

BHARTIYA VIDYA BHAVAN'S

SARDAR PATEL COLLEGE OF ENGINEERING



A Government Aided Autonomous Institute Affiliated to University of Mumbai Munshi Nagar, Andheri (West), Mumbai 400 058

Report on Two Day workshop Under TEQIP on Industrial Automation 27th November, 2019 to 28th November, 2019

A workshop was conducted on 27th and 28th November 2019 on 'Industrial Automation' at SPCE. This workshop was organized by the Mechanical Engineering Department and Electrical Engineering Department of SPCE in collaboration with Absolute Motion Pvt Ltd. The course focused on educating young engineering professionals on the use of PLC training kits. The training sessions laid a foundation to very essential skills in automation required by mechanical and electrical engineers. Students of 3rd and 4th year of the mechanical and electrical engineering departments participated in this workshop.



On the first day, an introductory theory lecture was followed by hands on learning activities with PLC trainer. The students were tested the ladder logic programs developed on the PLC. The next day, after the initial theory lectures explaining automation concepts, there was a 3D simulation activity. An automation simulation using 'Factory I/O' was carried out. Following this there was a competitive problem-solving task given to student teams. The teams competed in developing a solution based on the concepts taught. They were asked to simulate a simple factory conveyor belt with different constraints. The teams tried and tested many variations to arrive at the right solution.



Finally, there was a theory MCQ test for the students to undertake. The students with the maximum right answers, and as per their general performance in the workshop, were evaluated to pick winners. The theory test tested concepts taught from the lectures.

The training sessions were conducted by Mr. Alister D'Silva, the Director of Absolute Motion Pvt Ltd, assisted by the engineers of his team. Overall, it was an informative and exciting experience to the participants. The students gained a basic understanding of PLC and the competitive task enabled them to think out-of-the-box quickly.