

# AUTOMATION STUDIO™ TRAINING – HYDRAULICS FUNDAMENTALS

## General description of the course

Throughout the training, the trainer will cover all the training material using the guide provided to you beforehand. After each session, participants will be able to individually practice the concepts covered using the instructions and exercises contained in the training guide.

From the second session onwards, a short period of time will be allocated at the beginning of each session to answer participants' questions and briefly review the content of the previous session.

The last session will allow the practice and acquisition of knowledge relating to the design of a system and its technical documentation through an application project. In addition, a period of time will be set aside during the last session to review the training material and answer specific questions from the participants.

## Schedule Breakdown

<b>Day 1</b>  Session 1 (2.5 hours)	<b>Getting started</b> <ul style="list-style-type: none"><li>• Interface/Help/Support</li><li>• 1st Circuit (with components &amp; Products)<ul style="list-style-type: none"><li>◦ Design</li><li>◦ Control Sequence</li><li>◦ Analysis Tools</li></ul></li></ul>	<b>Editing Functions (1/2)</b> <ul style="list-style-type: none"><li>• Links Features</li><li>• Grid/Snap (Overview)</li><li>• Display Features</li><li>• Layout/Order Features (Overview)</li><li>• Layer Manager (Overview)</li></ul>
<b>Day 2</b>  Session 2 (2.5 hours)	<b>Editing Functions (2/2)</b> <ul style="list-style-type: none"><li>• Search Components/Texts (Overview)</li><li>• Groups and Assemblies</li><li>• Functional Group Manager (Overview)</li><li>• Diagnostics (Overview)</li></ul>	<b>Component Common Features (Interface)</b> <ul style="list-style-type: none"><li>• Property Dialog/Parameters/ Graphical Data</li><li>• Sizing tool (Part A)</li></ul> <b>Component Symbol Configurators</b> <ul style="list-style-type: none"><li>• Directional Valve</li><li>• Cylinder</li></ul>

<b>Day 3</b>  Session 3 (2.5 hours)	<b>Simulation Environment</b> <ul style="list-style-type: none"> <li>• Circuit and Installation</li> <li>• Ambient Conditions</li> <li>• Oil Selection</li> <li>• Line Selection</li> <li>• Thermal Simulation (Overview)</li> <li>• Other Options (Overview)</li> </ul>	<b>Understand Component Models</b> <ul style="list-style-type: none"> <li>• Pressure Drop</li> <li>• Lines &amp; Fittings</li> <li>• Pumps</li> <li>• Actuators</li> <li>• Pressure, Flow Valves</li> <li>• Directional Valves (Part A)</li> <li>• Leaks</li> </ul> <b>Mechanical</b> Mechanism (Part A)
<b>Day 4</b>  Session 4 (2.5 hours)	<b>Catalogue</b> <ul style="list-style-type: none"> <li>• Component Sizing</li> <li>• Select Product and Configure Product (Overview)</li> <li>• Create Catalogue</li> <li>• Add product and its documentation</li> </ul>	<b>Project Standization</b> <ul style="list-style-type: none"> <li>• Project Template (Part A)               <ul style="list-style-type: none"> <li>• Page Setup</li> <li>• Title Block</li> <li>• History</li> <li>• Fluid Standard (Overview)</li> </ul> </li> </ul>
<b>Day 5</b>  Session 5 (2.5 hours)	<b>Synthesis Project</b> <ul style="list-style-type: none"> <li>• Hydraulic Circuit Design</li> <li>• Control Circuit Design</li> <li>• Mechanism Design</li> <li>• Troubleshooting (Overview)</li> </ul>	
<b>Day 6</b>  Session 6 (2.5 hours)	<b>Project Documentation</b> <ul style="list-style-type: none"> <li>• Component Information</li> <li>• BOM and Reports (Main Features)</li> </ul>	

