27TH NOVEMBER, 2021
FACTORY AUTOMATION REPORT
DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION

Introduction

Factory Automation consisted of 3 sessions in all. First there was a seminar for the participants conducted by the Mitsubishi resource person, Mr. Muttappa Lalagundi. Participants were able to gain more knowledge on the uses and needs of automation and how it is used in different industries like the pharmaceutical industry, dairy industry and the automotive industry. They were also taught about PLCs architecture and their applications. Mitsubishi PLCs examples were

given to broaden participants understanding of PLCs. After this, a quiz was conducted to test the participants' general idea of automation

And PLCs. The top 11 teams qualified to attend the Mitsubishi workshop also conducted by Mr Muttappa, where they were taught how to use Mitsubishi licensed software for automation purposes mainly via ladder diagrams. After this workshop, students were given two simulation tasks to complete within a stipulated time. They had to form their ladder diagram logic and write it down on a sheet. Those sheets were evaluated by Mr Muttappa and the winners were announced based on the best logic used to carry out the task.

Learning Outcomes

Participants learnt more about automation and the components used to facilitate automation. They also learnt the architecture of such components and they learnt how to apply the software taught to real life situations and through the workshop were equipped with skills required to make a prototype using the software that could prove to be beneficial to society.

The winners of the event:
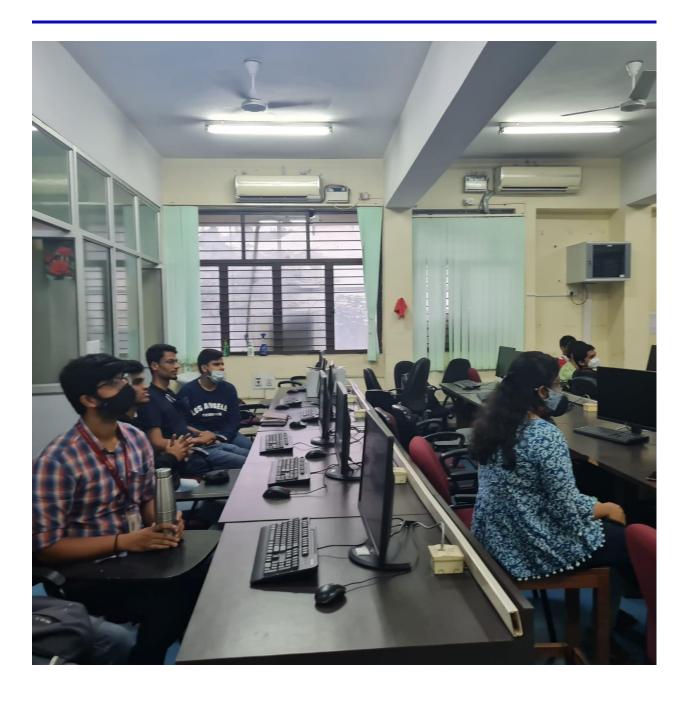
1st place- Akshay D S and team from UVCE.

2nd place- Y Rahul Reddy and Sreekeerth C P from BMS College of Engineering

Industry Connect

Akshay DS and team are from UVCE.

Y Rahul Reddy and Sreekeerth C P are from the mechanical engineering department of BMSCE.

Mr Muttappa Lalagundi, a senior engineer from Mitsubishi Electric, was the resource person for this event.

ROBOVISION -27/11/2021

Introduction:

The workshop aimed to provide basic technologies and materials to build a Robot from scratch. The workshop started off with brief introduction to ISA and about   FIEPER Project. It was taken forward by Mr. Anand Iyer (ISA ACARD). Talk was revolving around revolutionary technologies and effective building of a potential robot.

Then we had Mr. Vishwajeet Gokhale (Managing director- Dimension Mechanix) who guided the participants and gave an insight on future ready robotics and potential robots.

Then we had Different colleges across India presenting their Built Robots on an online Platform.

With constant support and help from the coordinators and the resource persons the workshop achieved its main objective of making it a learning platform.

Learning Outcomes

What did participants learn from the event?

Materials Required to build Robot

Technologies and Software Required

Insight on Future Ready Robotics

Process involved in building Robots

Name	Pnone No.
Sadath Nabeel	7760628264
Rakshan Kulkarni	7619495202
Mark A	9480436237
Shuchirath R	7411125260
Sumera S	9739701064
Yukta R	9482800838
Vidya V B	7892368406
Mihir	8296689145
Ananya B R	8088481987
Sharanya S	8197212486
Prajwal	9901271999
Hithaish D	6360379096
Usha L	6362235884

(26TH NOVEMBER, 2021)

WORKSHOP ON MICROCONTROLLERS AND MICROPROCESSORS REPORT

Introduction:

The workshop aimed to provide a basic understanding about raspberry pi 3 and python programming. The workshop started off with a tech talk by Industry expert Venu Pakalapaty, the talk covered everything from the real time problems to the advancements in the field of semiconductor industry.

The latter session was handled by Prajwal Uppoor and Navneeth Vittal who guided the participants and gave an insight on both the hardware and software of the processor. With constant support and help from the coordinators and the resource persons the workshop achieved its main objective of making it a learning platform to analyze, apply and create.

Learning Outcomes

What did participants learn from the event?

-commands used in a PC terminal

-basic python programming

-PIn diagram and architecture of raspberry pi 3

-how raspberry pi is different from a arduino

-tasks on temperature sensor

-Time management and team working skills