Course goal

The goal of the course is to improve the ability of run the Robot cell, Program Modification and responsible for engineering, commissioning, operation and Maintenance of Robotics for Automation.

Learning objectives

Upon completion of this course, students will be able to:
- understand the use Advance Instructions
- Safety and Handling
- Understand the critical elements Programming
- Advance Programming
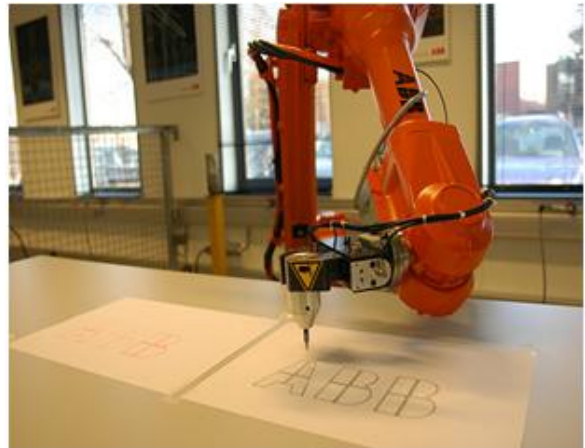- Own Instruction

Participant profile

Personnel from System integrator
Installation team
Engineering department
Advance programming developer
Improvement Projects

Prerequisites

Degree or diploma in engineering, basic knowledge of Automation Product. Students must have attended Robot Basic Programming Training. Having knowledge about Flow Chart & Programming, Programming Concept

Topics

- Safety Overview & Introduction
- Overview of RAPID , RAPID Program structure ,Routines, Modules, Program Data
- Program Data ,new Data ,Declaration , Data Arrays
- Advance Instructions & Offset Function Offset ,RelTool MoveLDO, MoveLSync
- Reading Current Poisson ,Target Reading Current joints
- Search Instruction
- Program Displacement Instructions
- PDispOn , PDisOff , PDispSet
- Event routines Benefits of Event routines
- Configuration of Event routines

Topics

- Mathematical Instruction =; Asign a Value add, subtract
- Event routines Benefits of Event routines
- Configuration of Event routines
- hand-on exercise & Practices
- Introduction of Multitasking Input Foreground and Background TASK , Data Uses and TASK
- World Zone WZtemporary & WZstationary
- Configuration

- Performance Instructions
  VelSet ,setting the Speed by PLC ,
  AccSet ,setting the Acceleration by PLC
- GrippLoad MotionSup Deactivate/Activate
  SoftAct & SoftDeact
- Configuration ConfJ\On,ConfJ\Of
  ConfLOn,ConfL\Of SingArea[Wrist]ppLoad
- Error Handling
- Advanced I/O Instructions
  TriggIO ,TriggInt,TriggJ,TriggL
  ,TriggC,TriggCheck IO
- Advance Operator Communication
  Instructions
- TPShow, TPWrite/Optional Urgument
  UIMsgBoxOptinal and UIShow
- Question & Answer, Summarizing
- Interrupt & TRAP routines
- Complete description Disabling and Enabling
  the Interrupt
- Creating Your Own Instructions , customized
  instruction

Course type and methods

This is an instructor led seminar with practical
exercises. The language of the course is English

Course Duration
The duration of the course is Two days.

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IN-RB05
Advance Level Programming

Course Outline

Day 1	Day 2
■ Safety Overview & Introduction	■ Introduction of MultitaskingInput Foreground and Background TASK , Data Uses and TASK
■ Overview of RAPID , RAPID Program structure ,Routines, Modules,Program Data	■ World Zone WZtemporary & WZstationary
■ Program Data ,new Data ,Declaration , Data Arrays	■ Configuration
■ Advance Instructions & Offset Function Offset ,RelTool MoveLDO, MoveLSync	■ Performance Instructions VelSet ,setting the Speed by PLC , AccSet ,setting the Acceleration by PLC
■ Reading Current Poisson ,Target Reading Current joints	■ GrippLoad MotionSup Deactivate/Activate SoftAct & SoftDeact
■ Search Instruction	■ Configuration ConfJ\On,ConfJ\Of ConfLOn,ConfL\Of SingArea[Wrist]ppLoad
■ Program Displacement Instructions	■ Error Handling
■ PDispOn , PDisOff , PDispSet	■ Advanced I/O Instructions TrigglO ,TriggInt,TriggJ,TriggL ,TriggC,TriggCheck IO
■ Mathematical Instruction =; Asign a Value	■ Advance Operator Communication Instructions TPShow
■ ADD,SUBTRACT	■ TPWrite/Optional Urgument UIMsgBoxOptinal and UIShowQuestion & Answer, Summarizing
■ Event routines Benefits of Event routines	■ Interrupt & TRAP routines
■ Configuration of Event routines	■ Complete description Disabling and Enabling the Interrupt
■ hand-on exercise & Practices	■ Creating Your Own Instructions , customized instruction

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