

## Information national selection Mechatronics - Festo AG Lupfig – Mai 2023

### Procedure

The national selection takes 1 day for each participant.

All participants achieve:

- 1 assembly test project and 1 programming test project, each with a duration of 60 minutes
- 1 interview with the WorldSkills Swissem project manager and the Mechatronics international expert

Each participant with the HW (Hardware) competency completes a second assembly test project with a duration of 90 minutes.

Each participant with the SW (Software) competency completes a second programming test project with a duration of 90 minutes.

All the tasks will be providing only in English.

### Tools and infrastructure

All participants must bring and use their own tools for the national selection, i.e. a toolbox with the usual automation tools for assembling an MPS station.

A Festo laptop or a Siemens programming console with the necessary software (Festo CoDeSys V3 or Siemens TIA Portal V17) will be available on site. Both systems will be equipped with a mouse and Ethernet communication cables.

Participants cannot use their own laptop, programming console, supplementary monitor or own mouse.

No portable memory devices (for example USB) or additional personal documentation will be permitted.

Listen to music is forbidden.

## Documentation

The documentation of the MPS stations and modules is available on the Internet:

- Catalogue information : [MPS stations - Learning factory kits - Factory automation & Industry 4.0 - Learning Systems - Festo Didactic \(festo-didactic.com\)](#)
- Technical documentation and test project from WorldSkills projects as example: [Projects/WorldSkills - MPS The Modular Production System - Services - Festo Didactic \(festo-didactic.com\)](#)
- Didactic InfoPortal with technical documentation for actual MPS stations and modules: <https://ip.festo-didactic.com/InfoPortal/EN/index.html>

The quality of the assembly will be evaluated according to the Guideline Judgment Professional Practice Version 2022 1.7.

## PLC Specification

	Provided equipment	Programming software
<b>Festo</b>	<p>CPX-CEC (CPU CPX-CEC-C1-V3) 16x DI, 16x DO, 2x AO, 2x AI</p> <p>Product catalogue: <a href="https://www.festo.com/media/pim/926/D15000100121926.PDF">https://www.festo.com/media/pim/926/D15000100121926.PDF</a></p> <p>Festo Didactic special offer available during the selection process.</p>	<p>CODESYS V3.5.0.19</p> <p>Free download:</p> <p>Programming Software <a href="https://www.festo.com/net/fr-ch_ch/SupportPortal/Downloads/647932/726553/CODESYS_3.5.16.40.zip">https://www.festo.com/net/fr-ch_ch/SupportPortal/Downloads/647932/726553/CODESYS_3.5.16.40.zip</a></p> <p>Target Support Package <a href="https://www.festo.com/net/fr-ch_ch/SupportPortal/Downloads/656222/728791/CPX-CEC_3.5.16.169(df426cd81416).package">https://www.festo.com/net/fr-ch_ch/SupportPortal/Downloads/656222/728791/CPX-CEC_3.5.16.169(df426cd81416).package</a></p>
<p><b>Contact:</b></p> <p>Nicolas Godel <a href="mailto:nicolas.godel@festo.com">nicolas.godel@festo.com</a></p>		
<b>Siemens</b>	<p>CPU 1512C-1 PN 32x DI, 32x DO, 5x AI, 2x AO 6ES7512-1CK01-0AB0</p> <p>Product catalogue : <a href="https://mall.industry.siemens.com/mall/en/ch/Catalog/Product/6ES7512-1CK01-0AB0">https://mall.industry.siemens.com/mall/en/ch/Catalog/Product/6ES7512-1CK01-0AB0</a></p>	<p>TIA Portal V17</p> <p>Free student version available on request</p>
<p><b>Contact:</b></p> <p>Andreas Rohrbach <a href="mailto:andreas.rohrbach@siemens.com">andreas.rohrbach@siemens.com</a></p>		