1st Batch of

"INDUSTRIAL AUTOMATION THREE-WEEK INTERNSHIP PROGRAM"

Day wise Training Schedule

Day	Training	Name of Expert	Schedule
Day-1 (26/07/2021)	Inauguration & Hydraulics Training	Miss. Chitrangi Bhatt	• Morning Session (11 AM to 12 PM): Inauguration • Afternoon Session (12 PM to 1 PM): Introduction with students. • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Technology Introduction.
Day-2 (27/07/2021)	Hydraulics Training	Miss. Chitrangi Bhatt	• Morning Session (11 AM to 1 PM): Hydraulics Theory • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Hydraulics Theory.
Day-3 (28/07/2021)	Hydraulics Training	Miss. Chitrangi Bhatt	• Morning Session (11 AM to 1 PM): Introduction of Pumps. • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Introduction of Pumps.
Day-4 (29/07/2021)	Hydraulics Training	Miss. Chitrangi Bhatt	• Morning Session (11 AM to 1 PM): Basic Practical's Session. • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Basic Practical's Session.
Day-5 (30/07/2021)	Hydraulics Training	Miss. Chitrangi Bhatt	• Morning Session (11 AM to 1 PM): Advance level components theory session. • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Advance level components theory session.
Day-6 (31/07/2021)	Hydraulics Training	Miss. Chitrangi Bhatt	• Morning Session (11 AM to 1 PM): Advance Practical's session. • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Advance Practical's session.

Day-7 (02/08/2021)	Pneumatics Training	Mr. Karamjit Bihola	• Morning Session (11 AM to 1 PM): Pneumatics Theory • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Pneumatics Theory.
Day-8 (03/08/2021)	Pneumatics Training	Mr. Karamjit Bihola	• Morning Session (11 AM to 1 PM): Introduction of Pneumatics Pumps. • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Introduction of Pneumatics Pumps.
Day-9 (04/08/2021)	Pneumatics Training	Mr. Karamjit Bihola	• Morning Session (11 AM to 1 PM): Basic Practical's Session. • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Basic Practical's Session.
Day-10 (05/08/2021)	Pneumatics Training	Mr. Karamjit Bihola	• Morning Session (11 AM to 1 PM): Advance level components theory session. • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Advance level components theory session.
Day-11 (06/08/2021)	Pneumatics Training	Mr. Karamjit Bihola	• Morning Session (11 AM to 1 PM): Advance Practical's session. • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Advance Practical's session.
Day-12 (07/08/2021)	Pneumatics Training	Mr. Karamjit Bihola	• Morning Session (11 AM to 1 PM): Self Innovation Practical's session. • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Drought clearance session.
Day-13 (09/08/2021)	Sensor Training	Mr. Pratik Zaveri	• Morning Session (11 AM to 1 PM): Sensors Theory • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Sensors Theory.
Day-14 (10/08/2021)	Sensor Training	Mr. Pratik Zaveri	• Morning Session (11 AM to 1 PM): Introduction of Sensors. • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Introduction of different types of sensors.

Day-15 (11/08/2021)	Sensor Training	Mr. Pratik Zaveri	• Morning Session (11 AM to 1 PM): Basic Practical's Session. • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Basic Practical's Session.
Day-16 (12/08/2021)	Sensor Training	Mr. Pratik Zaveri	• Morning Session (11 AM to 1 PM): Combined Practical performance. • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Software based practical Performances.
Day-17 (13/08/2021)	Educational Visit at GPERI	Mr. Jeet Joshi	• SEAMENS lab visit. • PLC and SCADA Introduction.
Day-18 (16/08/2021)	PLC Training	Miss. Urvi Shah	• Morning Session (11 AM to 1 PM): Basic Practical's Session. • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Advance Practical's Session.
Day-19 (17/08/2021)	PLC Training	Miss. Urvi Shah	• Morning Session (11 AM to 1 PM): Advance Practical's Session. • Lunch time: 1 PM to 2 PM • Afternoon Session: (2 PM to 4 PM): Drought Clearance Session.
Day-20 (18/08/2021)	Examination and Valedictory		• Morning Session (11 AM to 12 PM): Exam • Afternoon Session: (12 PM to 1 PM): Valedictory.

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A Report

On First Batch of

"INDUSTRIAL AUTOMATION THREE-WEEK INTERNSHIP PROGRAM"

at Bosch COE

Date: 26th July 2021 - 18th August 2021

Vanue - Graduate School of Engineering and Technology
Academic Block 5, GTU-Chandkheda Campus,
Nr.Vishwakarma Government Engineering College,
Nr.Visat Three Roads, Visat – Gandhinagar Highway,
Chandkheda, Ahmedabad – 382424 – Gujarat.

The first batch of "INDUSTRIAL AUTOMATION THREE-WEEK INTERNSHIP PROGRAM" was held at Bosch center of excellence in Automation, from 26th July 2021 to 18th August 2021. There have been 17 students from various colleges had participated during this training. For that, we had an inauguration function on 26th July 2021 at the training venue "Bosch Center of Excellence in Automation"

Where Mr. RajuBhai Shah Managing Director of Harsha Engineering, Hon. Vice chancellor of GTU and Dr. S.D.Panchal Director of GSET had attended the program, the day was started with Digital light lamping and Sarasvati Vandana. Afterward, we move forward to sing a GTU song.

Chief Guest and Industrial expert had welcomed with a memento, Where Hon. Vice chancellor welcomed Mr. Rajubhai Shah and Dr. S.D.Panchal welcomed industrial expert Miss. Chitrangi Bhatt to thank them for to be present at the program.

Then Dr. S.D.Panchal director of GSET, had given a welcome speech to encourage the Students. Moreover, we had a golden chance to concentrate to a fruitful speech of Hon. Vice chancellor and Mr. Rajubhai shah.

In this three-week internship program students have learned about the four major technologies. Which are widely used and highly in demand nowadays like,

1. Hydraulics
2. Pneumatics
3. Sensors
4. Programmable Logic Controller (PLC)

From the primary day (26th July 2021) to 31st July 2021 Hydraulics lab had taken by Miss. Chitrangi Bhatt, where firstly all students have learned about the fundamentals of Hydraulics also as get in-tuned with all related equipment's and also learned the way to use them to satisfy the requirements, afterward they did hands-on practical's to urge more and more about this technology. At last, fruitful discussion done by the expert over how we will use this technology to form our work easier and the way we will interact this technology with other technology.

From 2nd to 7th August 2021, we've arranged the training on Pneumatics where students had to urge conversant in this technology by the assistance of Mr. Karamjit sir, He taught deeply about this technology like everything about valves, drivers, the instant of valves (Horizontally and vertically). He also taught the way to manage the pressure and the way how to use cylinders. He had clear all the queries of the Students When students are performing practical by own salves. At last, they did stimulating discussion over how we will modify or attach this technology with other technologies to beat over needs and the way we will make our work easier by this technology.

From 9th August 2021 to 17th August 2021 session starts for Sensors lab by Mr. Pratik Gandhi. Firstly he gave knowledge about the sensors with best within the class presentation where students learned what's a sensor, Why they're used, How they work and lots of more…, then he taught students how we will identify the sensors (As they vary consistent with the

values and use) and the way we will sense anything by using sensors, Students get a particular idea and know the facility of the sensors after performing practical's by own selves.

They have many answers and thoughts in their minds regarding the questions which are asked by the experts. Question like how we will make our life easier by using this technology? And the most interesting question is how we can stick these all technologies together to beat our future needs.

Gujarat Power Engineering & Research Institute SIEMENS Center of Excellence Visit

The most interesting thing about this Internship program is that the surprise visit arranged for the participant to GPERI, Mehsana on 13th August 2021.

Firstly, Participant visited electrical department of GPERI. Students are guided by HOD sir of Electrical department regarding basic and necessary equipment utilized in an electrical domain which is drives.

In the lab there have been AC and DC drive modules were present, initially they got the fundamentals of AC drives (VFD). Then , they all got a chance during a group of three to figure upon that drive to know its working functionality and basic settings of it's we operated that VFD to regulate the speed of induction motor, Also students learned in briefed about basic switch gears.

Then we visited the PLC lab and that we were briefed about the usage of PLC within the industry. Thereafter alongside PLC, they were briefed about the SCADA software and expert taught how we will use it to perform given tasks and the way we will do the foremost complex and time-consuming tasks easily by integrating PLC with SCADA. Moreover, we had a fruitful discussion over how we will integrate sensors with them and the way can we do data visualization from the setup.

After it, students had a look at the sensor lab. Where they learned differing types of commercial sensors and their usage in industries. At last, we visited the Robotics lab which was the mixture of these components and technologies therein we were briefed how of these components were integrated and wont to perform a specific task like Manufacturing, Testing, maintenance, etc.…

At the end of the internship program, Industry expert arranged an exam for the students on 18th August 2021 at 4:30 PM to see out what proportion knowledge they gain during the Internship program.

On 19th August 2021, we had a valedictory program where certificate distribution program held. On this occasion Hon. Vice chancellor, Registrar, and Dr. S. D. Panchal were present to discuss about student's experience during the training program.

At that point we gave the primary chance to the Students to share their experience of this educational program, at that moment we got some specialized comments and a few suggestions. Afterward Miss. Chitrangi Bhatt had announced the name of the Students Akash Dobariya and Sneh Jani who won free advance training of this internship program as they're good performers of all overtraining.

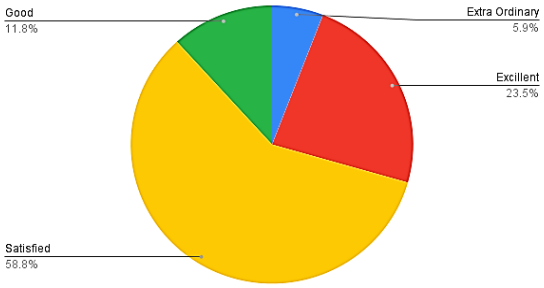
After that, we had a golden opportunity to concentrate to our Hon. Vice chancellor, where he talked about the importance of practical knowledge nowadays. Afterward, Registrar gave a stimulating speech where he focuses on how we can improve our limits and the way we can push up our salves to learn new technologies.

At the last Dr. S.D.Panchal Director, GSET, had done discussion with students over their feedbacks and gave some useful tips to urge success in life.

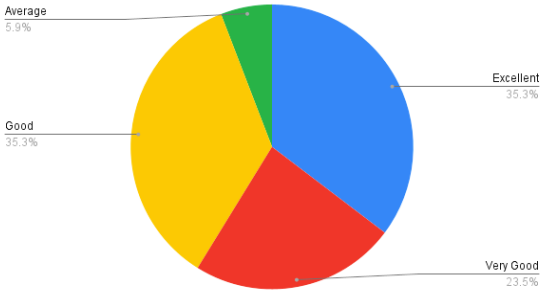
Vote of thanks speech given by Prof. Margam Suthar and wished good luck to all or any of the Students for his or her bright future from the entire Gujarat Technological University family.

Industrial Automation Internship Program Participants Feedback

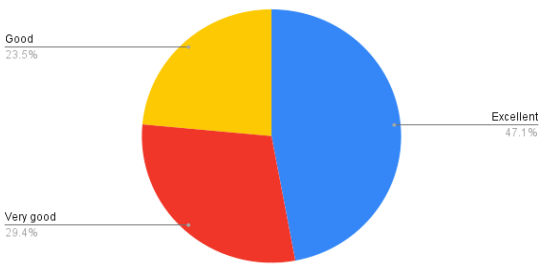
Q-1. Count of Quality of content delivered during the program:



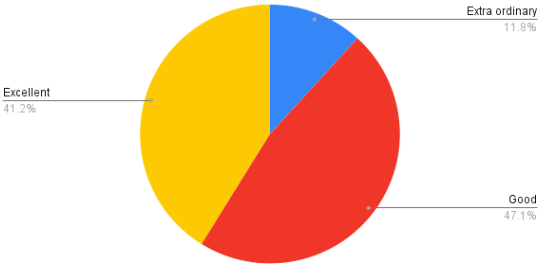
Q-2. Count of Quality of Hands-on Session:



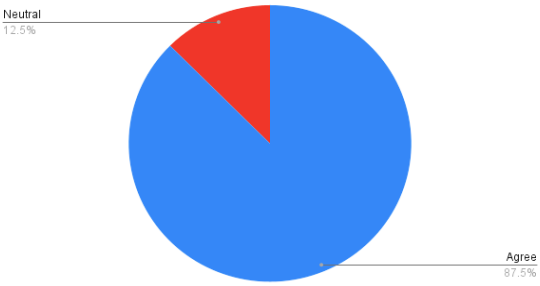
Q-3. Count of Arrangement of lab equipment and Facilities have provided at the lab:



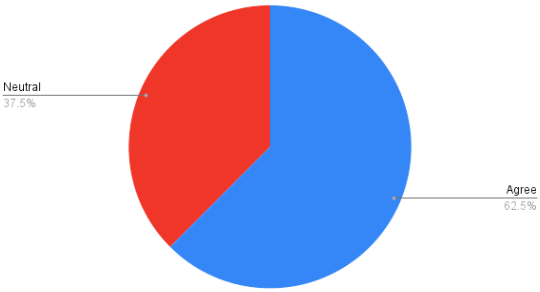
Q-4. Count of Quality of the service provided by the authorities?



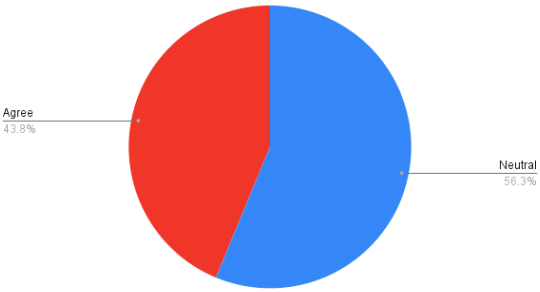
Q-5. Count of the training objectives were met:



Q-6. Count of the trainer was well prepared:



Q-7. Count of the time allotted for the training was sufficient:



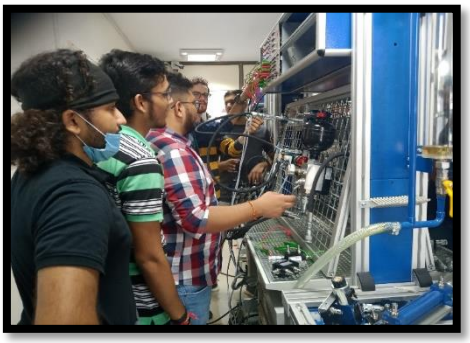
Industrial Automation Internship Program Photographs

Inauguration function:




Inauguration Function photographs where firstly light lamping and prayer did by all. Moreover, Hon. Vice Chancellor, Mr. Rajubhai Shah and Dr. S.D.Panchal had given a motivational speech and welcomed students to the program.

Hydraulics Lab:



Some of the unforgettable memories of Hydraulics lab where students are performing hands on practical and getting deep knowledge of the technology.

Pneumatics Lab:



Here are some of the pictures from Pneumatics lab where group wise personal practical teaching given by an expert to enhance student's practical knowledge over the technology.

Sensor Lab:



Here we can see Mr. Pratik Gandhi is teaching all basics about the sensors to the students on projector. After getting vast knowledge students are performing practical's by own self.

Visit of GPERI:



Ready for visit from GTU to GPERI

Ready to learn about PLC and Robotics.

Industrial automation lab

Knowledge given by HOD sir over fundamentals of Electrical engineering.

Students got knowledge of super advance Industrial robotics.

Practical knowledge of PLC given by the expert.

Valedictory Program:

Here, are some of the precious photographs of Valedictory program where Hon. Vice chancellor of GTU, Registrar of GTU and Dr. S.D. Panchal Director of GSET did discussion with the students over their experience during the program. After thought, Miss. Chitrangi Bhatt declared results and we had a certificate distribution program. At the end of the day Pro. Margam Suthar had given vote of thanks speech.