

Course: PLC Systems

credits: 4

Course code	ELVH17GPLC	Modes of delivery	Lecture
Name	PLC Systems		Practical / Training
Study year	2022-2023	Assessments	PLC Systems - Skills test
ECTS credits	4		
Language	Dutch, with parts in English		
Coordinator	P. Noordhuis		

Learning outcomes

The student is able to choose the right PLC with the help of Codesys and add hardware.

The student is able to write a fully functional program using various programming techniques.

The student is able to simulate a PLC on their own laptop.

The student is able to program in Ladder, FB, ST and SFC.

The student is able to analyze and correct errors.

The student is able to control a frequency inverter using RS485

The student can visualize, both on the laptop and on the HMI.

Content

- overview and applications of PLCs
- construction of a PLC, IO modules, CPU, memory
- programming of a PLC
- switching algebra, ladder diagrams, Function Blocks, Structured text, Sequential function diagrams
- Modbus control and HMI
- program control and data handling

Included in programme(s)

Electrical Engineering Major Electronics
Electrical Engineering Major Mechatronics

School(s)

Institute of Engineering