

Sample Project: Software for Vacuum Controls

Code	TE4042
Programme	FCT
Department	TE
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Updated by	41065 - Dr. Johan Bremer
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Title

Software for Vacuum Controls

Description

In the framework of the operation the Large Hadron Collider and of its injectors, you will be part of:

the Department Technology (TE) that provides the technologies specific to existing particle accelerators, facilities & future projects;

the Group Vacuum Surfaces and Coatings (TE-VSC), responsible for the design, construction, operation, maintenance and upgrad of high & ultra-high vacuum systems for Accelerators and Detectors;

the Section Interlocks, Controls and Monitoring (TE-VSC-ICM), in charge of the design, maintenance & consolidation of the vacuu control systems of all Accelerators and Detectors.

You will participate in the development, update and maintenance of the control systems of vacuum installations, based on Siemen PLCs, WinCC-OA (former PVSS II) SCADA and Oracle Databases.

You will perform : configuration and programming of SCADA, PLC and fieldbus systems; this may include Siemens SIMATIC-S S7-Driver, SCADA-PLC data exchange, PROFIBUS, SQL.

Master Degree in Computing, Automation or Electronics

Skills

Programming and database [C/C++, Java, Ruby, SQL, Oracle]; System software administration [operating systems & applications installation, configuration, maintenance]; Control systems software [PLC programming in SCL, SCADA (PVSS)]; Control systems hardware [PLC components (Siemens), FieldBuses, Remote_IO].

Disciplines

Information Technologies, Electrical Engineering, Electronic Engineering