SRI SRINIVASA EDUCATIONAL AND CHARITABLE TRUST®
SAPTHAGIRI COLLEGE OF ENGINEERING
(Affiliated to Visvesvaraya Technological University, Belagavi and Approved by AICTE, New Delhi)
(Accredited by NAAC with "A" grade)
(An ISO 9001:2015 & ISO 14001:2015 Certified)
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

INDUSTRIAL VISIT REPORT

An Industrial visit to "Government Tool Room & Training Centre", Rajajinagar, Bangalore was organized by Electronics and Communication Department of Sapthagiri College of Engineering on *Tuesday, 23rd November 2021*. 118 students of Electronics and Communication Engineering along with two professors visited GTTC to interact with the Electronics Industry.

Students ready to depart from college

Students at GTTC

This one-dayIndustrial visit was organized to educate the students on how an organization works and to learn about the work culture. We reached GTTC campus at 10:30 AM. After the security check we were then taken to the seminar hall and given a briefing of rules and guidance's to be followed by everyone inside the industry. The Technical head of GTTC gave an introduction for 60min and told us about the origination of the industry, a overview of what the students would experience for the rest of their afternoon.

An interaction with different laboratories like robotics, mechatronics, process instrumentation, renewable energy gave a very good exposure to the students and it created an interest among the students.

Automation laboratory

The Automation Lab imparts skills & knowledge on complete factory automation with PLC, HMI, SCADA Industrial Communication-Networking. Participants are trained on concept of automation, programming of PLC, Screen designing, setting up communication with PROFINET, Diagnostic & troubleshooting strategies.

Equipment & Software Siemens 571200 with KTP700 comfort touch panel & 57-300 test kit with TP700 comfort touch panel Siemens 11A Portal V13/V14.

Mechatronics laboratory

The Mechatronics Lab imparts expertise in the field of Mechatronics system /Process. Participants are trained on various Electrical Components, Mechanical Components, Pneumatics, Digital Fundamentals and troubleshooting Techniques with System Approach. It benefits students of all streams to acquire hybrid Technical Skills

Equipment & Software Modular Automation and Production System (MAPS 6S), 5 Individual Station of MAPS-6S, Siemens S7-1200 PLC's, Diagnostic Kit 2006, Siemens TIA Portal V1

Students at PLC laboratory

Process Instrumentation laboratory

The Process Instrumentation Lab enables Participants to work on Advanced Automation usingDistributed Control Systems (DCS) and understanding the working of the various process equipment in Plants.

Equipment & Software Magnetic Flow Meter, Mass Flow Meter, Ultrasonic Flow Meter, Ultrasonic Level Transmitter, Absolute pressure Transmitter; Radar Level Transmitter, Temperature Transmitter, SIMATIC PCS7, PDM V8.2/9.0

Students at process instrumentation laboratory

Robotics laboratory

Robotics play an important role in the manufacturing Industry, ensuring that the quality of theproduct is not compromised, and the production volumes are met. In the Robotics Lab, participants will be taught on working principles of programming and application of Robotics.

Major equipment software Robotic Pick and Place Cell Robotic Arc Welding Cell Robotic Spot-Welding Cell Rob CAD, ABB Robot Studio simulation and offline Programming Software.

Plasma welding robot

Renewable Energy Laboratory

The different kinds of energy was highlightened - how solar and wind energy is converted into electricity using a 'Solar Test Bench' and 'Wind Turbine Controller' respectively, where the power generated to run the bulb and the turbine was generated by a '4 Quadrant Dynamometer'. They showed us how thespeed of wind generated could be controlled by the computer using a software.

Students at Renewable energy laboratory

The industrial visit made the students think about the following points:

- Renewable sources of energy (Solar and Wind)
- Robotics
- PLC
- SCADA

Industrial Visit Co ordinators HOD,ECE

Prof. Kavitha R. J.
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