

Training in ASIA



From November 14-25, 2022, we had the privilege of hosting Prof. Plamen Daskalov, PhD, and Assoc. Prof. Tsvetelina Georgieva, PhD, from the University of Ruse, Bulgaria, for a specialized training session. This training was conducted as part of the Factori 4.0 project, which is supported by the ERASMUS+ Program of the European Union under the title “Asean Factori 4.0: Across South East Asian Nations: From Automation and Control Training to the Overall Roll-out of I4.0” (reference number: 609854-EPP-1-2019-1-FR-EPPKA2-CBHE-JP).

The main goals of this training were to equip the staff from Chulalongkorn University with the necessary skills to effectively plan lessons and laboratory activities related to programmable logic controllers (PLCs). The aim was to ensure that students gain practical experience in coding PLC languages and witness firsthand how PLCs are applied in real-life scenarios. Additionally, the task involved installing CODESYS and GALILEO on all computers for the Intelligent Control Automation of Process Systems (ICAPS) laboratory within the Electrical Engineering Department at the Faculty of Engineering, Chulalongkorn University. This installation process was successfully completed, ensuring that our students have access to the latest tools and platforms for their studies and practical experiments.

Furthermore, the training involved testing the connection from the benchmark to all computers, resulting in successful connectivity and network integration. This crucial step ensures smooth communication and data exchange between devices, allowing for efficient and reliable PLC programming exercises.

Throughout the training, various PLC programming exercises were created, focusing on ladder diagram, function block diagram, and sequential function chart programming techniques. These exercises provide our staffs with hands-on experience in designing and implementing control logic using different programming languages, enabling them to develop comprehensive lessons in industrial automation for CU students.

We are grateful to Prof. Plamen Daskalov and Assoc. Prof. Tsvetelina Georgieva for sharing their expertise and contributing to the advancement of our educational programs. Their visit and the training sessions have played a pivotal role in equipping our staff members with the essential knowledge and practical skills needed to effectively prepare Chulalongkorn University (CU) students for success in the era of Industry 4.0.