

Module Name	Process Control Systems
Module Number	Eul-ET-C-PLT, Eul-MT-E-PLT
Responsible Lecturer	Prof. Dr.-Ing. habil. Leon Urbas leon.urbas@tu-dresden.de
Qualification Objectives	After completing the module, students are familiar with the description tools, methods, and tools of process control technology for the design, configuration, and programming of automation systems, particularly for plants in the process industry. They are able to apply this specialized knowledge to solve specific practical problems in process control technology.
Contents	The module covers the fundamental principles, description tools, and methods for the design, configuration, and programming of reliable and safe automation systems.
Teaching and Learning Forms	2 hours per week of lectures, 2 hours per week of projects, and self-study.
Prerequisites for Participation	The competencies to be acquired in the modules Systems Theory and Automation Engineering are required.
Usability	The module is a compulsory module of the main study program in the field of Automation Technology and Robotics in the diploma program Electrical Engineering. Furthermore, it is an elective module in the elective area "Methods and Applications" according to § 6 paragraph 3 SO and § 33 paragraph 3 PO of the main study program in the diploma program Mechatronics. It creates the prerequisites for the modules that list this module in the field "Prerequisites for Participation."
Prerequisites for the Award of Credit Points	Credit points are awarded when the module examination is passed. The module examination consists of a portfolio with a total workload of 16 hours.
Credit Points and Grades	5 credit points can be earned through the module. The module grade corresponds to the grade of the examination performance.
Frequency of the Module	The module is offered every summer semester.
Workload	The total workload is 150 hours.
Duration of the Module	The module lasts one semester.