Course Outline
Duration 5 days (Remote learning course)
Beneficial to Programmers / integrators who require the fundamental knowledge of working with RobotStudio.
Instructor led online demonstrations with practical exercises.
The language of the course is English

Prerequisites
Completion of UK R552 IRC5 Programming and Operation course. Students must have experience using Microsoft Windows. Each Student will require a computer with Internet connection. Headset with microphone
RobotStudio 2019.x / 2020.x installed with premium or trial license. Robotware 6.08 or newer will also need to be installed.
RobotStudio download link

Subject areas
Introduction
Course content and material
Timeline

RobotStudio Basics
RobotStudio Help files
Views, Tabs, Ribbons
Navigating the graphics window
Selection levels and snap modes

Create a basic station
Attaching tools to robot arm
Methods of Jogging the robot
Importing and positioning solid geometry
Creating Tool and workobject coordinate data
Programming motions

Graphical Programming
Creating curves (splines) on models
Create targets and paths from geometries
Programming motions
Setting robot axis configuration and reachability
Collision detections

Zone Visualization
Showing zone data visualization
Optimising zone size and Asymmetrical zones

Modelling
Create solid objects
Creating a mechanism
Mirroring geometries and paths

Transfer
Compare programs and data
Transferring RAPID modules to robot

Signal Analyser
Monitoring robot performance and signals

Instruction templates and simulation events
Adding instructions to the station simulation events using smart components and station signals

Smart components
Creating basic Smart components

External axis
Programming with Track motion and Rotary Positioners

MultiMove
Path generation for coordinated motion between robots

Conveyor tracking
Configuring robot system and mechanism for conveyor tracking
Program robot to coordinate with conveyor’s motion

Sales Tools
Tools for making simulations more realistic

Physics
Modelling flexible cables
Physics joints
Surface friction and gravity

Objectives
On completion, participants will be able to perform:

Basic offline programming
Create a RobotStudio Simulation
Basic modelling
Transfer RAPID code to robot
Monitor performance using signal analyser
Use simulation events
Create smart components
Program a multimove simulation
Setup and program with conveyor tracking
Use tools to graphically enhance simulations
Use physics engine within simulations