



# Sample Project: Development of Industrial Control Systems for cooling and ventilation plants.

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|--------------|------------------------------|
| Code         | EN2302                       |
| Programme    | TRAIN-PTES                   |
| Department   | EN                           |
| Responsible  | 37630 - Mr. Mauro Nonis      |
| Created by   | 32907 - Mr. Renaud Barillere |
| Updated by   | 77932 - Ms. Sylvie Prodon    |
| Date Created | 30-MAY-14                    |
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## Title

Development of Industrial Control Systems for cooling and ventilation plants.

## Description

The candidate will be integrated in a team in charge of the development and of the operation of distributed Industrial Control Systems (ICS) for a large set of CERN cooling and ventilation plants.

These ICS are implemented with a CERN suite of tools &ndash; UNICOS - which is used for the controls of many CERN plants (e.g. cooling and ventilation plants, LHC cryogenic plants, LHC experiment gas systems). This suite of tools generates code for Siemens and Schneider Programmable Logic Controllers (PLC) as well as for the WinCC OA Supervision Control And Data Acquisition (SCADA) system.

The candidate will participate to the definition of the requirements of these ICS. He/she will design and develop the PLC and SCADA code and will be responsible for their tests (with simulator and in situ) and for their commissioning.

## Skills

Networks and Systems: Sensors. Theory of Electrical Engineering: Control theory Automation, PLC programming

## Disciplines

Information Technologies, Electrical Engineering

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