and Operation

Enterprise Manager

AIMS

- The course provides students with basic information on handling the Enterprise Manager and using ARCL
- Managing map and configuration updates
- Creating a software interface for connecting a mobile robot fleet to the in-house ERP system

COURSE CONTENT

- Integrating LD robots in a fleet
- Setting EM parameters and options
- Basics of EM job queuing
- Simple programming example for creating middleware in C#.Net

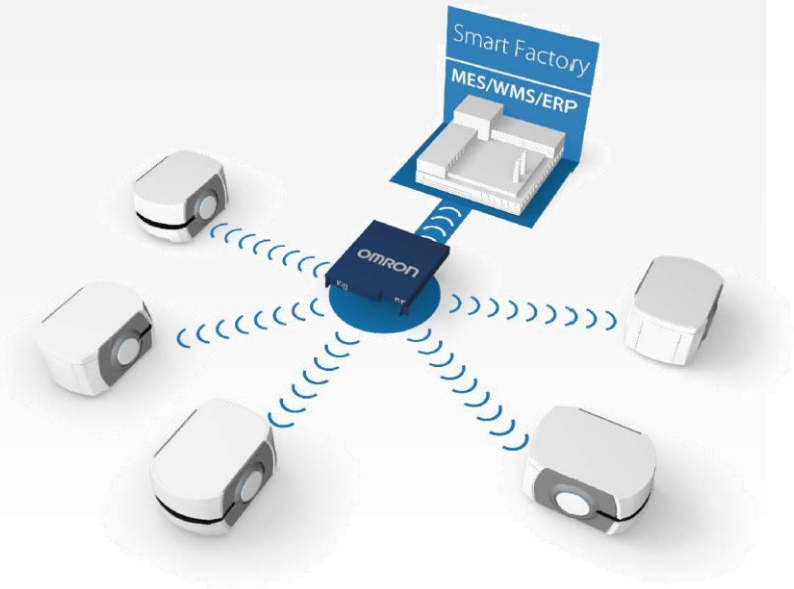
TARGET GROUP
Engineers and programmers who integrate a fleet of mobile robots into the production environment

PRIOR KNOWLEDGE REQUIRED
None

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office



OMRON

Robotics – Collaborative Robots

Programming and Operating TM Cobot

AIMS

- Acquire extensive system knowledge (robot, gripper, camera)
- Development of application programs Introduction to security considerations

COURSE CONTENT

- Operation of the TM Flow user interface (login, user levels)
- Robot procedure in different modes (Free, Joint, World, Tool)
- Teach, change and copy positions
- Create exercise programs (PTP and linear)
- Create user coordinate systems (tool and base)
- Processing inputs and outputs
- Global variables and position variables
- The internal HMI
- Logical links and program instructions
- Install grab (parameters) and grab objects
- Programming thread
- Security Settings and Basic TS15066
- Basic TM vision and camera
- Vision functions: barcode, color classification, landmark, pattern matching, camera calibration
- System update, backup functions and installation of components
- Modbus and Profinet communication

TCD27 PROG COBOT

TARGET GROUP
Engineers and programmers who integrate collaborative robots into the production environment

PRIOR KNOWLEDGE REQUIRED
Basic knowledge of mechanics, electronics and computer use

COURSE DURATION
2 days

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

TCD31 ACE SIGHT 3 BASICS

Robotics - Image Processing

ACESight 3 - Basics

AIMS

- Communication of basic knowledge about the structure and parameter settings of ACESight image processing

COURSE CONTENT

- System overview of ACESight
- Settings for the camera lens
- Settings for camera parameters
- Camera calibration

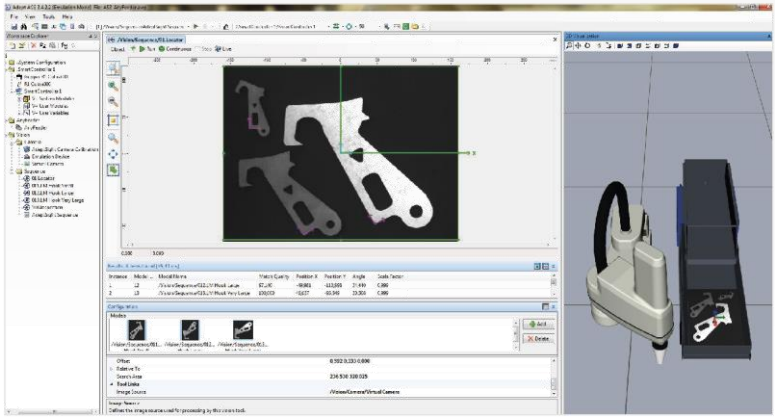
TARGET GROUP
Operators, electricians and maintenance technicians who work with Omron/Adept robot systems with image processing

PRIOR KNOWLEDGE REQUIRED
None

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office



OMRON

TCD32 ACE SIGHT 3 CONV TRACK

Robotics - Image Processing

ACESight 3 - Conveyor Tracking

AIMS

- Communication of special circumstances for programming applications with conveyor tracking
- Many applications are designed in such a way that the robot, which uses the image processing tool to "see," takes the parts from a running conveyor
- This course explains the specific features that must be taken into account when programming such an application

COURSE CONTENT

- Conveyor encoder (function and system integration)
- Conveyor calibration
- Special V+ commands for conveyor tracking
- Queue handling
- Example program for vision-controlled recording of objects from the running conveyor using the robot

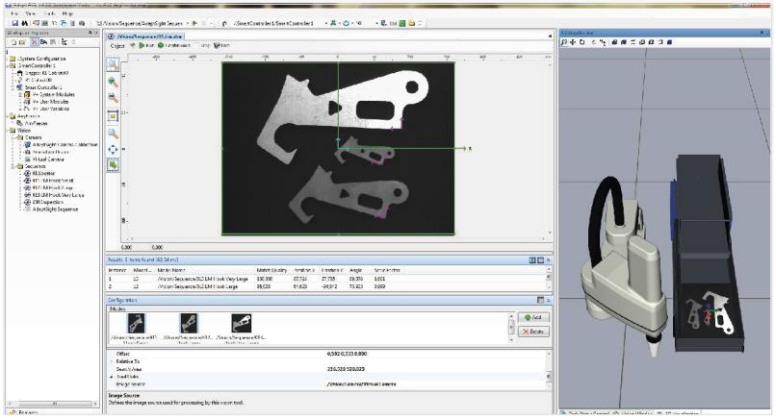
TARGET GROUP
Engineers and programmers of Omron/Adept robot systems with ACESight image processing

PRIOR KNOWLEDGE REQUIRED
Programming experience and participation in our three-day "ACESight 3 - Image Processing" course

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office



OMRON

TCD33 ACE SIGHT 3 VISION

Robotics - Image Processing

ACESight 3 - Image Processing

AIMS

- Operation and programming of the ACESight software using the ACE development environment
- Location and recording of objects using the robot, controlled via image processing

COURSE CONTENT

- Revision of the ACE development environment
- Installation of ACESight on a PC
- Optical basics: distance settings, focal length, aperture, depth of field
- Image processing tools such as line and arc finders, rulers, filters, histogram
- Image settings using system parameters, brightness, contrast, camera calibration
- Example programs for vision-controlled recording of objects using the robot

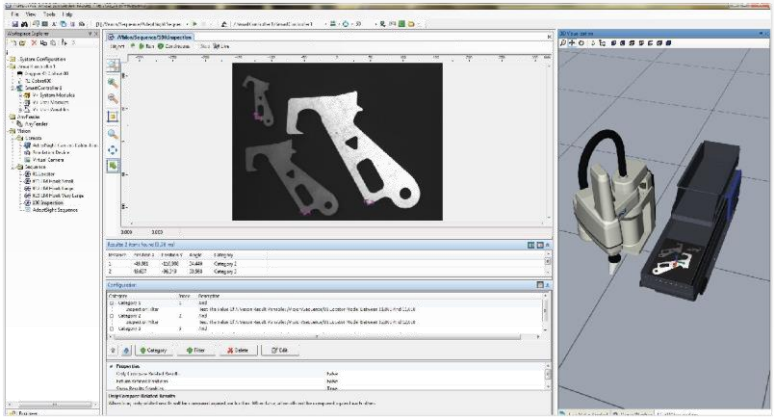
TARGET GROUP
Engineers and programmers of Omron/Adept robot systems with ACESight image processing

PRIOR KNOWLEDGE REQUIRED
Programming experience and participation in our "eV+ professional" programming course

COURSE DURATION
3 days

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office



OMRON

TCD34 ACE SIGHT 3 PROG ANYFEED

Robotics - Image Processing

Programming AnyFeeder

AIMS

- Learning about aspects of programming AnyFeeder in connection with the ACE development environment

COURSE CONTENT

- Program structure of the AnyFeeder program
- Parameterizing AnyFeeder
- Image processing
- Teach-in of models
- Development strategies

TARGET GROUP
Engineers and programmers of Omron/Adept robot systems with the AnyFeeder feed solution

PRIOR KNOWLEDGE REQUIRED
Participation in our "eV+ professional" course and "ACESight 3 - Image Processing"

COURSE DURATION
1 day

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

TCD41 MNT COBRA 350

Robotics - Service and Maintenance

Extended Service and Maintenance Course for Cobra s350 Robots

AIMS

- Carry out repairs to the electronics and mechanics
- Knowledge of system functionality
- Independently locate and remedy faults in the robot and in the controller
- Fault diagnosis
- Perform preventive maintenance on the system

COURSE CONTENT

- Starting and calibrating the system
- Manual operation
- Theory of the controller and control loops
- Detection and rectification of faults
- Preventive maintenance and care
- System interfaces
- Safety devices
- Emergency stop system
- Replacing various mechanical and electrical components of the robot

TARGET GROUP
Electricians, electrical engineers, maintenance personnel and maintenance technicians who are responsible for the maintenance and repair of robotic systems

PRIOR KNOWLEDGE REQUIRED
Basic knowledge of mechanics, electronics and computer use

COURSE DURATION
4 days

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

TCD42 MNT E COBRA PRO

Robotics - Service and Maintenance

Extended Service and Maintenance Course for Cobra s600/s800 Robots

AIMS

- Carry out repairs to the electronics and mechanics
- Knowledge of system functionality
- Independently locate and remedy faults in the robot and in the controller
- Fault diagnosis
- Perform preventive maintenance on the system

COURSE CONTENT

- Starting and calibrating the system
- Manual operation
- Theory of the controller and control loops
- Detection and rectification of faults
- Preventive maintenance and care
- System interfaces
- Safety devices
- Emergency stop system
- Replacing various mechanical and electrical components of the robot

TARGET GROUP
Electricians, electrical engineers, maintenance personnel and maintenance technicians who are responsible for the maintenance and repair of robotic systems

PRIOR KNOWLEDGE REQUIRED
Basic knowledge of mechanics, electronics and computer use

COURSE DURATION
4 days

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

TCD43 MNT COBRA S600S800

Robotics - Service and Maintenance

Extended Service and Maintenance Course for Cobra s600/s800 Robots

AIMS

- Carry out repairs to the electronics and mechanics
- Knowledge of system functionality
- Independently locate and remedy faults in the robot and in the controller
- Fault diagnosis
- Perform preventive maintenance on the system

COURSE CONTENT

- Starting and calibrating the system
- Manual operation
- Theory of the controller and control loops
- Detection and rectification of faults
- Preventive maintenance and care
- System interfaces
- Safety devices
- Emergency stop system
- Replacing various mechanical and electrical components of the robot

TARGET GROUP
Electricians, electrical engineers, maintenance personnel and maintenance technicians who are responsible for the maintenance and repair of robotic systems

PRIOR KNOWLEDGE REQUIRED
Basic knowledge of mechanics, electronics and computer use

COURSE DURATION
4 days

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

TCD44 MNT VIPER S650S850

Robotics - Service and Maintenance

Extended Service and Maintenance Course for Viper s650/s850 Robots

AIMS

- Carry out repairs to the electronics and mechanics
- Knowledge of system functionality
- Independently locate and remedy faults in the robot and in the controller
- Fault diagnosis
- Perform preventive maintenance on the system
- Back up and transfer data from the PC to the controller

COURSE CONTENT

- Starting and calibrating the system
- Manual operation
- Theory of the controller and control loops
- Detection and rectification of faults
- Preventive maintenance and care
- Replacing various mechanical and electrical components of the robot
- System interfaces
- Safety devices
- Emergency stop system
- File transfer
- NFS, FTP, TCP/IP
- Data backup
- Software installation from the PC to the controller

TARGET GROUP
Electricians, electrical engineers, maintenance personnel and maintenance technicians who are responsible for the maintenance and repair of robotic systems

PRIOR KNOWLEDGE REQUIRED
Basic knowledge of mechanics, electronics and computer use

COURSE DURATION
4 days

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

Robotics - Service and Maintenance

Extended Service and Maintenance Course for the Quattro Robot

TCD45 MNT QUATTRO

AIMS

- Carry out repairs to the electronics and mechanics
- Knowledge of system functionality
- Independently locate and remedy faults in the robot and in the controller
- Fault diagnosis
- Perform preventive maintenance on the system

COURSE CONTENT

- Starting and calibrating the system
- Manual operation
- Theory of the controller and control loops
- Detection and rectification of faults
- Preventive maintenance and care
- System interfaces
- Safety devices
- Emergency stop system
- Replacing various mechanical and electrical components of the robot

TARGET GROUP
Electricians, electrical engineers, maintenance personnel and maintenance technicians who are responsible for the maintenance and repair of robotic systems

PRIOR KNOWLEDGE REQUIRED
Basic knowledge of mechanics, electronics and computer use

COURSE DURATION
2 days

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

OMRON

TCD46 MNT ANYFEEDER

Robotics - Service and Maintenance

Extended Service and Maintenance Course for AnyFeeder

AIMS

- Carry out repairs to the electronics and mechanics
- Knowledge of system functionality
- Independently locate and remedy faults in the robot and in the controller
- Fault diagnosis
- Perform preventive maintenance on the system

COURSE CONTENT

- Starting the system
- Control commands
- Detection and rectification of faults
- Preventive maintenance and care
- System interfaces
- Installing the service software
- Using the service software
- Replacing various mechanical and electrical components of the robot

TARGET GROUP
Electricians, electrical engineers, maintenance personnel and maintenance technicians who are responsible for the maintenance and repair of robotic systems

PRIOR KNOWLEDGE REQUIRED
Basic knowledge of mechanics, electronics and computer use

COURSE DURATION
2 days

COURSE FEE
Please check our website for price indication

TRAINING LOCATION
Local Omron sales-office

Registration

CONDITIONS

The courses are run with two or more participants. For some courses the number of participants is limited.
We reserve the right to cancel the event if the minimum number of participants is not reached.
Registrations will be processed in the order in which they are received.
Hotel suggestions are available upon request.

The course fees include seminar documentation, refreshments during breaks and lunch on all full seminar days.

WITHDRAWAL AND CANCELLATION POLICY

Up to 14 days prior to the start of the training, cancellation is possible free of charge. Thereafter the entire fee is payable. Transfer to a third party is possible at any time.

You will receive written confirmation from us after registration.
Our general terms and conditions apply.

DATES

The current dates can be found on our website.

OMRON at a glance

200,000

Products products delivering Input, Logic, Output, Safety and Robotics

Sensing, Control systems, Visualisation, Drives, Robots, Safety, Quality control & Inspection, Control & Switching components

6.7%

Investment in Research & Development

Innovation track record of 90 years

1200 employees dedicated to R&D
10087 issued and pending patents

Close to your needs

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Locations worldwide

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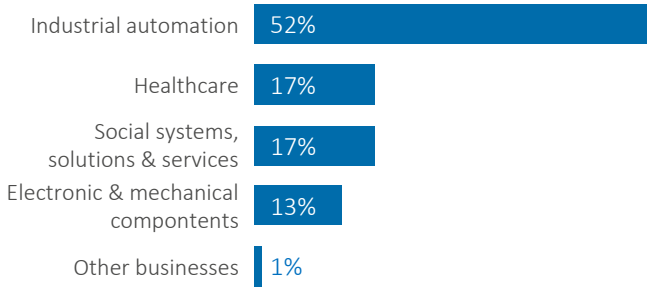

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