

CODESYS version 2 – A hardware-independent introduction to PLC programming

PLC281	<p>In order to master the fast-changing requirements of embedded and PC-controlled industrial applications, it is increasingly important to master and apply different programming languages. This is complicated by the huge variety of programming software available. Differences in user-interface, functionality and commands sets cause confusion and make mistakes more likely. Codesys – tried and tested, globally introduced hardware-independent software from 3S – offers a Controller Development System according to the IEC 61131-3 with all defined programming languages independent of the hardware manufacturer. This course demystifies Codesys and gives participants confidence in using it.</p>
Target groups	Maintenance staff, designers, engineers, trainers
Contents	<ul style="list-style-type: none">• Design and functions of a PLC• Overview of the IEC 61131-3 standard• Overview of automation structures and bus systems• Functionality of the Codesys programming environment• Use of the 6 programming languages IL, ST, LD, FBD, SFC, CFC• Offline simulation• Visualisation• Configuration and commissioning Festo automation systems
Outcomes	<p>The participant:</p> <ul style="list-style-type: none">• can use and combine IEC 61131-3 languages (Codesys version 2.3) to program a professional solution for an industrial application quickly and efficiently• can program IEC 61131-2 compatible industrial controllers• can describe the sequence of the MPS Distribution Station using GRAFCET• can program the sequence of the MPS Distribution Station using a language or combination of languages• can use debugging tools to simulate, test and trace• can use Codesys features to troubleshoot• masters the fundamentals of visualisation• can create and use different kinds of variables (local, global)• knows how to find help within the software
Prerequisites	Basic electrical knowledge. We recommend taking the EL131, EL141 and PLC271 courses in advance.
Duration	2 days
Article number	570612



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