ENGINEERING COLLEGE
GREATER NOIDA | SINCE 2006

I.T.S Engineering College
A unit of Durga Charitable Society
46, Knowledge Park-III, Greater Noida, Gautam Budh Nagar (U.P)-201310
Ph: +91 (0120) 2331000, Toll Free : 180018008040
E-mail: engg.gn@its.edu.in Website: www.itsengg.edu.in

Index

Criterion 5	**Student Support and Progression**
Key Indicator 5.1.2	**Following capacity development and skills enhancement activities are organised for improving students' capability** **1. Soft Skills** **2.Language and Communication skills** **3. Life Skills (Yoga, Physical fitness, health)** **4. ICT/Computing Skill**
Metric 5.1.2	ICT/Computing Skills

16	Valued added course on MATLAB	2019-20	84-89
17	One Day Workshop on Robotics & IOT	2019-20	90-91
18	Arduino Simulation using Arduino Simulated Software	2019-20	92-94
19	One day Workshop on Introduction to the Internet of Things and Cloud	2019-20	95-96
20	One Day Workshop on “Advancement in Industrial Automation & Control”.	2018-19	97-98
21	2 days Control system and Simulation	2018-19	99-100
22	2 Days Real Time Data Acquisition Workshop	2018-19	101-101
23	2 Days Basic LabVIEW Workshop	2018-19	102-103

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IEEE Student Branch UP

INSTITUTION'S INNOVATION COUNCIL

IIT Bombay e-yantra
Engineering a better tomorrow

Work Report

Name of the Event: Two Days Hands on Workshop on "Industrial to Robotics" by e-Yantra IIT Bombay.

Date of the Event: 16th & 17th June 2023.

Hosted by: e-Yantra (COE), ITS Engineering College

Speaker: Mr. Kalind Karia & Mr. Jaison Jose, Senior Project Engineer, e-Yantra, IIT Bombay

Venue of the event: Naidu Hall & ITB Lab

Coordinator of the Event: Ms. Pragati Tripathi, Assistant Professor & Coordinator e-Yantra Lab

Participants: Faculty members from different engineering colleges

No. of Participants

- Faculty Members: 20
- Students: 13

Objectives of the Workshop:

• Impart theoretical and programming knowledge to faculty members through workshops

• Provide hands on training to teachers through regional e-Yantra Robotics Teacher Competition

• Help colleges set up their own Robotics labs.

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Greater Noida

TARGET AUDIENCE

The workshop was aimed at those who want to understand the working of embedded system and robotics.

- The workshop was started with introduction to various components of a typical robot which are basic building block of any robot, It contains both electronics as well as mechanical parts. So students got familiar with basic building block of any robot.

Report:

e-Yantra is a project initiated by IIT-Bombay sponsored by the Ministry of Human Resource Development under National Mission in Education through Information and Communication Technology. The mission of e-yantra project is to enable students and staff of Technical Institutions to take India's economy to a greater height by 2025 with the help of technological innovations. Our Management of I.T.S. Engineering College has the mission to grow a rich eco-system of ideas and applications; it encourages faculty members and students' research activities in Robotics, Automation and Embedded system platform. Our Management is very keen in establishing many research labs in our campus and funded 5 Lakhs to establish Robotics and embedded systems lab in our college and aims to create the next generation of embedded system engineers with a practical outlook to provide practical solutions to real world problems. Our faculty members have attended two days' workshop and got trained through Faceto-face training in embedded systems and Micro-controller programming related to Robotics. Our Team Leader and members are also involved actively in the Task Based Training comprising of a total of six different tasks which is an endeavor to train teachers in Embedded Systems and Robotics through hands-on experiments which is given by IIT Bombay on Firebird V robot. Team members successfully completed all the six tasks. e-Yantra is a project to spread Embedded systems and Robotics education in colleges across India. The e-Yantra Lab Setup Initiative (eLSI) enables colleges to set up Robotics labs and teach Robotics and Embedded systems in an effective manner. E-Yantra Lab Setup Initiative (eLSI) is a holistic approach to. The aim of this workshop was to understand robotics and embedded system through Firebird V Atmega 2560 based robot. This was intended to make a step forward in understanding, working of electro-mechanical parts of robotics and how to integrate them to make a complete system.

The Department of Electronics & Communication of I.T.S. Engineering College in association with e-Yantra Lab Setup Initiative (eLSI), IIT Bombay organized a Two-Day Workshop on **Introduction to Robotics** for the teaching faculty in greater Noida and other neighbouring states. The inaugural function was held on 16th June 2023 at the institute.

The inaugural began with lighting of the lamp by the dignitaries – Director Dr. Mayank Garg, Dr. Monika Jain, HOD Electronics Communication Department, Dr. Setu Garg, Associate Professor, Mr. Shahid Khan, Mr. Prabhakar Sharma, Mr. Agha Asim Hussain, Mr. Navneet Chaudhary, Ms. Pragati Tripathi, Assistant Professor and Coordinator of the event, Mr. Kalind Kariya and Mr. Jaison Jose, Senior Project Engineer, e-Yantra IIT Bombay.

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Dr. Mayank Garg, Director Engineering welcomed everyone and, in her message, urged the participants to take maximum advantage and to get the doubts clarified and spread this knowledge to your respective institutes.

Dr. Monika Jain, H.O.D. ECE addressed all the participants and welcomed Prof. Kavi Arya Principal Investigator, e-Yantra, IIT Bombay. She also stated that this workshop provides a very good platform to take off in our career. There is guidance, freedom and an environment for teaching and learning. She has introduced two initiatives from IIT Bombay, one being Remote Centre for IITB and second is the e-Yantra Laboratory under e-Yantra Lab Setup Initiative (eLSI). The purpose of which is to further education in India by thinking beyond, practically and to think differently.

The Overview of e-Yantra was through a live web session by Prof. Kavi Arya, Principal Investigator, e-Yantra, IIT Bombay, Ms. Ruchi Sharma, Dr. Anshu, Mr. Kiran Solanki Senior Project Manager, Core Team, e-Yantra. He expressed gratitude to the management of I.T.S. Engineering College for hosting this workshop at their campus and for having faith in the e-Yantra project. He explained about the project in detail to all the participants. Also, he elaborated on the initiatives taken up by them to train teachers and set up labs in their respective colleges. According to her this project is attaining popularity by word of mouth rather than self-promotion. Dr. Mayank Garg and Dr. Monika Jain thanked the e-Yantra Resource Persons, Management, e-Yantra Core Team and all the participants for being a part of this workshop.

OUTLINE

Session I: DAY: 1

- First session started with introduction of robotics and its components like sensors, actuators, Control unit, Intelligence, communication and power system. Each component separately taught and practical sessions done accordingly.
- After the end of this session, students and faculty members got to know about what are the sensors/actuators/Control Unit and how to program a control unit to interface them.
- Up to now they had performed individual interfacing of robot's components.

Session II: DAY: 2

- In second session, students had started to integrate all the components to make complete system like a line follower robot.
- End of this session students and faculty members knew to make closed loop system, what are the components required and how to integrate them on embedded system. Each session had 4 hours.

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Learning Outcome:

- Participants learnt about Robotics technology.
- Participants got exposure to industrial application of robotics.
- Participants understood how to make Robotics based Projects.
- Participants know about the e-yantra lab and their activities.
- Participants have got the depth knowledge of Firebird-V Robot and its applications.
- They have also learned AVR programming.

Conclusion: The workshop was very effective for the participants as they learnt about Robotics technology and understood how to make Robotics based Projects.

SM Links:

Day: 1 Post

https://www.facebook.com/560321492802193/posts/652998493534492
https://www.linkedin.com/feed/update/urn:li:ugcPost:7075443856636354561

https://www.instagram.com/p/CtjPm2YyhHm/

https://local.google.com/place?id=11010943153743415673&use=posts&lpsid=CIHM0ogKEICAgIDx56bGWw

Day:2 Post

https://www.facebook.com/560321492802193/posts/653595180141490
https://www.linkedin.com/feed/update/urn:li:ugcPost:7075808064599203840

https://www.instagram.com/p/Ctl1Ob8AIX0/

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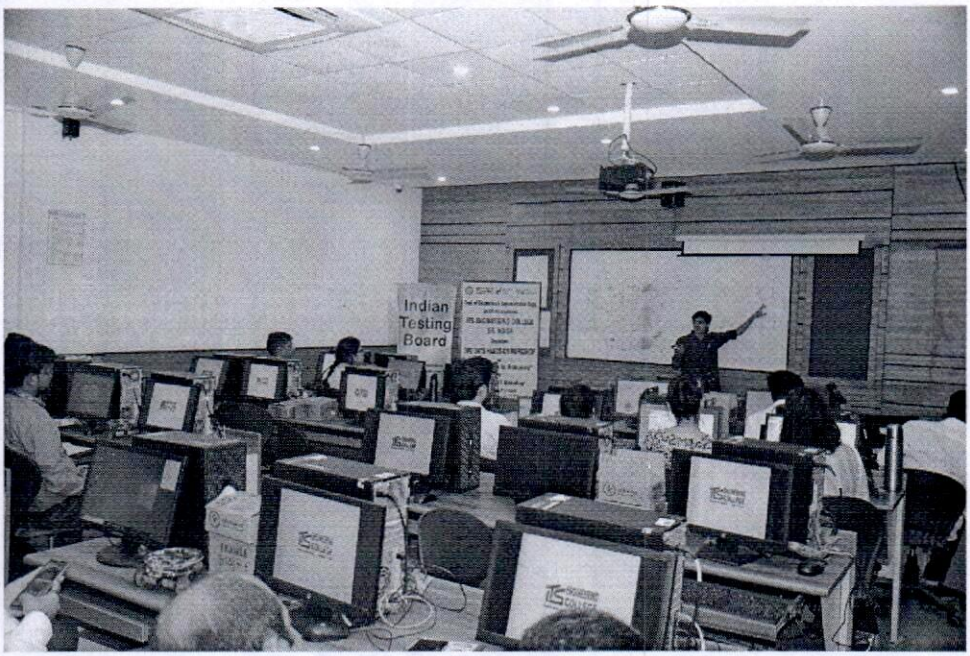
Event Photos:



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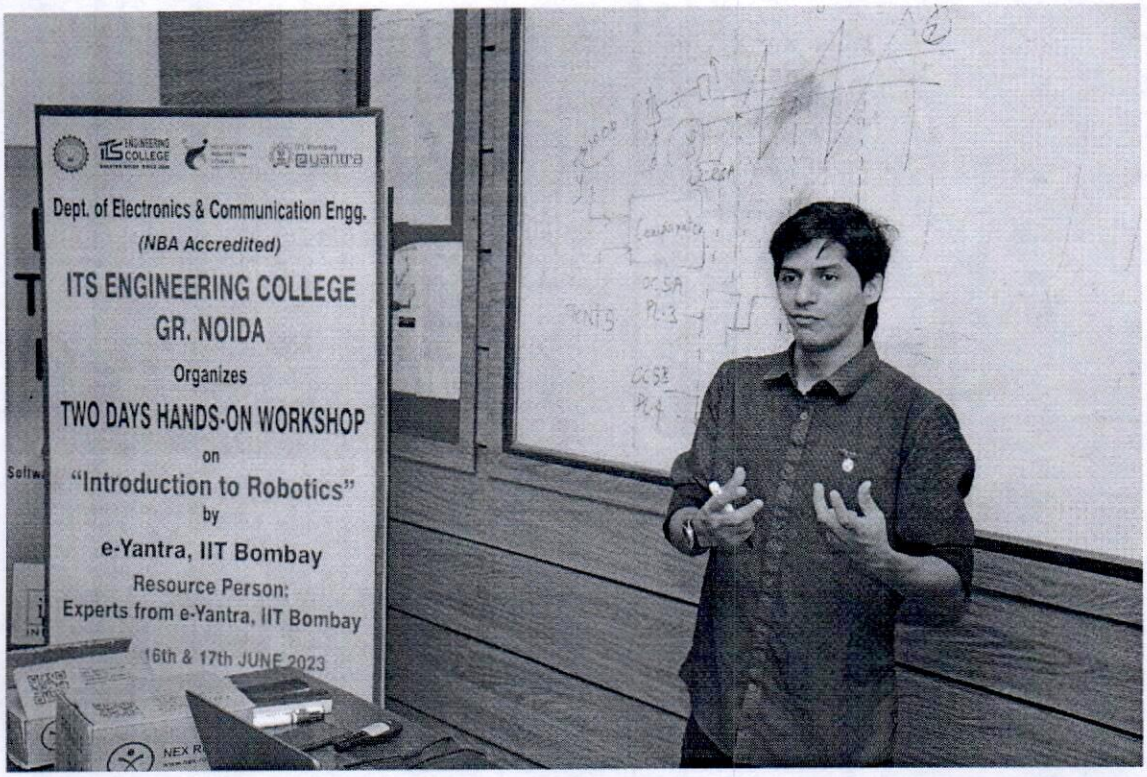

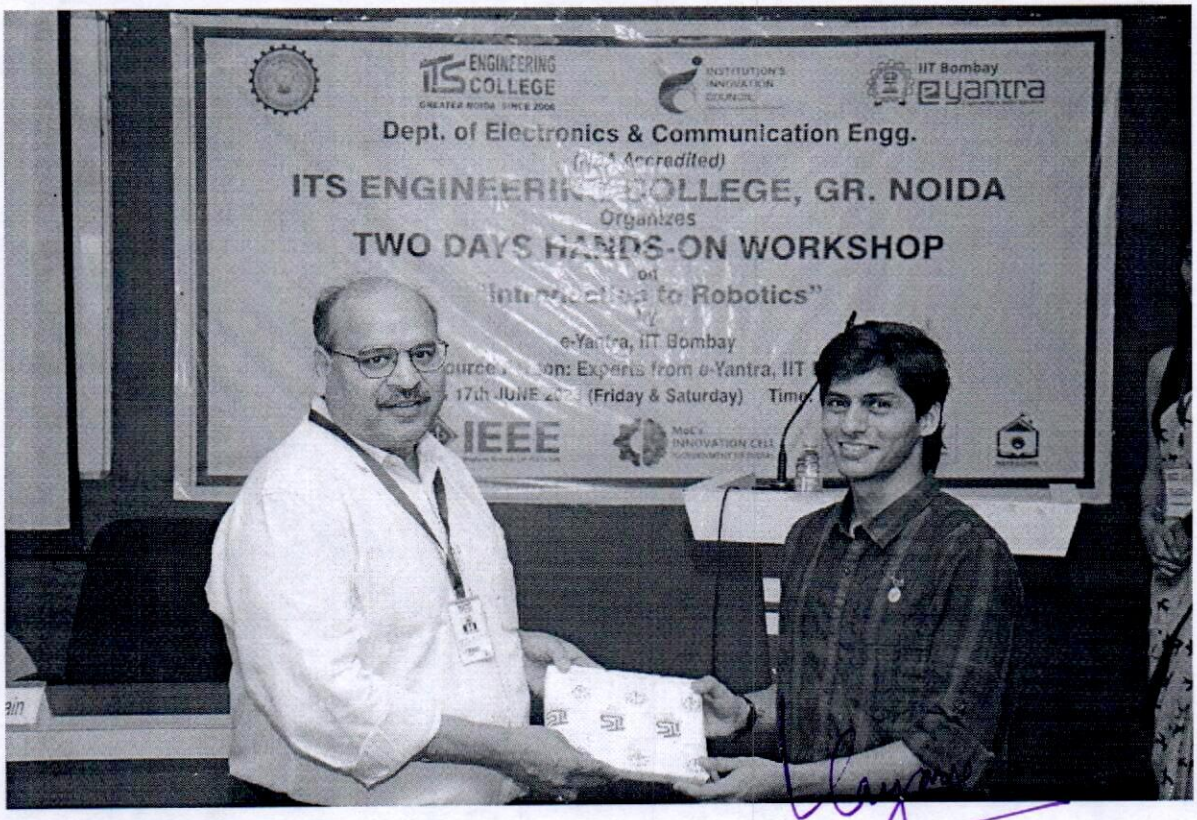

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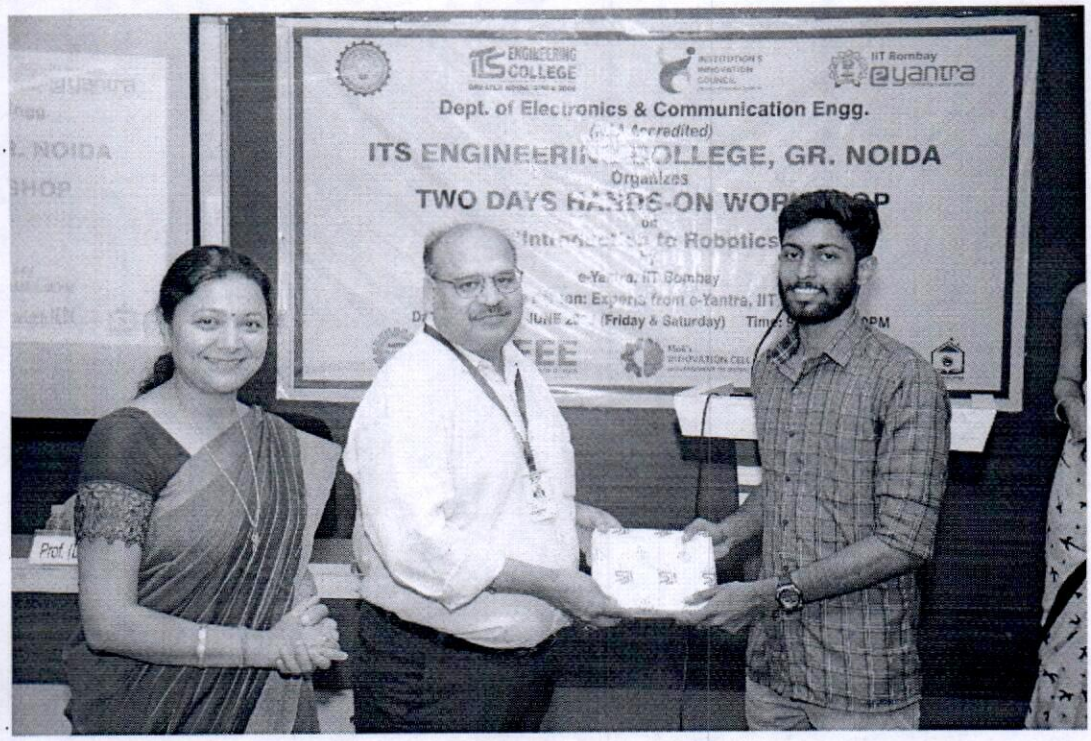

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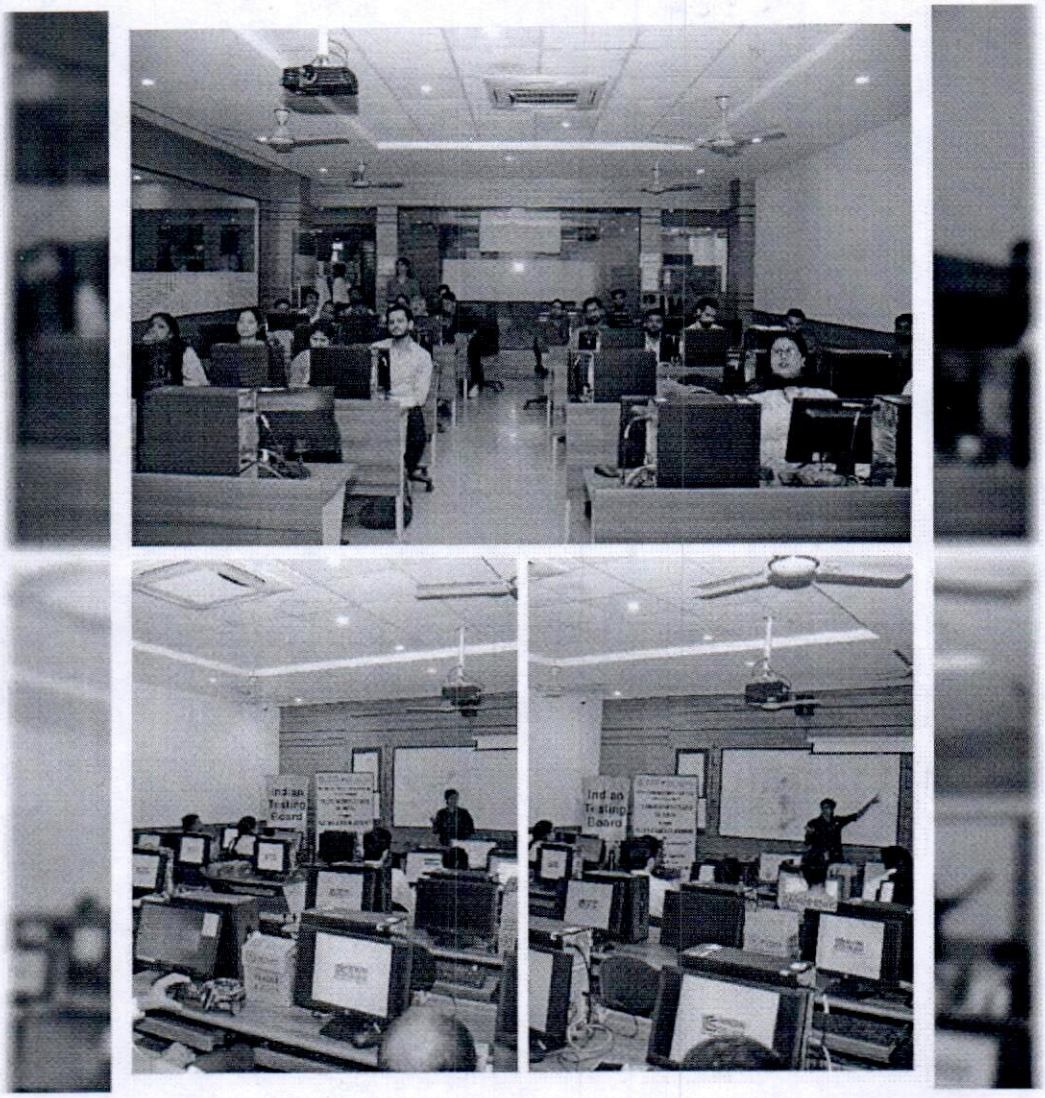

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Dept. of Electronics & Communication Engg.

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ITS ENGINEERING COLLEGE, GR. NOIDA

Organizes

TWO DAYS HANDS-ON WORKSHOP

on

"Introduction to Robotics"

by

e-Yantra, IIT Bombay

Resource Person: Experts from e-Yantra, IIT Bombay

Date: 16th & 17th JUNE 2023 (Friday & Saturday) Time: 9:00AM-6:00PM

AICTE

IEEE
Student Branch UP-ITS DC6N

MoE's INNOVATION CELL (GOVERNMENT OF INDIA)

NewGen IEDC

NAVYAGNIA

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IIT Bombay e-yantra

Dept. of Electronics & Communication Engg.

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ITS ENGINEERING COLLEGE GR. NOIDA

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AICTE | IEEE | MoE's INNOVATION CELL (GOVERNMENT OF INDIA) | NewGen IEDC | NAVRACHNA

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Coordinator

Ms. Pragati Tripathi, Assistant Professor, ECE

Organizing Secretary

Dr. Setu Garg, Associate Professor, ECE

Mr. Shahid Khan, Assistant Professor, ECE

Organizing Committee

Mr. Navneet Kumar, Assistant Professor, ECE
Mr. Agha Asim Hussain, Assistant Professor, ECE
Mr. Prabhakar Sharma, Assistant Professor, ECE
Ms. Manju Singh, Assistant Professor, ECE
Mr. Upendra Agarwal, Assistant Professor, EEE
Dr. Rajiv Ranjan, Assistant Professor, EEE
Dr. Praveen Bhola, Assistant Professor, EEE

Student Members

Mr. Shagun Beniwal
Ms. Plakshi Tomar
Mr. Avinash AB Roy
Mr. Ashwin Yadav

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Facebook: www.facebook.com/ITSengggn

linkedin: www.linkedin.com/school/itsengggn

Visit Us: www.tinyurl.com/ytppx6gr

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Shri Sohil Chadha
Hon. Vice-Chairman

Shri B.K. Arora
Hon. Secretary

Patron

Prof. (Dr.) Mayank Garg
Director I.T.S ENGINEERING COLLEGE

Convener

Prof. (Dr.) Monika Jain
HOD ECE, I.T.S ENGINEERING COLLEGE

Two Days
Hands on Workshop
on
"Introduction to Robotics"
by
e-Yantra, IIT Bombay
June 16 -17, 2023

Organized
by
COE e -Yantra
Department of Electronics & Communication Engineering
(NBA Accredited)
I.T.S ENGINEERING COLLEGE, GREATER NOIDA
(Affiliated to Dr. A.P.J Abdul Kalam Technical University, Lucknow, UP)

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ABOUT ITS

ITS Engineering College, Greater Noida (NAAC & NBA Accredited), affiliated to Dr. APJ AKTU, Lucknow.

The College is committed for offering engineering education in congenial environment with state-of-art infrastructure. The college is consciously working for industry academia connect, collaborative research & entrepreneurial initiative. ITS Engineering College is approved as Business Incubator under NewGEN IEDC, DST, Government of India and MSME, Government of India. With a mindset to skill building and inter-disciplinary collaborative learning multiple industrial Centre of Excellence have been established in the college including National Instruments, SMC , Rockwell Automation, Syscom Morpho, Apple iOS, eYantra, Android Apps, R Systems – Innovation Development Centre, SALT and Indian Testing Board. The college has been awarded National Education Excellence Award-2015 for excellent contribution in promoting excellent industry-academic interface by Honorable Chairman, AICTE. The college regularly organizes FDPs, Workshops, Conferences and Seminars, Guest Lectures to expose the faculty members and students with the recent technical trends by inviting eminent national and international personalities.

The college has been awarded IIC Top Star Ranking in 2020, 2021 and 2022. The college is also recognized in ARIIA ranking as Top Twenty-five institutions in 2020 and "Excellent Band" in 2021.

MoE Innovation Cell has recognized our ITSEC IIC as Mentor for Mentee-Mentee Program for harnessing innovation capacity building to other institutions too.

ABOUT DEPARTMENT

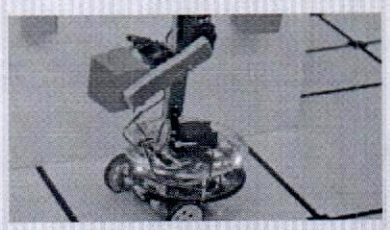
The Department of Electronics and Communication Engineering, under School of Engineering and Technology of I.T.S Engineering College was established in the year 2006 with an aim to produce globally competitive and socially sensitized engineering graduates along with a passion to bring out quality research in the frontier areas of Electronics and Communication Engineering. The Department offers four years Bachelor of Technology (B.Tech.) programme (comprising eight semesters) in Electronics & Communication Engineering, affiliated to Dr. A. P. J. Abdul Kalam Technical University, Lucknow (formerly UPTU) and has been accredited by NBA (National Board of Accreditation), New Delhi.

All throughout its sparkling history of 17 years, the Department of ECE has been known for its exceptionally strong undergraduate programme.

The Department has always been on a progressive path, thanks to the experienced and dedicated faculty members who have a strong commitment towards providing quality education. To achieve educational excellence, the department focuses on project-based learning for which necessary hardware and software form an integral part of laboratories.

RESOURCE PERSONS

Experts:
e-Yantra, IIT Bombay



About the Workshop:

e-Yantra is a flagship project of MoE through the National Mission on Education through ICT (NMEICT) to spread Embedded systems and Robotics education in Engineering, Polytechnic, and Science colleges.

This workshop is conducted as a part of e-Yantra Lab Setup Initiative (eLSI).

eLSI is a holistic approach to

- Impart theoretical and programming skilled based knowledge
- Provide hands-on experience to teachers and students through online training
- Help colleges set up their own robotics labs and innovation activities

Topics to be covered:

1. Introduction to Fire Bird V robot
2. Introduction to AVR Micro-controller and Programming environment
3. Simple Motion Control using I/O ports
4. Robot velocity control using pulse width modulation
5. Introduction to LCD interfacing
6. Analog sensor interfacing using Analog to Digital conversion
   *Interfacing with white line sensors
   *Interfacing with Infrared range finder sensor
7. Interrupt programming
   *Closed loop position control of robot using position encoders
8. Robot programming for white line following

TARGET PARTICIPANTS

- Faculty members / Research Scholars of university engineering/ Polytechnic colleges of following disciplines.

o ECE	o IT
o CSE	o EIE
o EEE	o ICE
o ME	o Mechatronics

ADDRESS FOR CORRESPONDENCE

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ITS Engineering College
46, Knowledge Park III, Greater Noida
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PIN- 201308 , India

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Work Report

Name of the Event: Workshop on "Industrial Robotics & Control"

Date of the Event: 30th November 2022.

Hosted by: e-Yantra (COE) and IEEE student branch ECE, ITS Engineering College

Speaker: Mr. Ravindra Mishra, R& D Engineer, Sofcon India Pvt.Ltd.

Venue of the event: Naidu Hall

Participants: Faculty members and students of ITS Engineering College

No. of Participants-

- Faculty Members: 5
- Students: 88

Objectives of the Workshop:

- To provide hands-on training on Industrial Robotics & Control
- To develop skill on Robotics & Control Technology.

Report:

e-Yantra (COE) and IEEE student branch Department of ECE, ITS Engineering College Greater Noida jointly organized a Workshop on "Industrial Robotics & Control" on 30th Nov 2022. The event was started by Saraswati Vandana and thereafter there was a welcome address by Prof. (Dr.) Monika Jain, HOD- ECE, ITS Engineering College Greater Noida. At the beginning of the session, the resource person Mr. Ravindra Mishra, R& D Engineer, Sofcon India Pvt. Ltd. explained the basic concepts of Robotics & Control. Mr. Mishra then explained working principle of Robotics, Motion Control, Drive circuit, ARDUINO UNO, Motion Control Simulation and Programming, Different Sensors, Node MCU, Servo Motor, Microprocessors, Microcontroller and Embedded System. He also demonstrated different robotics-based projects

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as Line Follower, Collision avoidance and related projects. He explained robotics control strategies in detail. Dr. Rajiv Ranjan, Convener, IIC-ITSEC concluded the event and extended the vote of thanks.

Learning Outcome:

- Participants learnt about Robotics technology.
- Participants got exposure to industrial application of robotics.
- Participants understood how to make Robotics based Projects.

Conclusion: The workshop was very effective for the participants as they learnt about Robotics technology and understood how to make Robotics based Projects.

SM Links:

https://www.facebook.com/124969124271413/posts/5053209968113946/

https://www.facebook.com/permalink.php?id=701870293626646&story_fbid=1538534149960252

https://twitter.com/ITSEngggn/status/1598530994617085954

https://www.linkedin.com/feed/update/urn:li:share:7004062103380619264

https://www.instagram.com/p/CloC8XMOB52/

https://local.google.com/place?id=11010943153743415673&use=posts&lpsid=CIHM0ogKEICAgID-weC6dA

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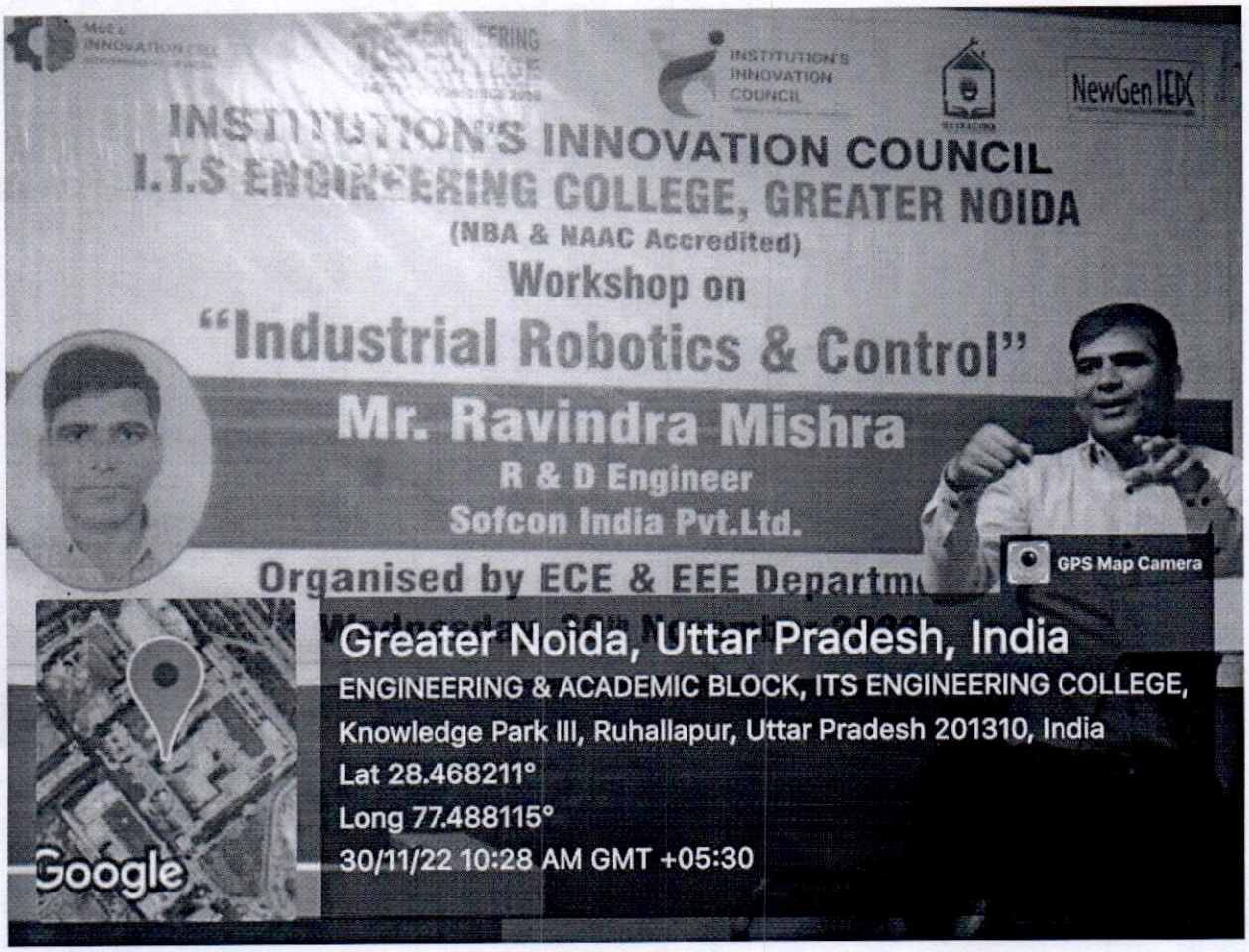
Event Photos:



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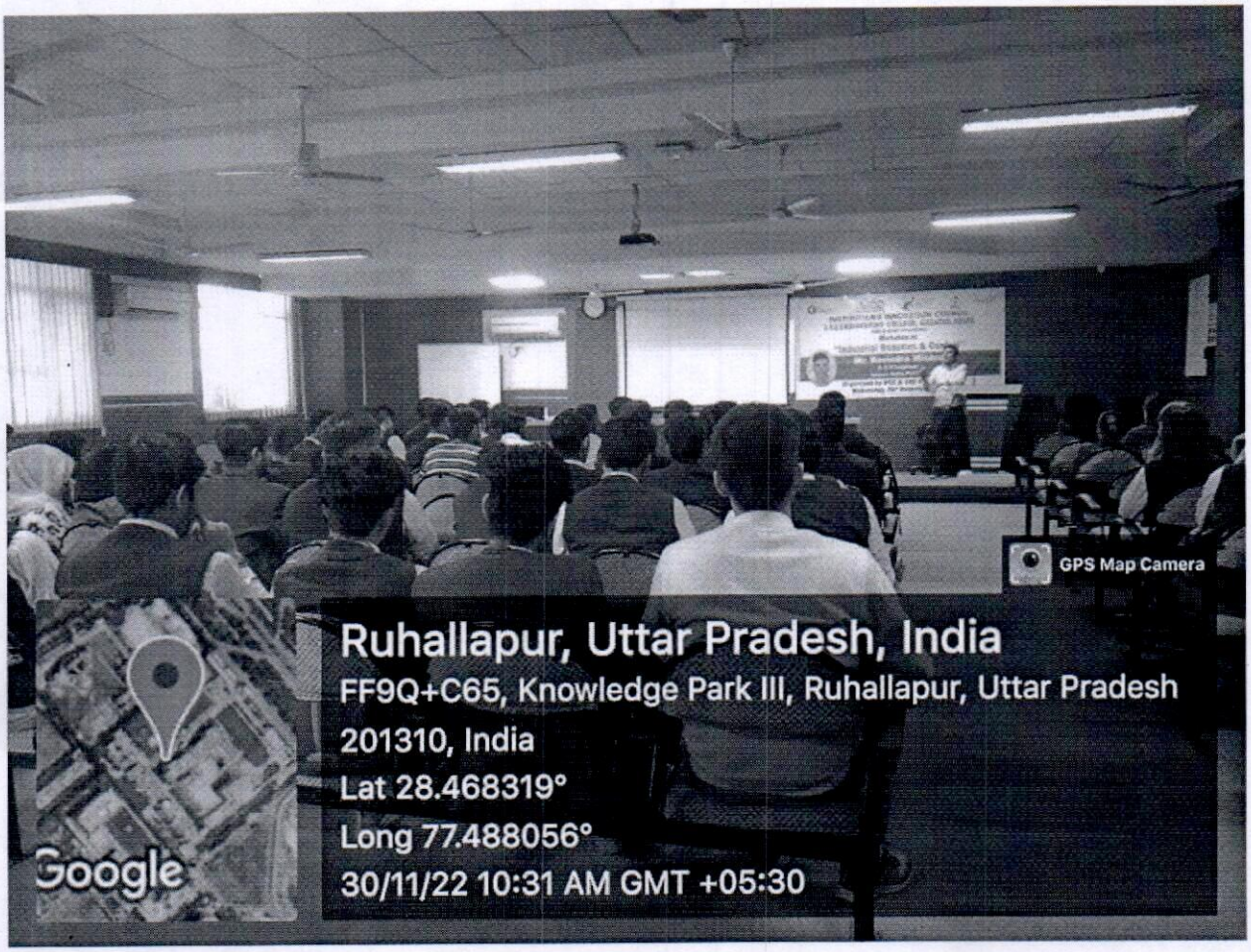

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Work Report

Name of the Event: One Day Workshop on "Data Sciences"

Date of the Event: 24th November 2022.

Hosted by: NI (COE) of ECE Department & IEEE Student Branch, ITS Engineering College

Speaker: Mr. Jitendra Kumar Sr. Data Scientist & Mr. Sonu Parkash Founder and CEO of APPWARS Technologies Pvt. Ltd.

Venue of the event: Naidu Hall

Participants: Faculty members and students of ECE Department of ITS Engineering College

No. of Participants-

- Faculty Members: 05
- Students: 40

Objectives of the Workshop:

- To get aware the students about the various Data Science Tools and Application used in Industries

Report:

NI (COE) and IEEE student branch of ECE Department of ITS Engineering College Greater Noida jointly organized One Day Workshop on "Data Science" on 24th November 2022 (Thursday). The event was started by Saraswati Vandana and thereafter there was a welcome address by Dr. Monika Jain HOD ECE, ITS Engineering College Greater Noida. The resource person **Mr. Jitendra Kumar & Mr. Sonu Prakash** discussed the key features of **Data Science** used in industry. They explained the students about Data Science in meaningful way. Data Science is a multidisciplinary approach that combines principles and practices from the fields of mathematics, statistics, artificial

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intelligence, and computer engineering to analyze large amounts of data. This analysis helps data scientists to ask and answer questions like what happened, why it happened, what will happen, and what can be done with the results etc. The students are motivated to take Data Science, as their career, as lot of job option are available in the market. Dr. Rajiv Ranjan, Convener, IIC-ITSEC concluded the event and extended the vote of thanks.

Learning Outcome:

- Participants learnt about Data Science.
- Participants got to know the key tools and application of Data Science used in Industries.
- Participants learn about computing theory, languages, and algorithms, as well as mathematical and statistical models.
- They also learnt about the principles of optimization to appropriately formulate and use data analyses.

Conclusion: The session was very fruitful for the participants, as they understood the facts and features of Data Science.

Sr. No	Name	Branch	Sr. No	Name	Branch
1	Aadrash	ECE 2nd Year	1	Vikram	ECE 3rd year
2	Sahzaad Bhatti	ECE 2nd Year	2	Kanchan	ECE 3rd year
3	Abhay	ECE 2nd Year	3	Prasant Kumar	ECE 3rd year
4	Md Gulab Nabi	ECE 2nd Year	4	Parveen	ECE 3rd year
5	Devraj Singh	ECE 2nd Year	5	Navdeep	ECE 3rd year
6	Sneha	ECE 2nd Year	6	Kavita	ECE 3rd year
7	Riya	ECE 2nd Year	7	Umesh	ECE 3rd year
8	Bhumika Pal	ECE 2nd Year	8	Ayush	ECE 3rd year
9	Siddarth Kumar	ECE 2nd Year	9	Abhishek	ECE 3rd year
10	Abhijeet	ECE 2nd Year	10	Prasant	ECE 3rd year
11	Sahwag Raj	ECE 2nd Year	11	Lokesh	ECE 3rd year
12	Sonu Kaumar	ECE 2nd Year	12	Suman	ECE 3rd year

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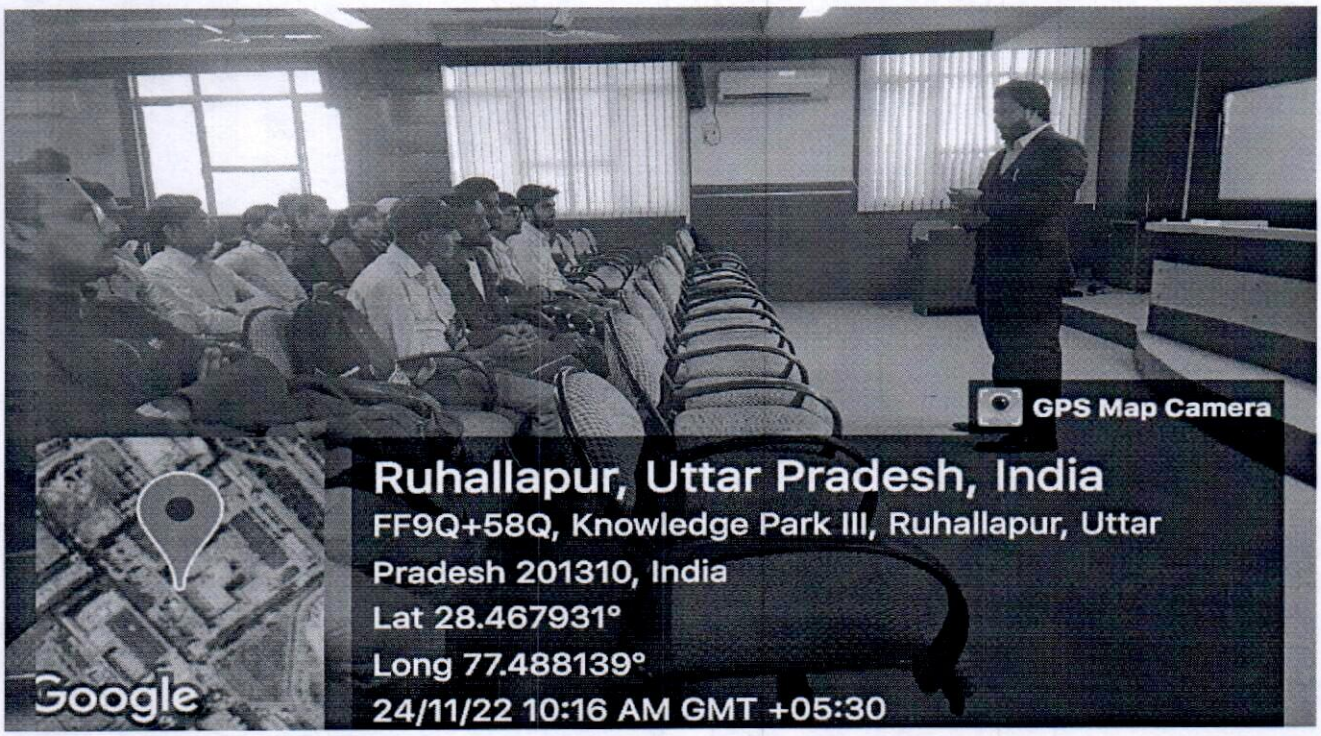
13	Aditya Shankar	ECE 2nd Year
14	Rakesh Sharma	ECE 2nd Year
15	Akmal Hussain	ECE 2nd Year
16	Ashwin Yadav	ECE 2nd Year
17	Md Gulab Nabi 17	ECE 2nd Year
18	Md Jaushit 18	ECE 2nd Year

PRAGATI TRIPATHI
(Co-coordinator AP ECE Department)

DR. MONIKA JAIN
(HOD, ECE)



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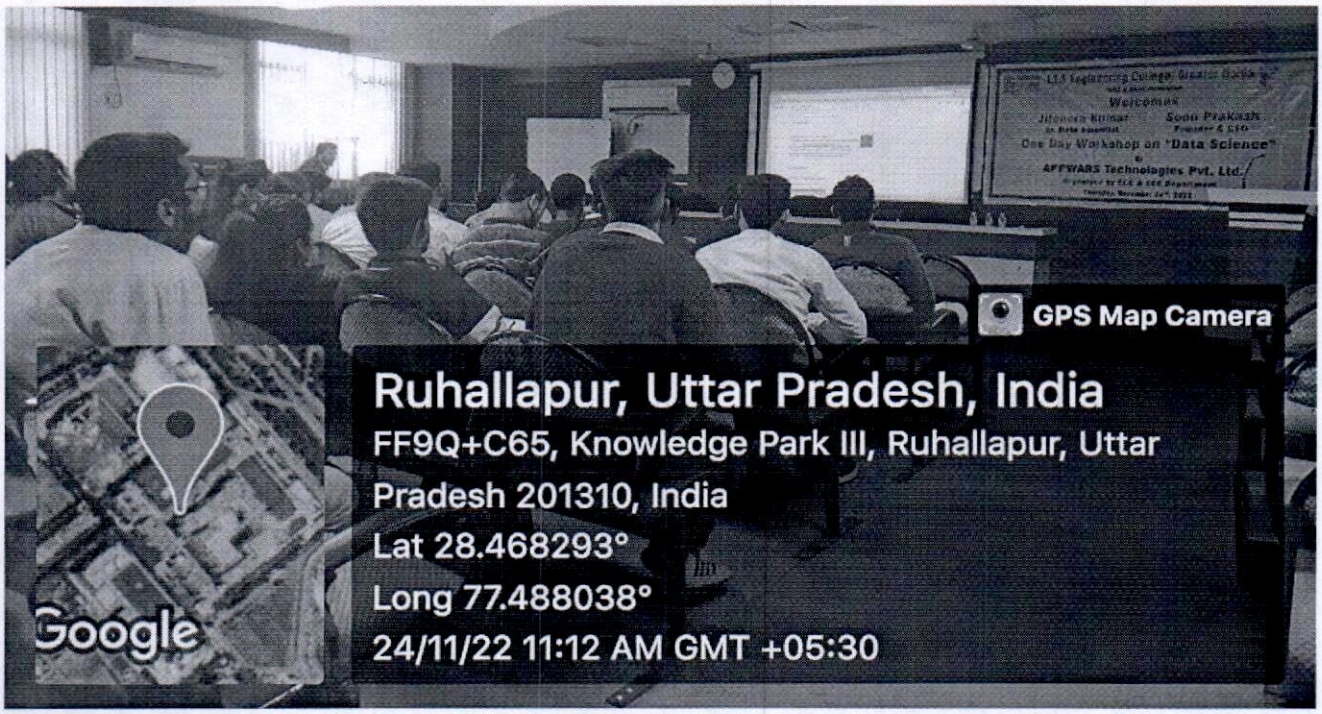

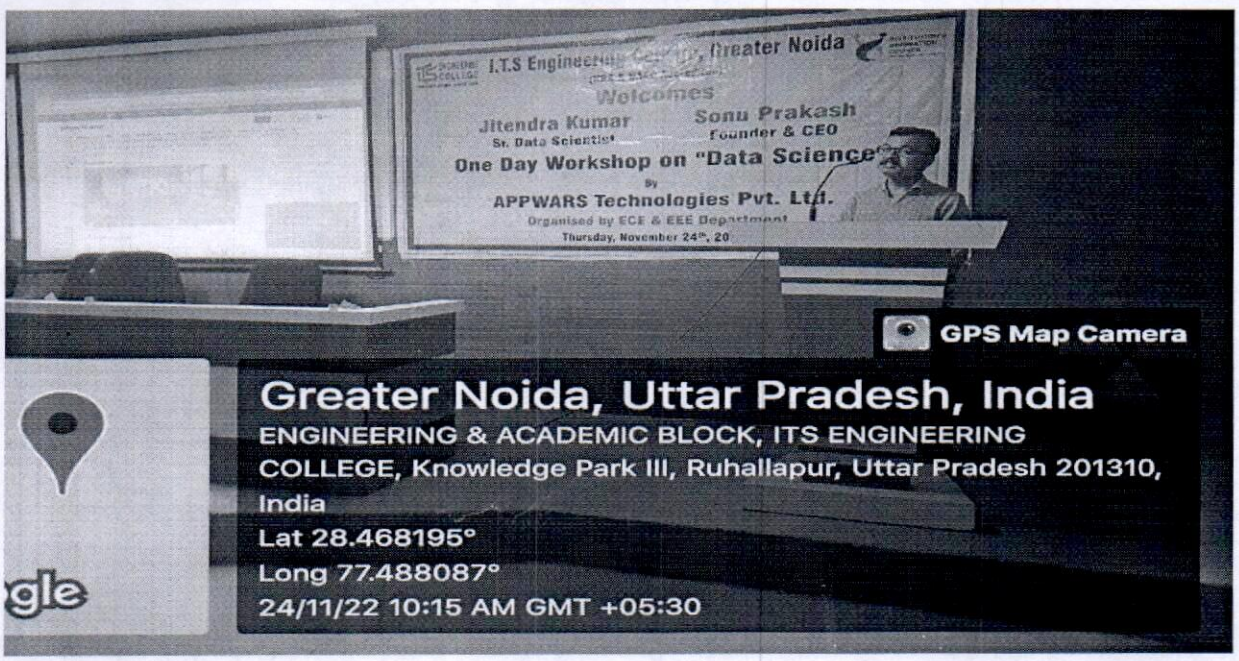

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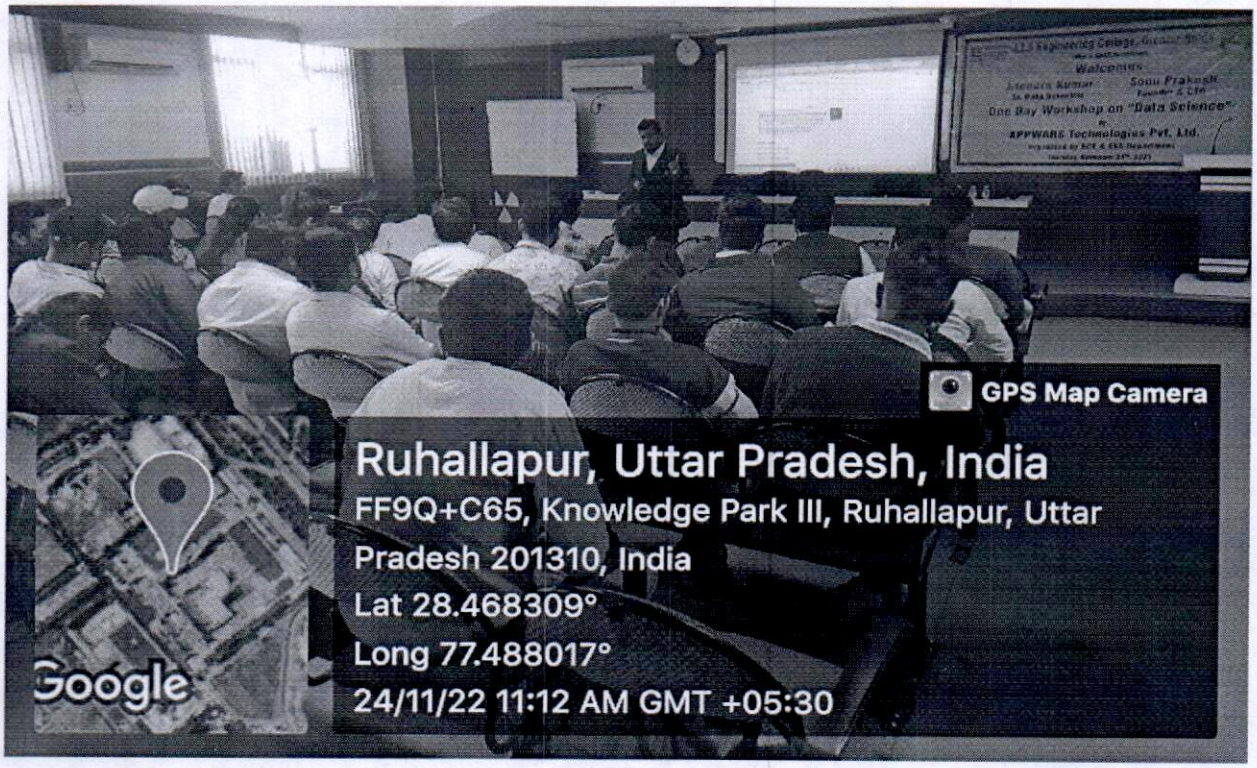

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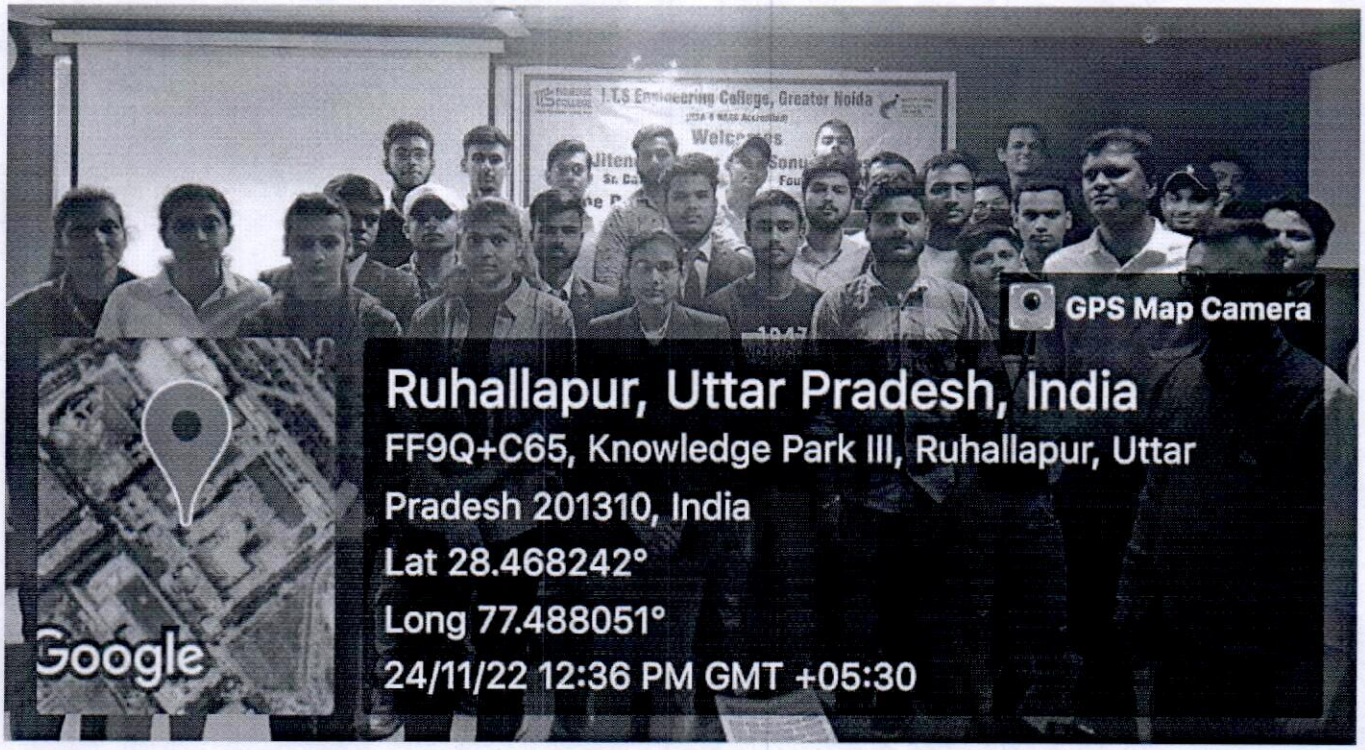

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Name of Event: 1 Day Workshop on "Python Programming: LIVE Projects"

Date of Event: November 6, 2022

Organized by: e-Yantra Innovation Centre Department of ECE

Event Coordinator: Ms. Pragati Tripathi (Assistant Professor- Department of Electronics & Communication Engineering)

Speaker: Mr. Kushal Pathak, Senior Software Engineer, Verve Gen Tech Pvt. Ltd.

Objective: The workshop was organized with the objective of promoting the awareness and skills among students about Python Programming and its applications in LIVE Industrial Projects.

Report:
The workshop was started with absolute basics as many of the attendees were new to programming. In the beginning, speaker explained to them the difference between a compiled and interpreted language. He began with the concept of print statements and how it was used to output to the console. The participants used the print () statement in Python to print sentences, concatenate strings and perform basic calculations. While concatenating and printing various things students noticed that they were not able to concatenate a sentence and a number (unless the number was in quotes). And hence various basic data types like Integer (int, numerical value without a decimal point), Floating Point (float, fractional numbers), String (str, sentences) were introduced. The two new data types for those who did a bit of programming were Boolean and None. Boolean (bool) can hold only one of two possible values: True and False. The last type was None which is a special type indicating nulls. Along the way, he also introduced the participants to the concept of variables. Many of those who had experience with C++/Java remarked how easy it was to declare a variable in Python (without specifying its data type) and change its data type fluidly. The reason is that Python doesn't actually "hold" any data but is merely pointers to data objects. He then moved on to the basic assignment and arithmetic operations in programming. Many of them were new to the modulo (%), the floor division (//), and the power of (**) operators. He then gave them a simple problem to solve for some practice using the things they learned. Comparison operators were then taught along with conditional statements, its syntax, working and how the or, and operators were used in it. Next, he moved on to looping statements. While being taught for loop, they were also introduced to the range () function in Python along with its start, stop and step parameters, which work exactly the same way in string slicing, also explained at the time. In the end, participants were given a few questions to solve, going from beginning to intermediate and they were encouraged to ask any doubts since he was nearing the end of the session. In this way the whole session was concluded.

Outcomes: The outcome of the workshop was to make students aware about the following concepts:

- Introduction to Python
- Python features and applications
- Data types, Operators

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- Functions, recursion
- File handling
- OOPs concepts
- Modules and Packages
- Libraries used for Data Science.

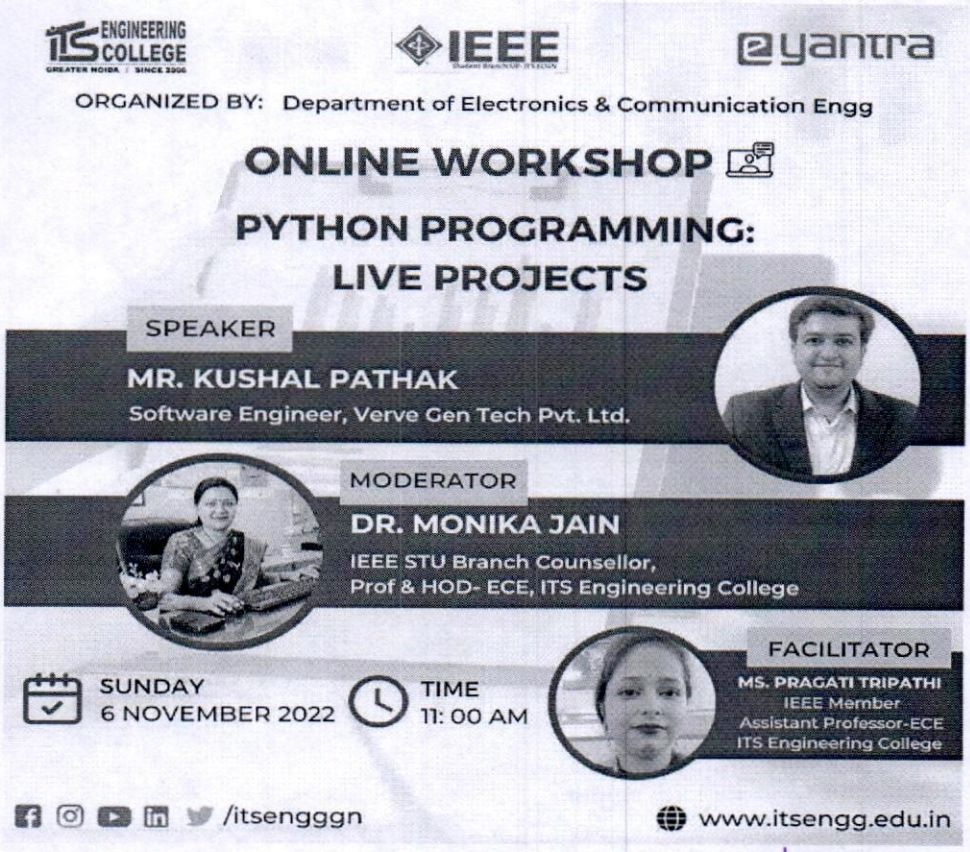
Program Outline: The workshop was organized with the objective of promoting the awareness and skills among students about Python Programming and its applications in LIVE Industrial Projects.

No. of Students attended: 72

Faculty attended: 05

Timing: 11.00 am - 6.00 pm

Banner:



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Pragpathi

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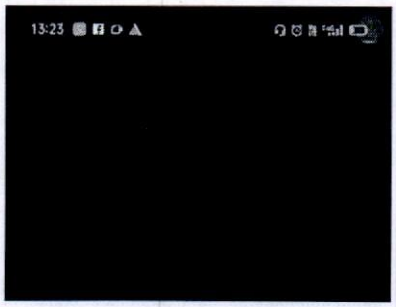
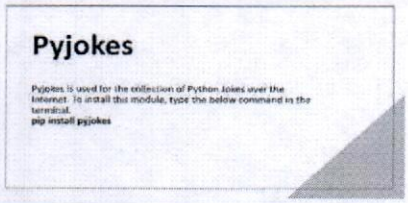
List of Participants:

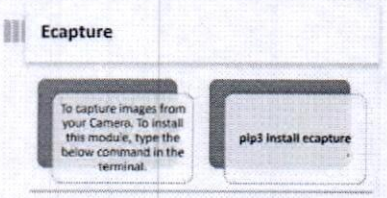
1. Abhinav Kumar Kanth
2. Abhishek Yadav
3. Aman Pratap Singh
4. Ambika
5. Ayush Raj
6. Divya Verma
7. Harshit Mishra
8. Kanchan Gupta
9. Kashish Solan
10. Kavita Yadav
11. Komal Nagar
12. Lokesh Bisht
13. Prashant Kumar
14. Rahul Raj
15. Raju Kumar
16. Sanjeev Kumar
17. Suman Kumar
18. Umesh Kumar
19. Vikram Kumar
20. Parveen
21. Prashant
22. Navdeep Thakur
23. Deepak Mandal
24. Vivek Kumar
25. Rahul Yadav
26. Abhay Chauhan
27. Piyush Kumar
28. Sonu Kumar
29. Aditya
30. Mann Kumar
31. Aditya Kumar Yadav
32. Prabhat Kumar Mishra
33. Ankit Kumar
34. Harsh
35. Aniket Srivastava
36. Abhishek Patel
37. Aditya
38. Vishnu Kumar
39. Krish Saini
40. Saket Kumar
41. Vikas Manraj
42. Aadarsh
43. Abhay Sharma
44. Abhimanyu Kumar
45. Abhishek Kumar
46. Aditya Rana
47. Aditya Shankar
48. Akmal Hussain
49. Alok Kumar Singh
50. Ashwin Yadav
51. Avinash B Roy
52. Bhumika Pal
53. Devraj Singh
54. Gautam Negi
55. Harshit Raj
56. Kapil
57. Md Gulab Nabi
58. Imam
59. Md Tausif Raja
60. Nikhil Raj
61. Rakesh Kumar
62. Riya Chaudhary
63. Sahwag Raj
64. Sahzaad Bhatti
65. Shivam Kumar Yadav
66. Abhishek Sharma
67. Adarsh Kumar Mishra
68. Deepanjan
69. Shlab Kumar
70. Abdul Hasib
71. Suraj Kumar
72. Md. Aamir Raza

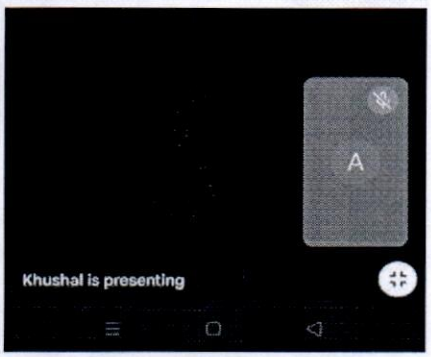
Tripathi

Workshop Pictures:









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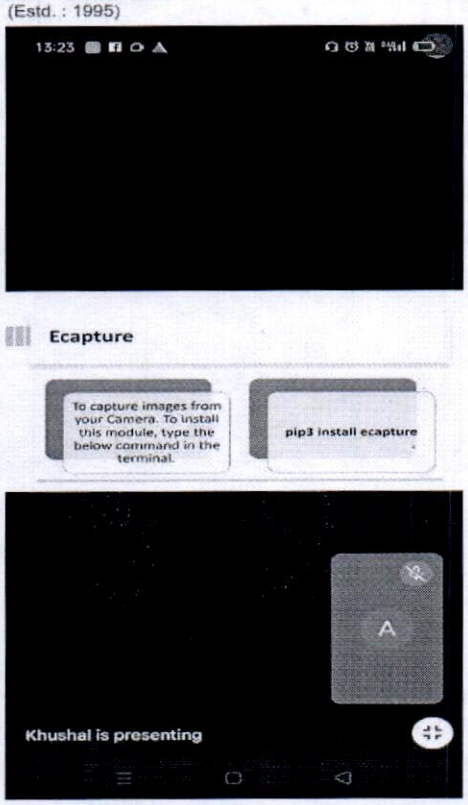
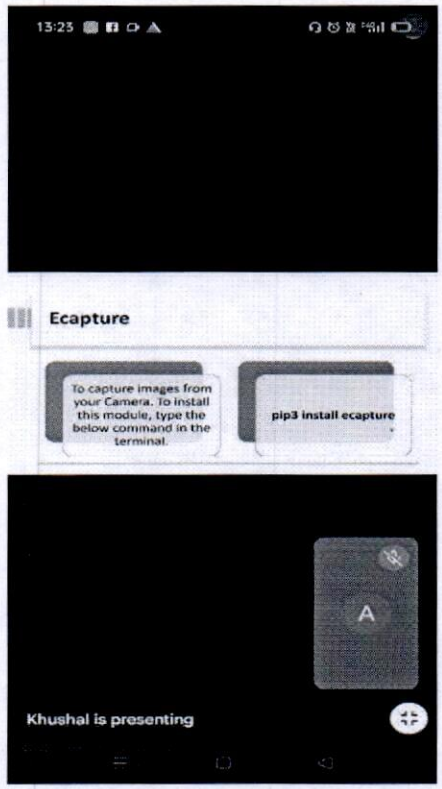
Ptripathi





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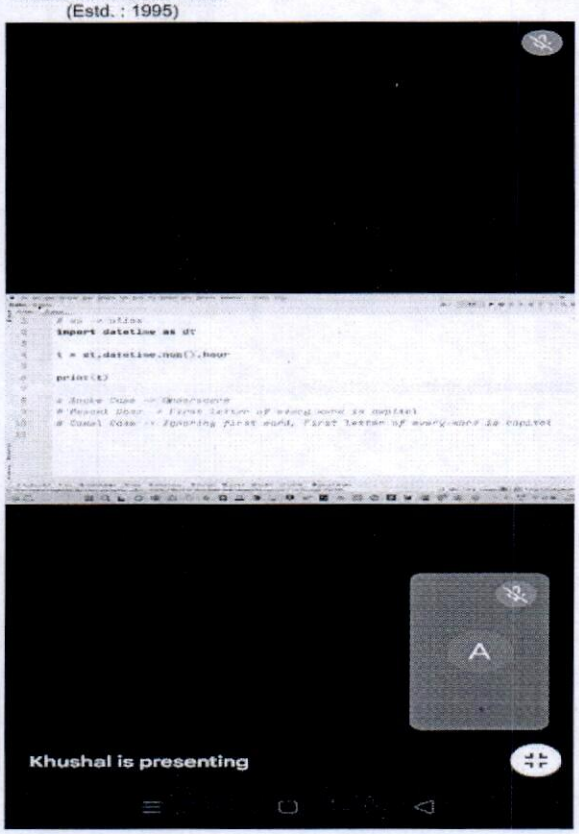

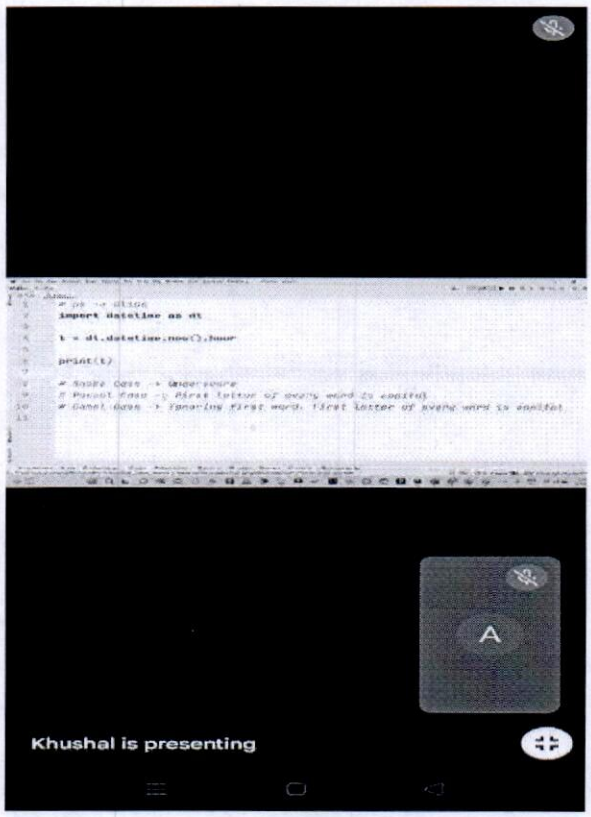

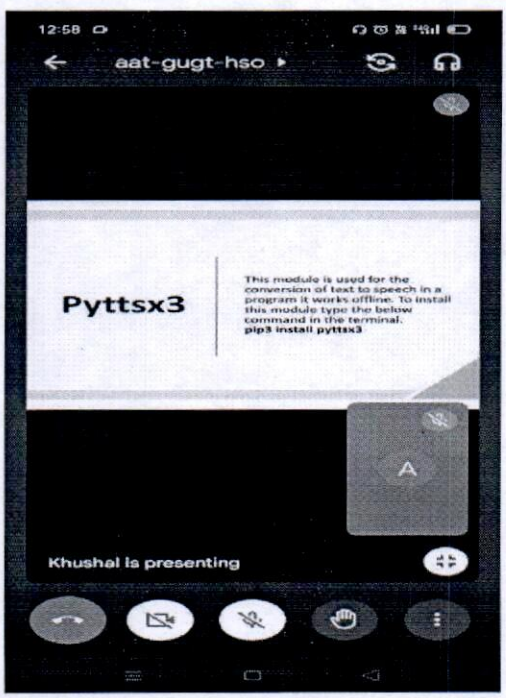

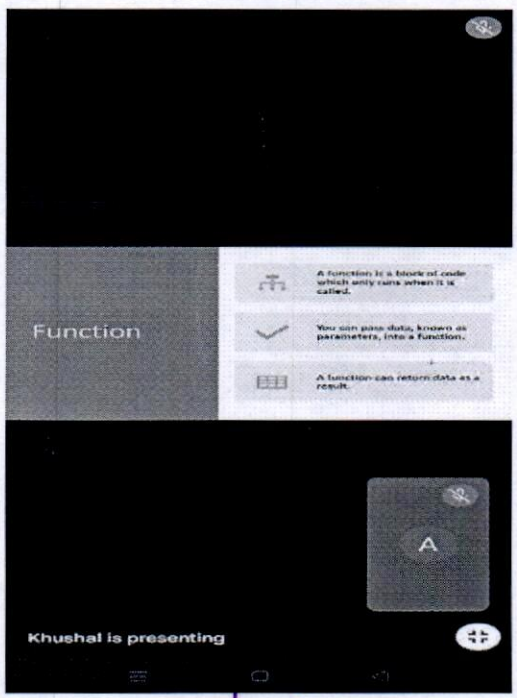

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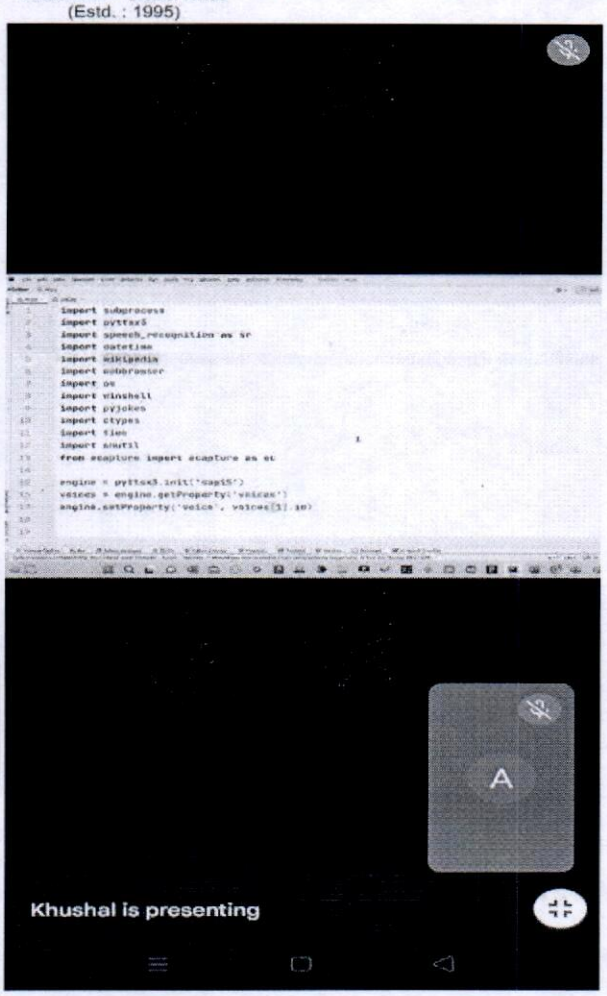

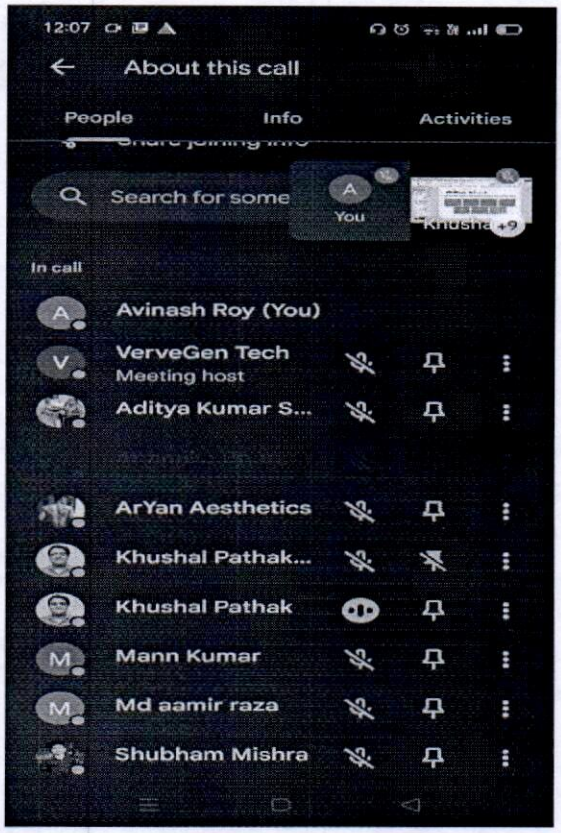

Social Media Links:

https://www.facebook.com/ITSengggn/photos/a.131241866977472/4982485785186365/?type=3
https://www.facebook.com/permalink.php?id=701870293626646&story_fbid=1519457311867936
https://twitter.com/ITSEngggn/status/1588843597574832128
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https://www.instagram.com/p/Ckk3qC6umr9/
https://local.google.com/place?id=11010943153743415673&use=posts&lpsid=CIHM0ogKEICAgIC-_uTWPw

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Coordinator
(Ms. Pragati Tripathi)

EVENT REPORT

Name of Event: One day Hands-on workshop on "Data Science".

Date of Event: April 12th , 2022 (Tuesday)

Time: 1:30 PM - 4:30 PM

Organized by: National Instruments Innovation Cell, COE- Electronics & Communication Engineering Department, ITS Engineering College, Greater Noida& e-YANTRA

Coordinator: Mr. Prabhakar Sharma (Corodinator- NI- COE), Assistant Professor- ECE Department.

Eminent Speaker: Er. Rohit Pahwa, Machine Learning Expert- Shapemyskill Pvt. Ltd- Gautam Budh Nagar.

Objective: The main objective of this program was to understand the importance, applications, challenges and opportunities in Data science with short orientation program included with some Hands-on practical examples.

Report:

On April 12th, 2022 National Instruments Innovation Cell, COE- ECE Department, ITS Engineering College organized **One day Hands-on workshop on "Data Science".**The session was delivered by **Er. Rohit Pahwa, Machine Learning Expert-- Shapemyskill Pvt. Ltd.** Our Head of Department Dr. Monika Jain welcomed our speaker. Hands-on Workshop started at 1:30 PM in National Instruments –COE- ITS engineering college- Gr.Noida. First Mr. Pahwa introduced yourself and then starting hands-on workshop. All students download anaconda software (Python) and do some examples of data science using python. This workshop was attended by students of ECE 2nd year, 3rd year and EEE 3rd year. **Er. Rohit Pahwa** discussed about the data science, its importance, applications, advantages, challenges and career opportunities in Data science with various examples. In last he cleared various doubts of students very well. Workshop was being closed by vote of thanks by the Mr. Prabhakar Sharma, Coordinator of this event.

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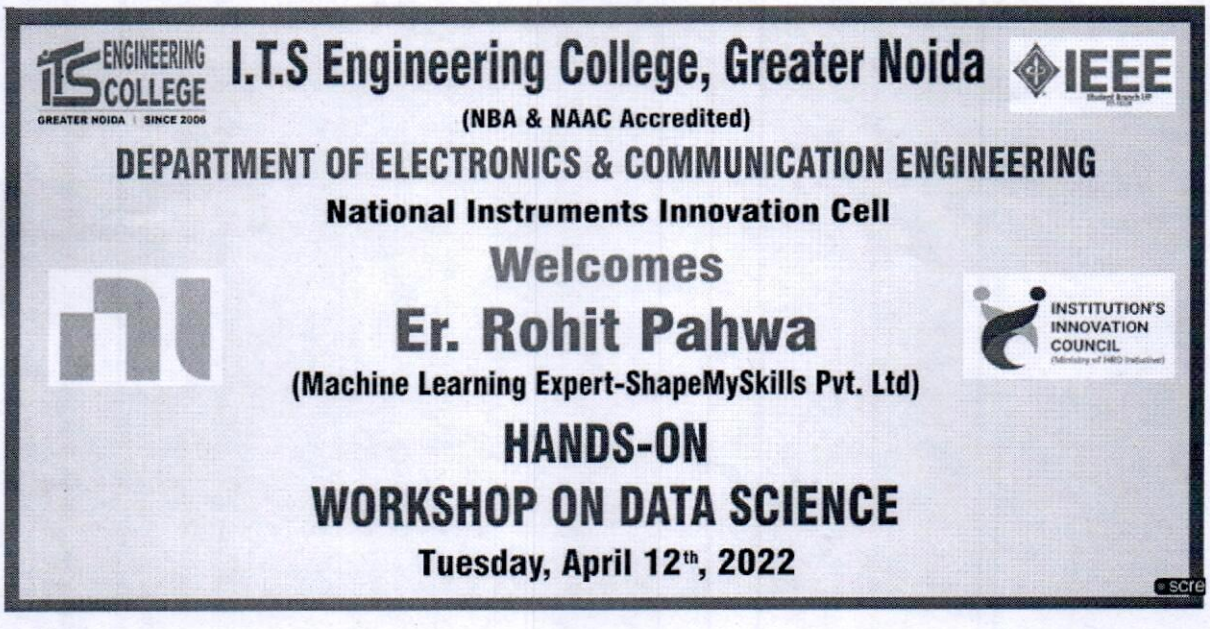
Program Outcome: Student are motivated about Data Science and its current industrial opportunities. All Students immediately received participation e-certification through shapemyskill portal (attached with this report also).

Program attendance: 31 students (ECE) + 5 (EEE)

Prabhakar Sharma

(Program Coordinator)

Workshop Banner:



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SHAPEMYSKILLS PRIVATE LIMITED

E-CERTIFICATE

OF PARTICIPATION

This is to certify that

Mr./Ms Ravi Kumar Shah has successfully Participated in One Day Workshop on Data Science held on 12 Apr 2022 at ITS Engineering College,Greater Noida,

Mr. Sanyam Dixit
Managing Director

ShapeMySkills
TRAINING | DEVELOPMENT | PLACEMENT

Mr. Kuldeep Dixit
Marketing Director

OUR PARTNERS: Microsoft Partner, Bentley Institute, WhiteHat Jr, Pearson, StartCoding, Wordpress

SHAPEMYSKILLS PRIVATE LIMITED

E-CERTIFICATE

OF PARTICIPATION

This is to certify that

Mr./Ms Saurav Bharti has successfully Participated in One Day Workshop on Data Science held on 12 Apr 2022 at ITS Engineering College,Greater Noida,

Mr. Sanyam Dixit
Managing Director

ShapeMySkills
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Mr. Kuldeep Dixit
Marketing Director

OUR PARTNERS: Microsoft Partner, Bentley Institute, WhiteHat Jr, Pearson, StartCoding, Wordpress

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Some Pictures:

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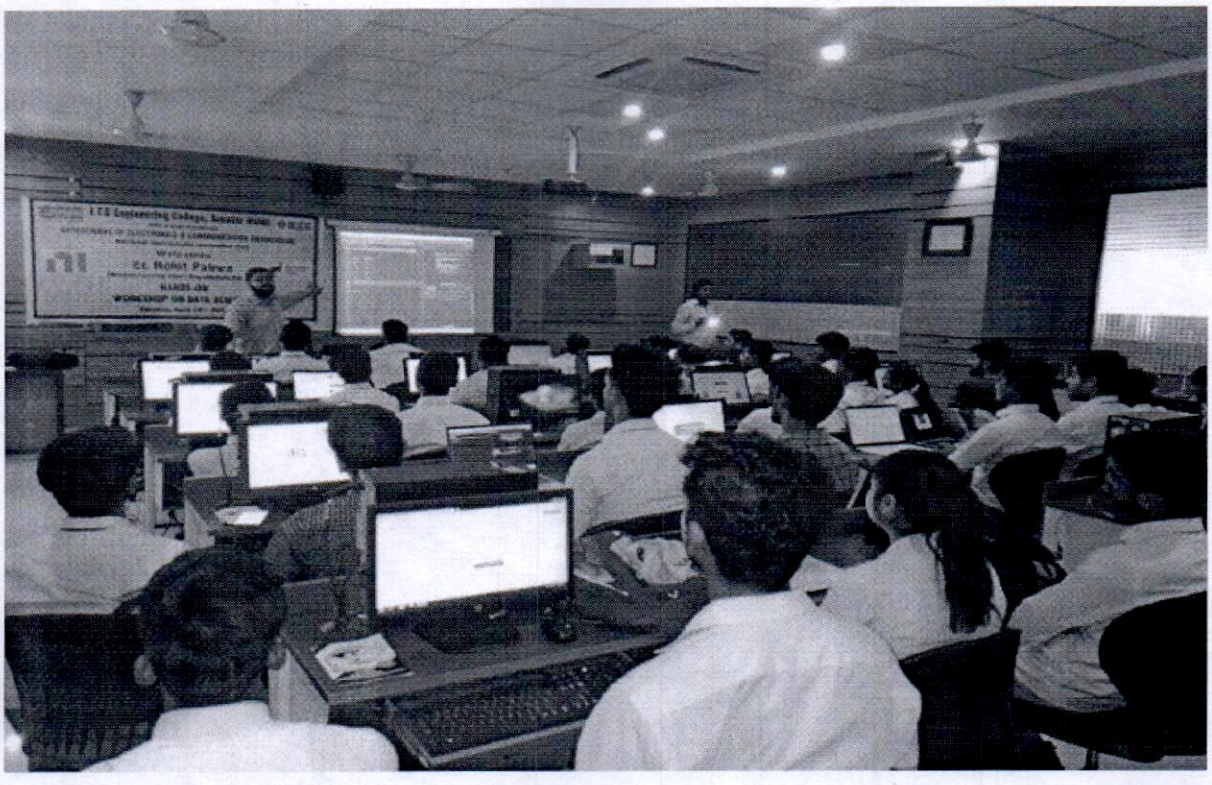

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Work Report on Radio Day

Name of the Event: Workshop on "Application of IOT and AI in Radio Technology"

Date of the Event: 15th February, Tuesday, 2022

Organized by: Electronics and Communication Engineering Department &(e-YANTRA)

Speaker: Mr. Atul Mishra, Senior Technical Expert, Centum Learning Ltd.

Venue of the Conference: Naidu Hall

Participants: B.Tech & MBA Students

No. of Participants: 60

Objective of the Workshop-

Following were the objectives of the workshop:

- To stimulate how students can develop right set of skills for experimental learning with real time projects using IOT.
- Promote the significance of IOT and AI technology and inculcate required skill set of IOT and AI technology in young graduate.

Report:

Institition's Innovation Council (IIC), Electronic & Communication Engineering Department of ITS Engineering College organized a One Day Workshop on "**Application of IOT and AI in Radio Technology**" on radio day for the students of BTech & MBA students on **Tuesday, February 15th, 2022.** The resource person for the workshop was Mr. Atul Mishra, Senior Technical Expert, Centum Learning Ltd.

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Mr. Atul Mishra has more than 10 years' experience in the Centum Learning Ltd. His wide array of experience includes working with AI, IOT and Telecommunication companies. Artificial Intelligence (AI) and Internet of Things (IOT) are the emerging technologies now days used in everywhere. During the workshop, the speaker talked about the various aspects of AI and IOT linked to industries where the students can get the opportunity to work. The convergence of AI (Artificial Intelligence) and IoT can redefine the way industries, business, and economies functions. AI enabled IoT creates intelligent machines that simulate smart behavior and supports in decision making with little or no human interference. Several businesses have already adopted AI and IoT as part of their processes and products.

He also shared about their unique skilling program designed for students at **Centum Pvt Ltd** to get a learner skilled at their doorstep through online learning mode. The students are provided with DIY kit in this program in which they can build and learn their skills hands on projects.

Speaker highlighted benefits of AI Enabled IoT

- Triggering New and Enhanced Products & Services using the AI and IOT
- Better Risks Management
- Increase IoT Scalability

The workshop witnessed the active participation of around 60 students from various branches of B.Tech and MBA along with Faculty Members. The workshop was concluded with a Q&A session.

Learning Outcome

The entire workshop was very interactive and interesting. Some of the notable outcomes of the session were:

- Radio Day was celebrated by the ECE Department via this workshop.
- Students learns how the AI and IOT technology together reduce the interference of human being in decision-making.
- The Centum Pvt Ltd. provided students with the hand on experience on IOT technology.

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- Students gets the opportunity to understand various aspects of AI and IOT technology related to industries.

Conclusion

In brief, the programme was very interesting for the entire audience and provided a great learning experience to all the participants. A total of 60 students and 7 faculty members attended the workshop.

Social Media Postings of the event

Facebook:
https://www.facebook.com/ITSengggn/photos/a.131241866977472/4278431218925162/

Twitter: https://twitter.com/ITSEngggn/status/1493500146260185095/photo/1

Linkedin: https://www.linkedin.com/posts/itsengggn_iic-workshop-btech-activity-6899265237686837250-tc9W

Instagram: https://www.instagram.com/p/CZ_a1KNjWtC/

Google
: https://local.google.com/place?id=11010943153743415673&use=posts&lpsid=CIHM0ogKEICAgIDm9veOEQ

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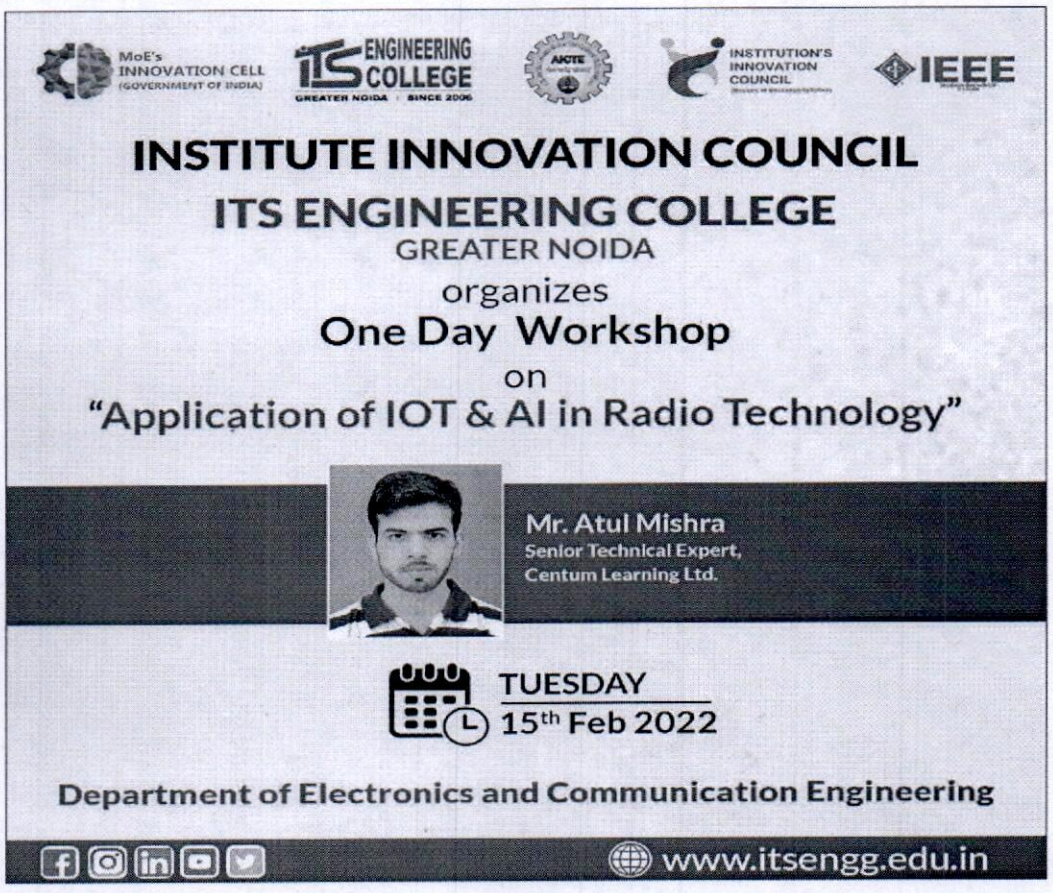

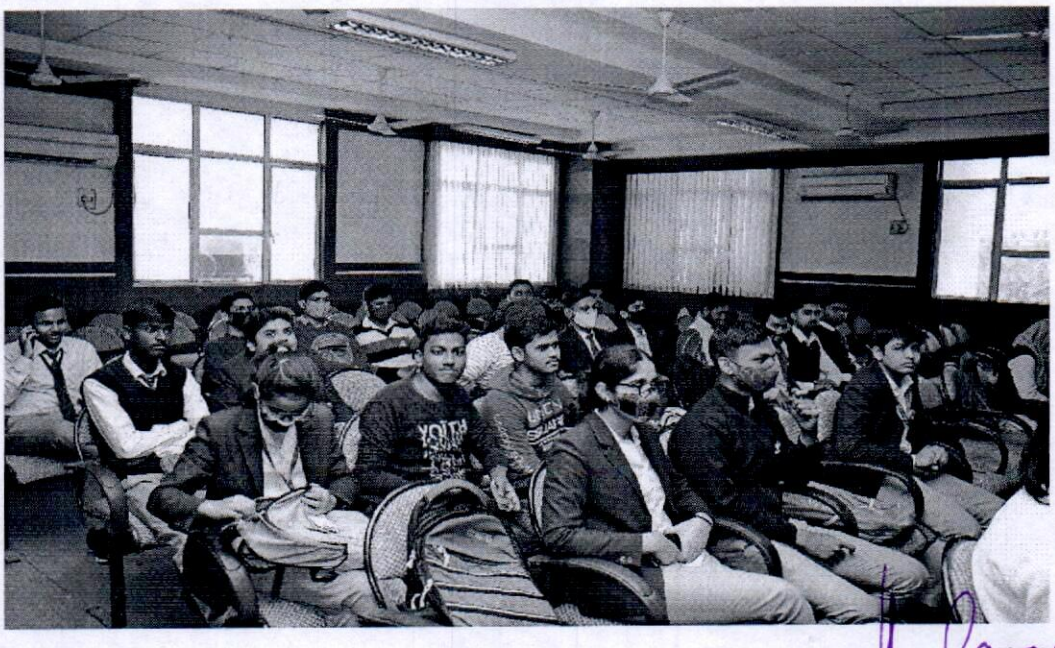

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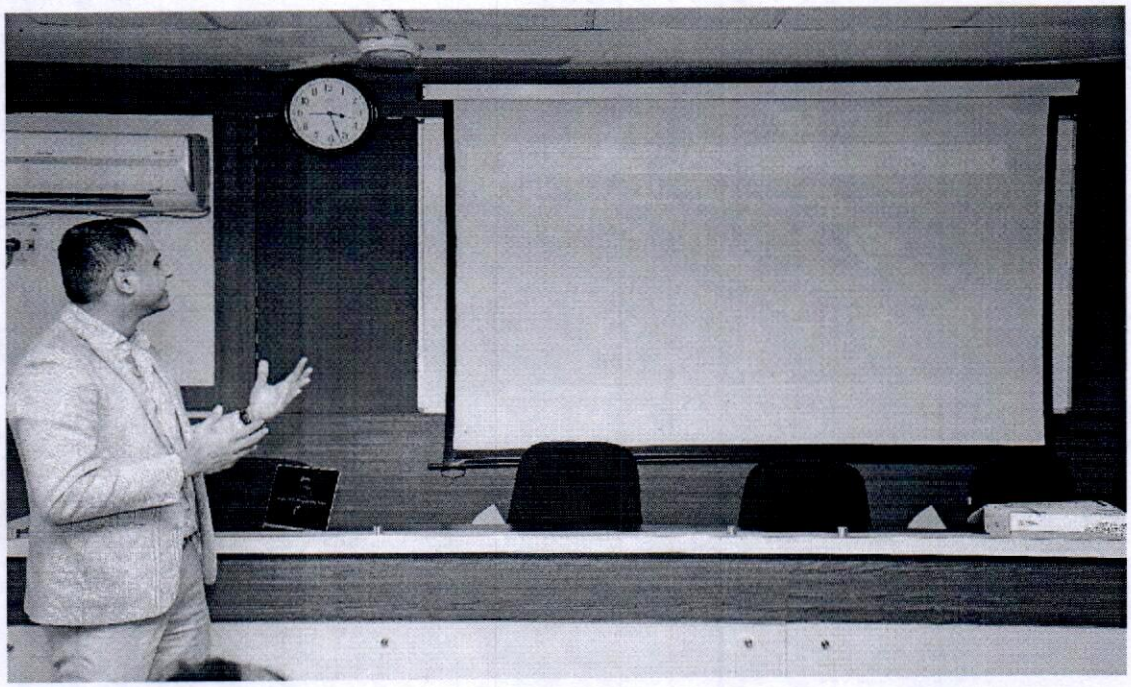

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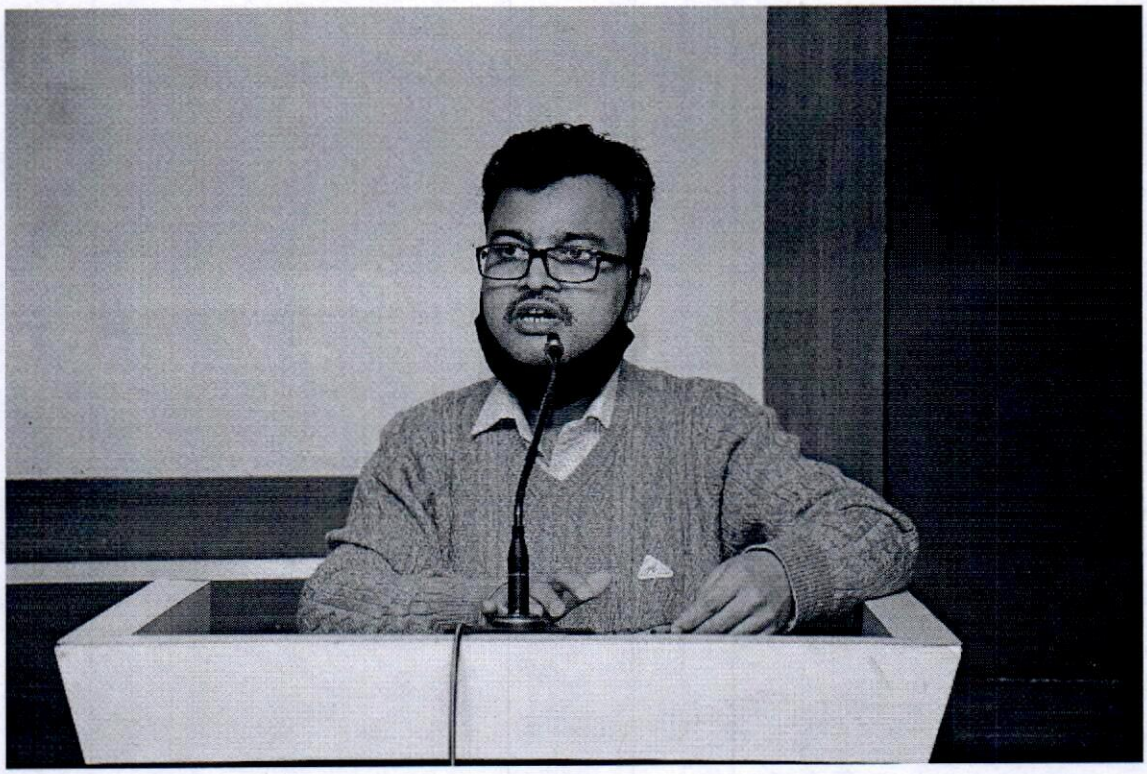

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Student Attended the Workshop

Attendance Sheet

Date: 15/Feb/2022 | Technology: IOT
College/University Name: I.T.S. College.

Sr. No.	Full Name	Mobile Number	Whatsapp Number	E-Mail I'd	Branch	Year
1	Vikas Verma	7011817328	7011817328	Vikasv91221@gmail.com	CSE	2nd
2	Nitish Pandey	8081300767	8081300767	SP627633@gmail.com	CSE	2nd
3	Himanshu Singh	9897188816	9897188816	himanshus894@gmail.com	CSE	2nd
4	Divyansh Upadhyay	9910054162	9910054162	divyanshupadhyay2803@gmail.com	C.SE	2nd
5	Saurav Kumar Singh	6386545668	6386545668	Singhsaurav737634@gmail.com	CSE	2nd
6	Utsav Singh	7639	7639			
7	Utsav Singh	9369383087	9369383087	utsavsinghpks_cse20@its.edu.in	CSE	2nd
8	Nisha Nanda	8791330974	8791330974	nishasharmans_cse20@its.edu.in	CSE	2nd
9	Utkarsh Kumar	6202461181	6202461181	Utkarshkumar44_cse20@its.edu.in	CSE	2nd
10	Nikhil Mehto	8445274721	8445274721	nikhilmehto_cse20@its.edu.in	CSE	2nd
11	Urvashi Sharma	7417069005	7417069005	urvashisharma9838@gmail	CSE	2nd
12	Ayush Goel	9560496817	9560496817	ayushgoel3388@gmail.com	CSE	2nd
13	Jitendra Kumar Gautam	8744991899	8744991899	Sachhasathi1@gmail.com	CSE	2nd
14	Abhishek Kumar	7678118409	7678118409	9512abhisingh@gmail.com	CSE	2nd
15	Deepti Sharma	9667482492	9667482492	deeptisharmahs1_cse20@gmail.com	CSE	2nd
16	Gaurit Jain	9891383864	9891383864	gauritjainsc1_cse20@its.edu.in	CSE	2nd
17	Nilesh Chaudhary	9213345953	9213345953	[illegible]	CSE	2nd
18	Nutan	6398193125	9675801318	nutanchauhan6398193125@gmail.com	CSE	2nd
19	Yuvraj Kr. Singh	7005693601	7005693601	Yousingh208@gmail.com	CSE	2nd
20						
21						

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Attendance Sheet

Date | | | Technology | |

College/University Name

Sr. No.	Full Name	Mobile Number	Whatsapp Number	E-Mail I'd	Branch	Year
1	Manish Kumar	7004361119	7004361119	m.kumar321321@gmail.com	civil	3rd
2	Rajnish Mishra	7321995219	7321995219	Rajnish mishra5319@gmail	civil	3rd
3	Sudhakar mishra	7081960903	7081960903	Sudhakarmishra7088gmail	CE	3rd
4	Kuldeep Kumar Varun	9760807899	9760807899	Kuldeepvarun77@gmail.com	C.E	IInd
5	Aditya Prakash Chauhan	9970142110	9970142110	apc316780@gmail.com	CE	IInd
6	Gaurav Maurya	9416663941	8795975146	gauravmaurya0908@gmail.com	CE	IInd
7	Rajat Gautam	8318999051	8318999051	rajatgautam4dw@gmail.	CE	IInd
8						
9						
10						

Date | | | Technology | |

College/University Name

Sr. No.	Full Name	Mobile Number	Whatsapp Number	E-Mail I'd	Branch	Year
1	Utkal Kumar	6388193156	—	Kumarutkal620136@gmail.com	Civil	3rd.
2	Praveen Kumar Singh	6392515568	6392515568	Praveen280920@gmail.com	Civil	3rd
3	Abdullah	8851574050	—	Abdullahkhan8869@gmail.com	Civil	3rd
4	Adarsh Kumar Mishra	8076667062	=	adarshm211@gmail.com		2nd
5	Abhishek Sharma	7668640496	=	abhishekshar9C@gmail.com		2nd
6	Shalabh Kapil	9957431191	=	Shalabh441@gmail.com		2nd
7	Suraj Kumar	8868250460	=	Surajkuba110@gmail.com		2nd
8	MADIYA FAYAZ	9149955078	-	madiyafayaz991@gmail.com	CE	2nd
9	SHAFIA NAZIR	9682664611		Shafianazir786@gmail.com	CE	3rd
10						
11						

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Greater Noida

I.T.S ENGINEERING COLLEGE
GREATER NOIDA
(A NAAC Accredited Engineering College)

The Education Group
Ghaziabad • Greater Noida
(Estd. : 1995)

Sr. No.	Full Name	Mobile Number	Whatsapp Number	E-Mail I'd	Branch	Year
1	Ujjwal Kumar	6287973156	—	Kumarujjwal620136@gmail.com	Civil	3rd.
2	Praveen Kumar Singh	6392515568	6392515568	Praveen280920@gmail.com	Civil	3rd
3	Abdullah	8851574050	—	Abdullahkhan8809720@gmail.com	Civil	3rd
4	Adarsh Kumar Mishra	8077667062	—	adarshmzu@gmail.com		2nd
5	Abhishek Sharma	7668625096	—	abhishekshan95@gmail.com		2nd
6	Shalesh Kapil	9957429191	—	Shalesh441@gmail.com		2nd
7	Suraj Kumar	8868250460	—	Surajdubal10@gmail.com		2nd
8	MADIYA FAYAZ	9149955078	-	madiyafayaz941@gmail.com	CE	2nd
9	SHAFIA NAZIR	9682664611		Shafia nazir 786@gmail.com	CE	3rd
10	MD Aamir	6200205163	-	mdaamir.cse@gmail.com	CSE	2nd
11	Yuvraj Singh	8081542773	-	Yuvrajsingh.cse@its.edu.in	CSE	2nd
12	Gaurshan Fayaz	9936947035	-	Kumarsaurabh.cse@its.edu.in	ECE	2nd
13	Shubham Pandit	9431261385	—	Shubhampandit.cse19@its.edu.in	CSE	3rd
14	Akhilesh Singh	9990227112	-	Singhaman1978@gmail.com	ISE	2nd
15						
16.						

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Name of Event: 6 Week online Internship on Machine Learning with Python

Date of Event: 19 Jan'22 – 10 Mar' 22

Organized by: National Instruments Innovation Centre, Department of ECE

Event Coordinator: Mr. Prabhakar Sharma (Assistant Professor- Department of Electronics & Communication Engineering)

Objective:OnlineInternship on Machine Learning with Python.

Report:

The Department of Electronics and Communication Engineering of I.T.S Engineering College, Greater Noida, organized6 Week online Internship on Machine Learning with Python Program. National Instruments Innovation Centre, Department of ECE started the 06-week internship on Machine Learning with Python on 19th Jan' 2022. The internship started with onboarding of the candidates. The training was hosted by Mr. Praveer Saxena. Mr. Saxena first explained about the importance of machine learning and how its revolutionizing our lives. He also introduced different machine learning techniques and explained why Python is the preferred language for designing Machine Learning Solutions. He guided about how to install required software. In the last he discussed about the curriculum and projects to be done in internship. This program is coordinated by Mr. Prabhakar Sharma (Assistant Professor- Department of ECE).

Outcomes:

During this Internship Program, the focus will be to train the interns in the field of Machine Learning as there is a huge demand for skilled Machine Learning /Artificial Intelligence Engineers. The interns will be trained on state of art Machine Learning Algorithms along with different optimization techniques. Besides receiving the training, the interns will have the opportunity to work on several Machine Learning projects covering classifications, regression and web scraping problems.

Course Details:

During this program following aspects will be covered

Module 1: Python for data science/ machine learning crash course

- Data Types
- Comparison Operators
- If, elif and else statements
- For Loop
- While Loop
- Functions
- Lambda Expressions
- List Comprehension
- Map and Filter

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Module 2: Data Analysis :NumPy and Pandas

- Introduction to NumPy
- NumPy Arrays
- NumPy Array Indexing
- NumPy operations
- Introduction to Pandas
- Series
- DataFrames
- Missing values and Treatment
- Groupby
- Merging, Joining and Concatenation
- Data Input and Output
- **Project on DATA ANALYSIS USING PANDAS**

Module 3: Exploratory Data Analysis

- What is EDA? Why it is a very important Step?
- Introduction to Data Visualization
- Hands on Matplotlib
- Hands on Seaborn
- Different types of visualizations and their typical use cases

Module 4: Machine Learning

- Introduction to Machine Learning
- Supervised, Unsupervised and Semi supervised Machine Learning
- Data Pre-processing
- Regression vs classification
- Build your first machine learning Model: K Nearest Neighbour(KNN)
- Build your second machine learning Model: Naïve Bayes
- Regression ML Models
- Linear Regression and other regression models
- Evaluating Regression Models: Performance metrics
- Concept of Overfitting, Underfitting
- Bias Variance Trade-off
- Ensemble Learning

Program Outline:

- Python Programming, Data Analysis using Python, Exploratory Data Analysis, Data Visualization using Matplotlib, Seaborn,
- Supervised Machine Learning,
- Unsupervised Machine Learning,
- Bias-Variance Trade OFF,
- Ensemble Learning,
- Hyper Parameter Tunning

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Registration Link: - https://forms.gle/LsUzP8H5xXtqDJSM9

On-line Lecture Link: Join Zoom Meeting

https://us02web.zoom.us/j/89393130057?pwd=NHdJU3pSaHpyMmpmOE5LWnRhV3JSZz09

Meeting ID: 892 4059 5781

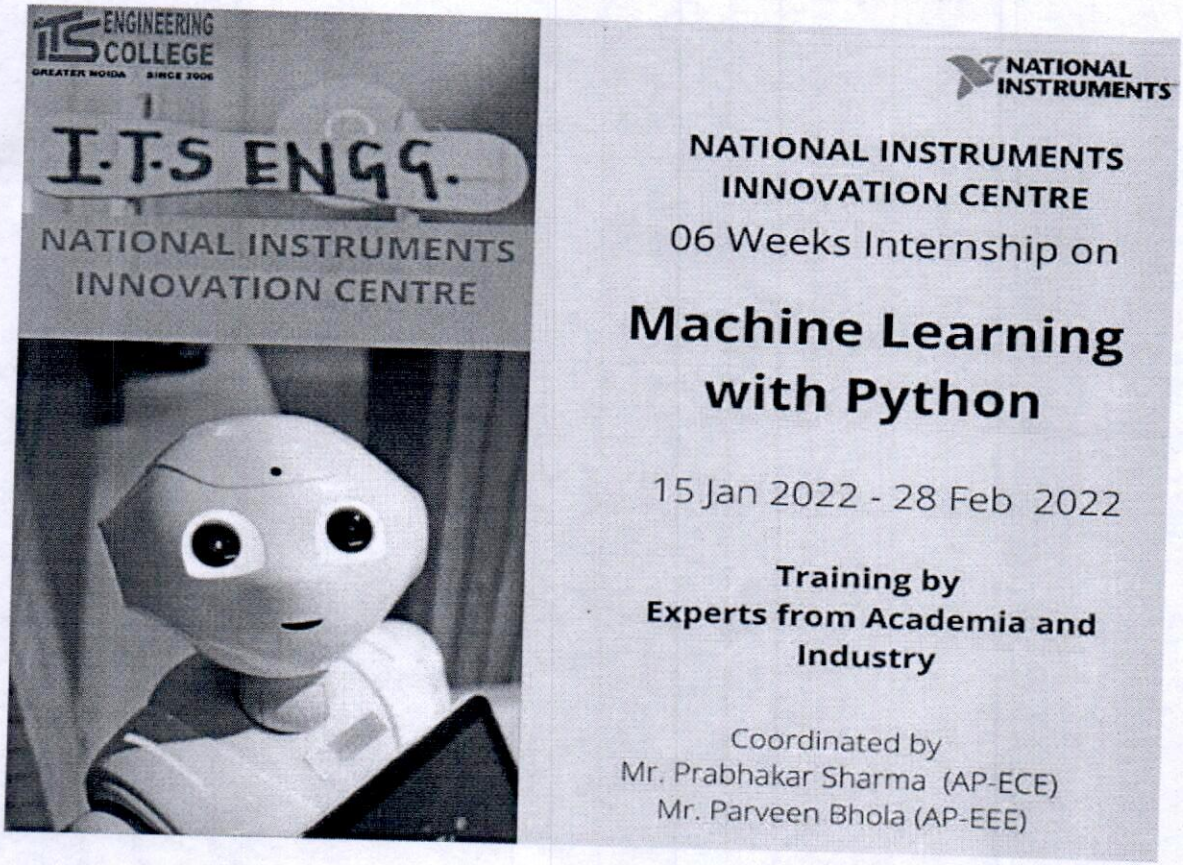
Passcode: 655845

No. of Students attended: 11

Faculty attended: 01

Timing: 6:30 PM to 8:00 PM

Template:



Coordinators
(Mr.Prabhakar Sharma)

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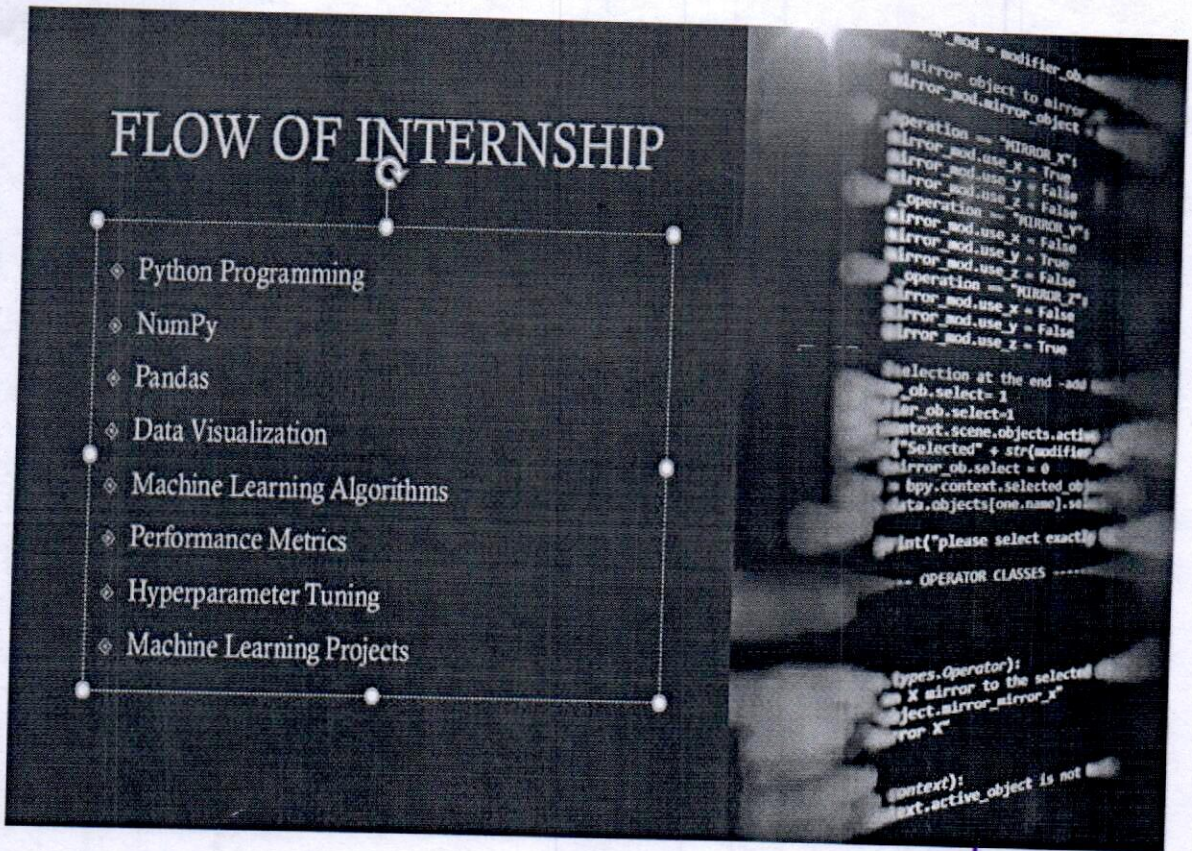
List of students:

S.No.	Participant Name	Ceritificate Number
1	ADEEB KHAN	NIIC/COE/SI/0322-ML001
2	ANUSHREE BHUI	NIIC/COE/SI/0322-ML002
3	GOVIND KUMAR JHA	NIIC/COE/SI/0322-ML003
4	MD ADIL HUSSAIN	NIIC/COE/SI/0322-ML004
5	MD ARKAM	NIIC/COE/SI/0322-ML005
6	MOHD MUDASSIR	NIIC/COE/SI/0322-ML006
7	AYUSH PATEL	NIIC/COE/SI/0322-ML007
8	PIYUSH BHARDWAJ	NIIC/COE/SI/0322-ML008
9	SACHIN KUMAR SINGH	NIIC/COE/SI/0322-ML009
10	SAUMYA TIWARI	NIIC/COE/SI/0322-ML010
11	SHIVAM RAJPOOT	NIIC/COE/SI/0322-ML011

Online Training Pictures:



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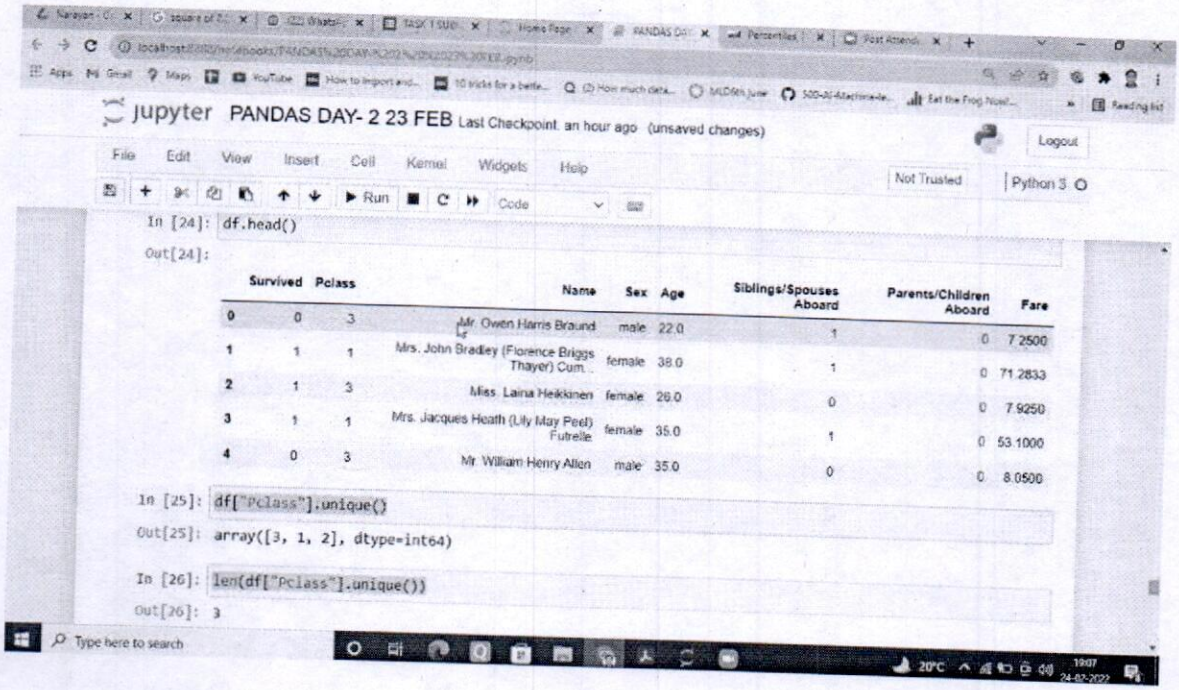
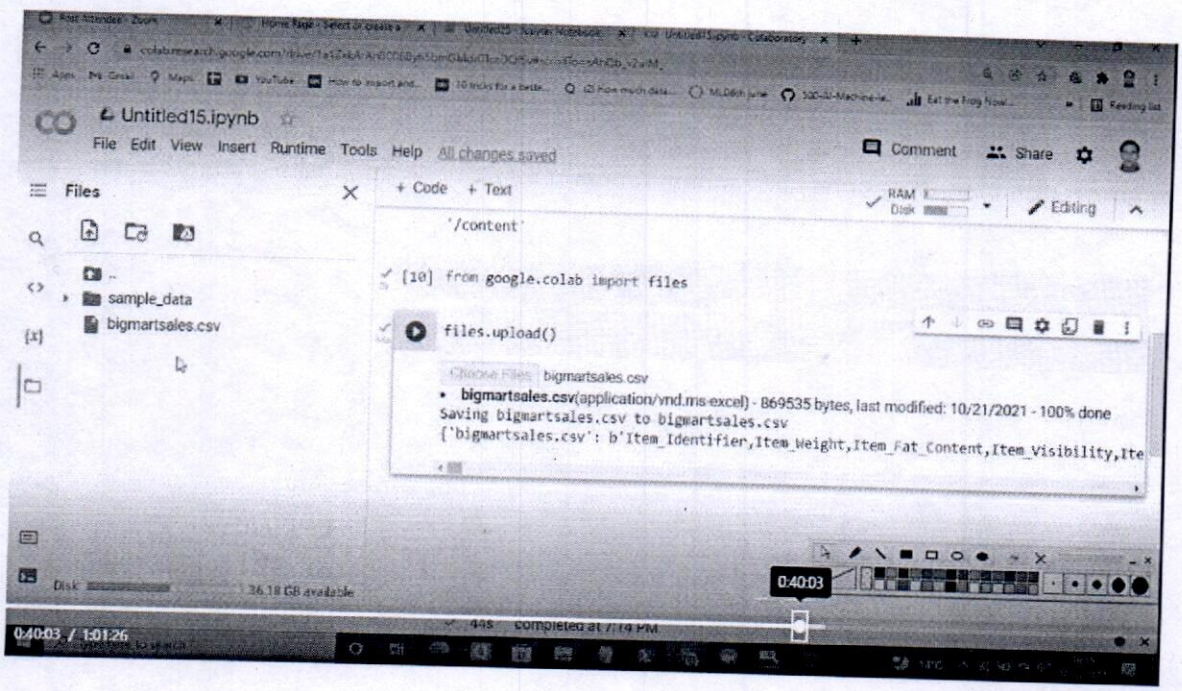


	Survived	Pclass	Name	Sex	Age	Siblings/Spouses Aboard	Parents/Children Aboard	Fare
0	0	3	Mr. Owen Harris Braund	male	22.0	1	0	7.2500
1	1	1	Mrs. John Bradley (Florence Briggs Thayer) Cum...	female	38.0	1	0	71.2833
2	1	3	Miss. Laina Heikkinen	female	26.0	0	0	7.9250
3	1	1	Mrs. Jacques Heath (Lily May Peel) Futrelle	female	35.0	1	0	53.1000
4	0	3	Mr. William Henry Allen	male	35.0	0	0	8.0500



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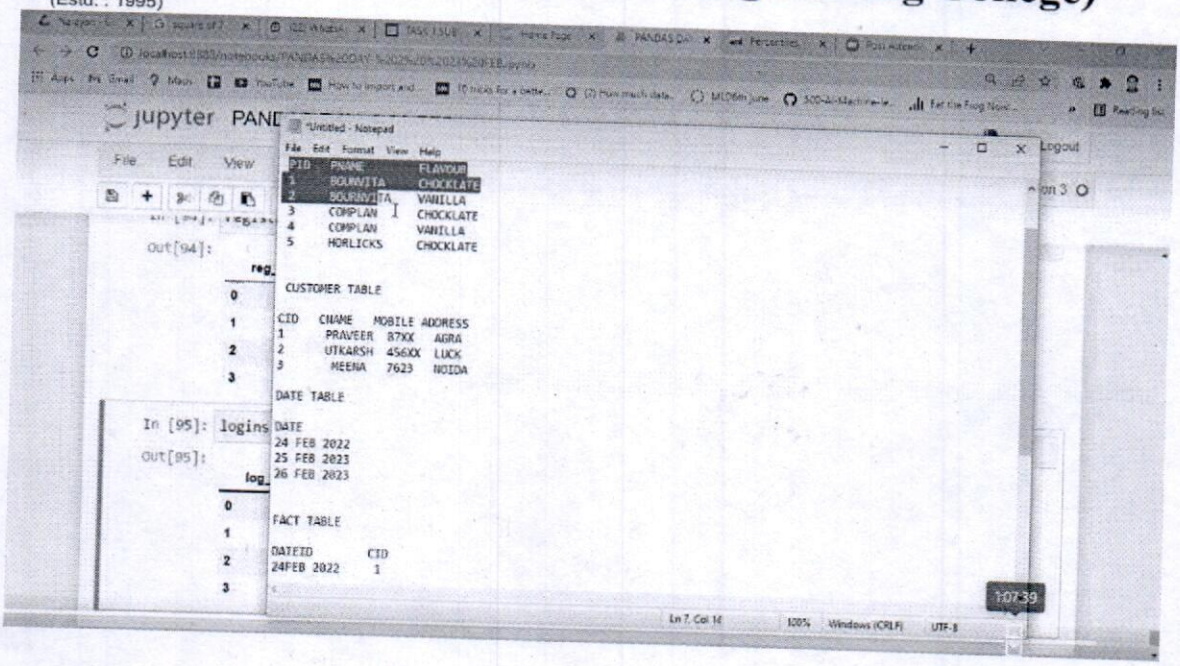

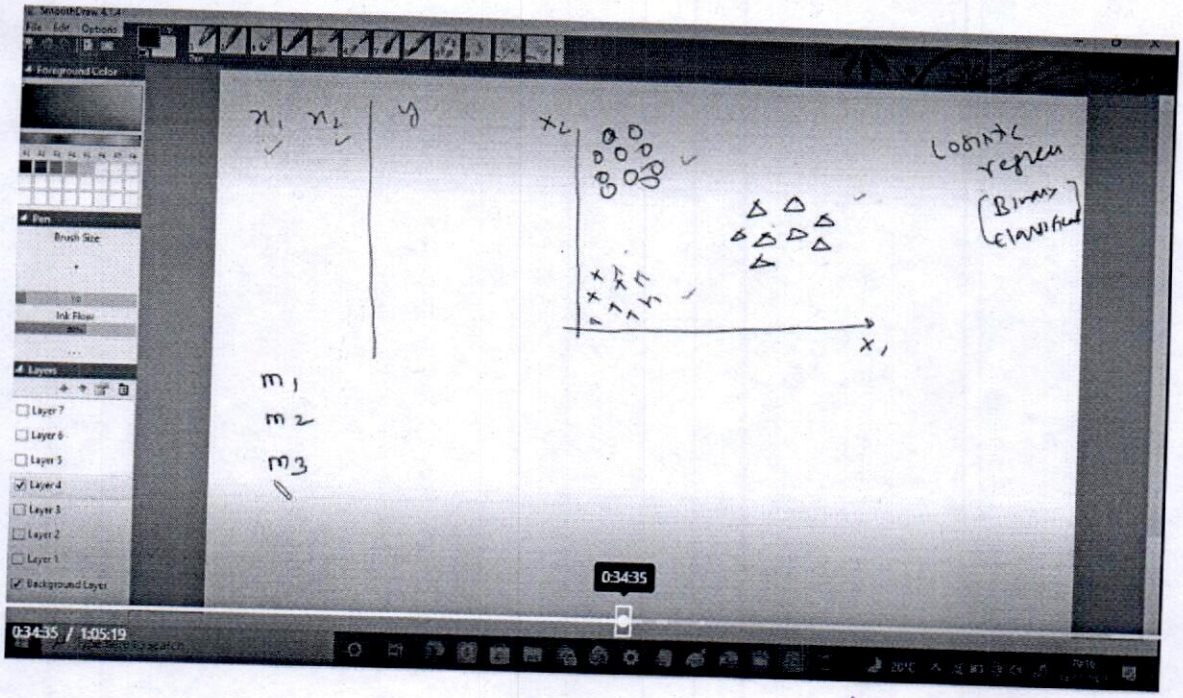

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Name of Event: Workshop on Hardware Design using HDL & FPGA

Date of Event: 10th December, 2021.

Time: 1:00- 4:30 PM.

Organized by: E.C.E Department, ITS Engineering College.& e-YANTRA

Event Coordinator: Mr. Prabhakar Sharma (Assistant Professor- ECE Department)

Report: One day Workshop on Hardware Design using HDL & FPGA is organized by Electronics & Communication Engineering department. Workshop began by felicitation of Mr. Vaibhava Mishra (Owner of Pine Training Academy- Training division of AUJUS Technology). Mr. Mishra explained about the history of VLSI and embedded system from 1960 onwards. He also explained the scope and importance of VLSI Technology in India and international level in various companies. He also explained the various topics of VLSI with clarification in workshop.

In Last he explained various training programs offered by pine academy on VLSI Technology with 100% placement assistant.

Event Objective:

1. To understand the scope and importance of VLSI Technology in current information technology scenario.

2. To understand various current topic on VLSI.

3. Awareness about various training programs on VLSI.

Program Outcome: Students gained information about various aspects of VLSI Technology.

Program attendance:

Students- 35 (2nd year, 3rd year and 4th year ECE)

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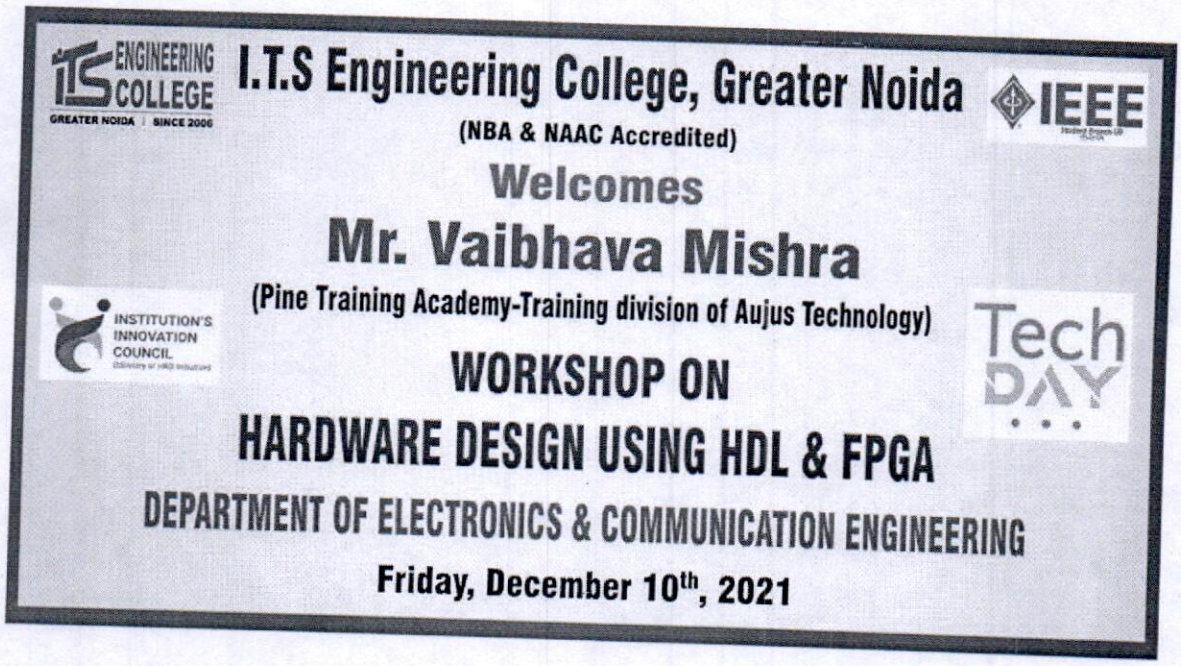
Department of Electronics and Communication

Teacher – 08 (ECE Faculties and Staff)

Faculty Coordinator
Prof. Prabhakar Sharma
(AP-ECE Department)



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Department of Electronics and Communication

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Name of Event: 6 Week online Internship on Machine Learning with python

Date of Event: 01 Nov' 21 – 12 Dec' 21

Organized by: National Instruments Innovation Centre, Department of ECE

Event Coordinator: Mr. Prabhakar Sharma (Assistant Professor- Department of Electronics & Communication Engineering) and Mr. Parveen Bhola (Assistant Professor- Department of Electrical & Electronics Engineering),

Objective: Online Internship on Machine Learning with Python.

Report:

The Department of Electronics and Communication Engineering of I.T.S Engineering College, Greater Noida, organized 6 Week online Internship on Machine Learning with Python Program. National Instruments Innovation Centre, Department of ECE started the 06-week internship on Machine Learning with Python on 1st November 2021. The internship started with on boarding of the candidates. The training was hosted by Mr. Praveer Saxena. Mr. Saxena first explained about the importance of machine learning and how its revolutionizing our lives. He also introduced different machine learning techniques and explained why Python is the preferred language for designing Machine Learning Solutions. He guided about how to install required software. In the last he discussed about the curriculum and projects to be done in internship.

This program is coordinated by Mr. Prabhakar Sharma (Assistant Professor- Department of ECE) & Mr. Parveen Bhola (Assistant Professor- Department of EEE)- ITS Engineering College-Greater Noida.

Outcomes:

During this Internship Program, the focus will be to train the interns in the field of Machine Learning as there is a huge demand for skilled Machine Learning /Artificial Intelligence Engineers. The interns will be trained on state of art Machine Learning Algorithms along with different optimization techniques. Besides receiving the training, the interns will have the opportunity to work on several Machine Learning projects covering classifications, regression and web scraping problems.

Course Details:

During this program following aspects will be covered

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- While Loop

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- Functions
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- List Comprehension
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Module 2: Data Analysis :NumPy and Pandas

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- What is EDA? Why it is a very important Step?
- Introduction to Data Visualization
- Hands on Matplotlib
- Hands on Seaborn

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·Different types of visualizations and their typical use cases

Module 4: Machine Learning

·Introduction to Machine Learning

·Supervised, Unsupervised and Semi supervised Machine Learning

·Data Pre-processing

·Regression vs classification

·Build your first machine learning Model: K Nearest Neighbour(KNN)

·Build your second machine learning Model: Naïve Bayes

·Regression ML Models

·Linear Regression and other regression models

·Evaluating Regression Models: Performance metrics

·Concept of Overfitting, Underfitting

·Bias Variance Trade-off

·Ensemble Learning

Program Outline:

- Python Programming, Data Analysis using Python, Exploratory Data Analysis, Data Visualization using Matplotlib, Seaborn,
- Supervised Machine Learning,
- Unsupervised Machine Learning,
- Bias-Variance Trade OFF,
- Ensemble Learning,
- Hyper Parameter Tunning

Registration Link: - https://forms.gle/LsUzP8H5xXtqDJSM9

Online Platform: Zoom

On-line Lecture Link: Join Zoom Meeting
https://us02web.zoom.us/j/89240595781?pwd=SlhhZGw2ZDYvdjZwSUU4MDVLMnJkZz09
Meeting ID: 892 4059 5781

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Passcode: 655845

No. of Students attended: 13

Faculty attended: 02

Timing: 6:30 PM to 7:45 PM

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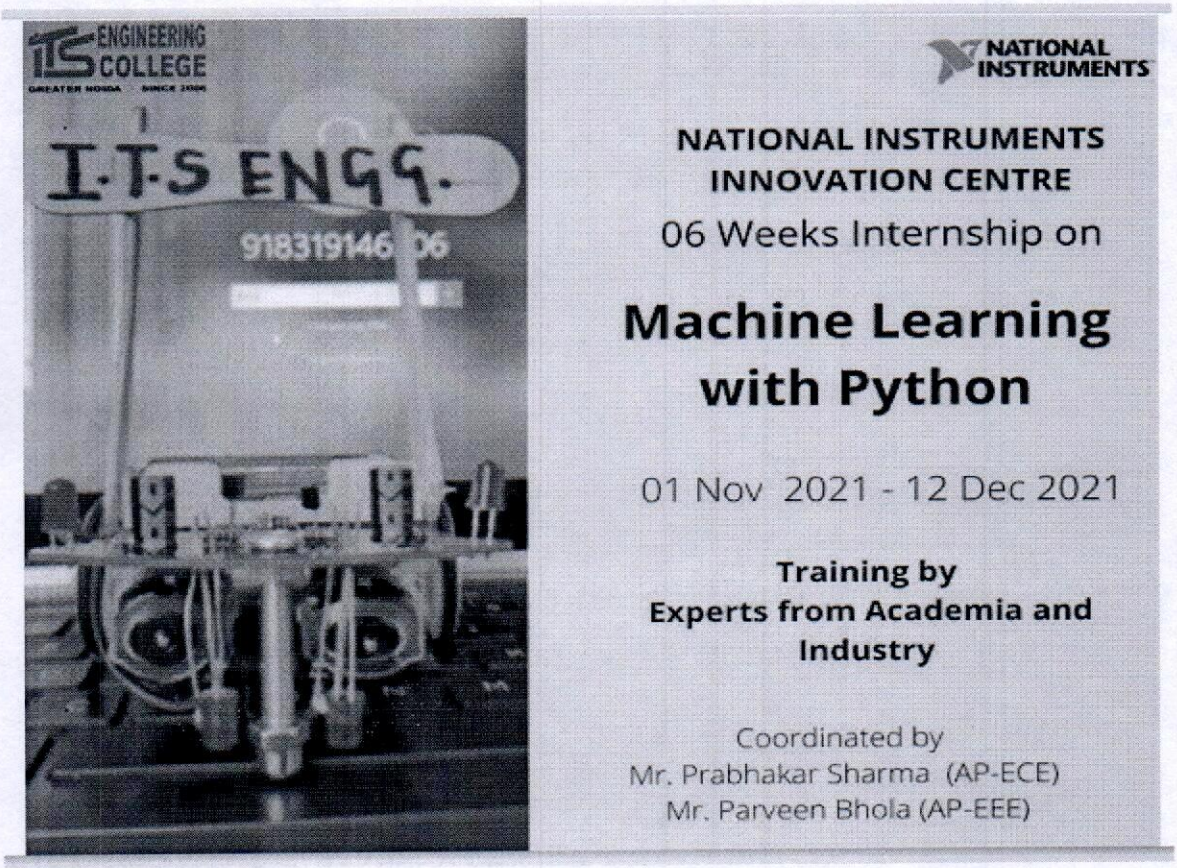

Coordinators
(Mr.Prabhakar Sharma)

(Mr. Parveen Bhola)

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ITS Engineering College
Greater Noida

List of students :

S.No.	Participant Name	Mail Id	Mobile No.
1	Abhay Purwar	abhaymp_ece18@its.edu.in	9169437769
2	Akanksha Mishra	mishraakanksha255@gmail.com	8429817442
3	Ankita pandey	9540ankita@gmail.com	9818639575
4	Anshit Malik	anshitmalik5833@gmail.com	7906167709
5	MD shahrukh Amber	Shahrukhambermk_ece18@its.edu.in	8083372242
6	Mohd Shakaib Ghazi	Mohdshakaibghazimrg_ece18@its.edu.in	7417122079
7	Musadiq Sadeeq	musadiqsadeeqece18@its.edu.in	7780838289
8	Prabhakar kumar	Prabhakarchaudhary93@gmail.com	7258039264
9	Pradumn Dubey	pradumndubeyvsd_ece18@its.edu.in	8707890871
10	Rakshit Tiwari	rakshittiwariat_ece18@its.edu.in	8383970859
11	Shiva Ashish	sshivaashish@gmail.com	7764006744
12	Soumen Hembram	soumenhembramsh_ece18@its.edu.in	9643914144
13	Vivek kumar	Vivekkumarss_ece18@its.edu.in	7340239533

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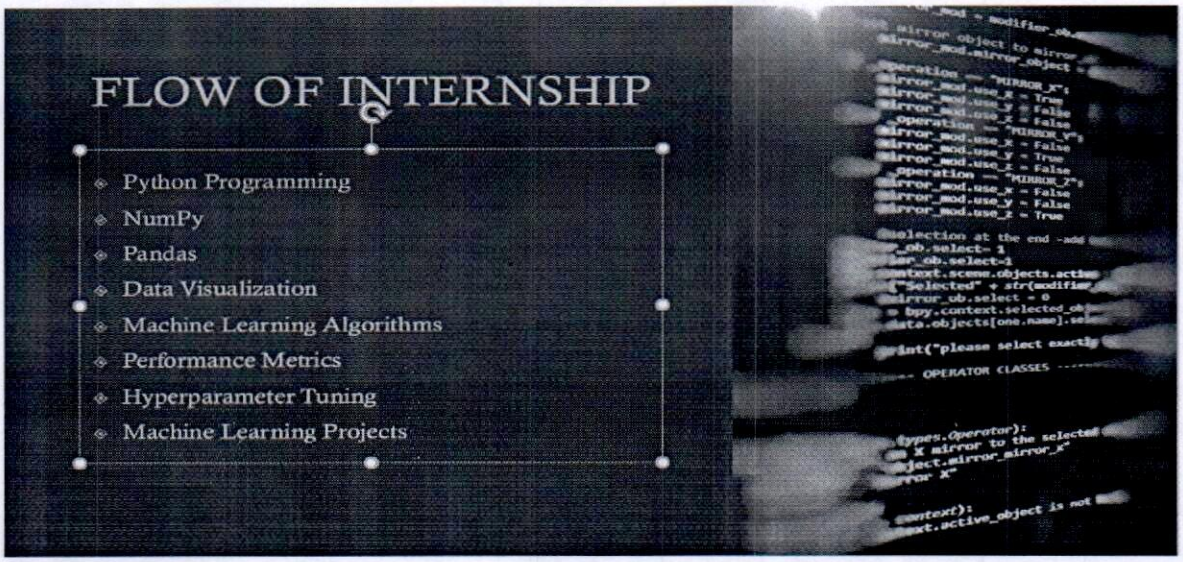
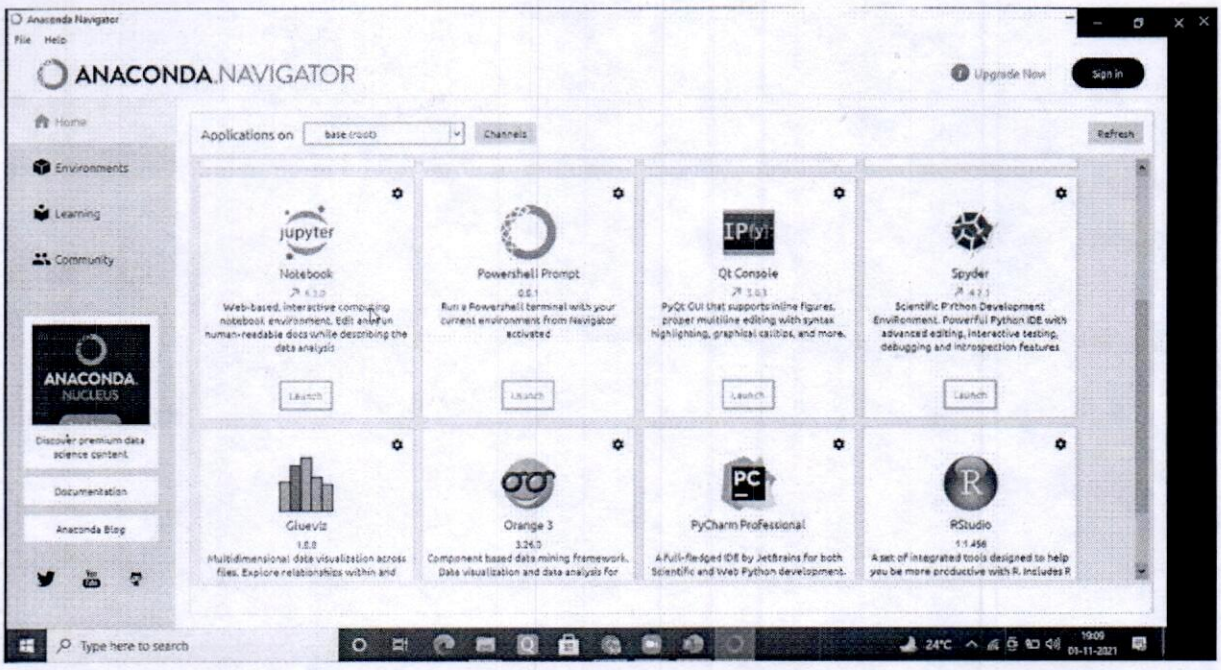
Online Training Pictures:





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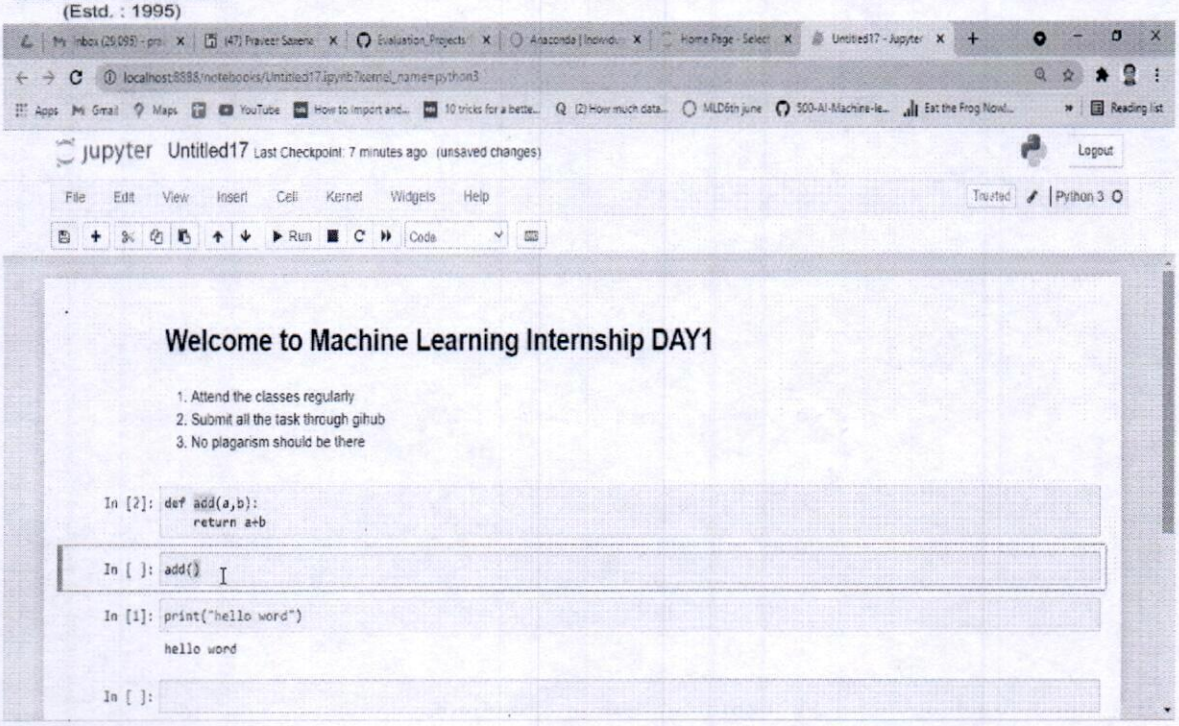

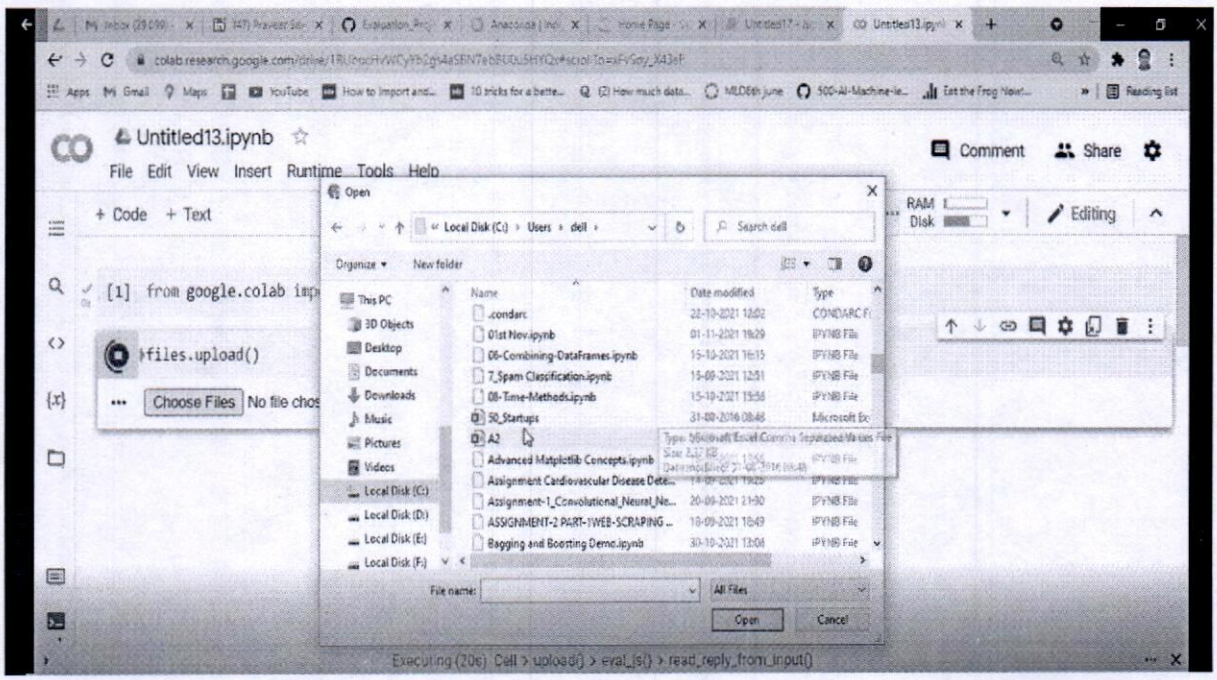

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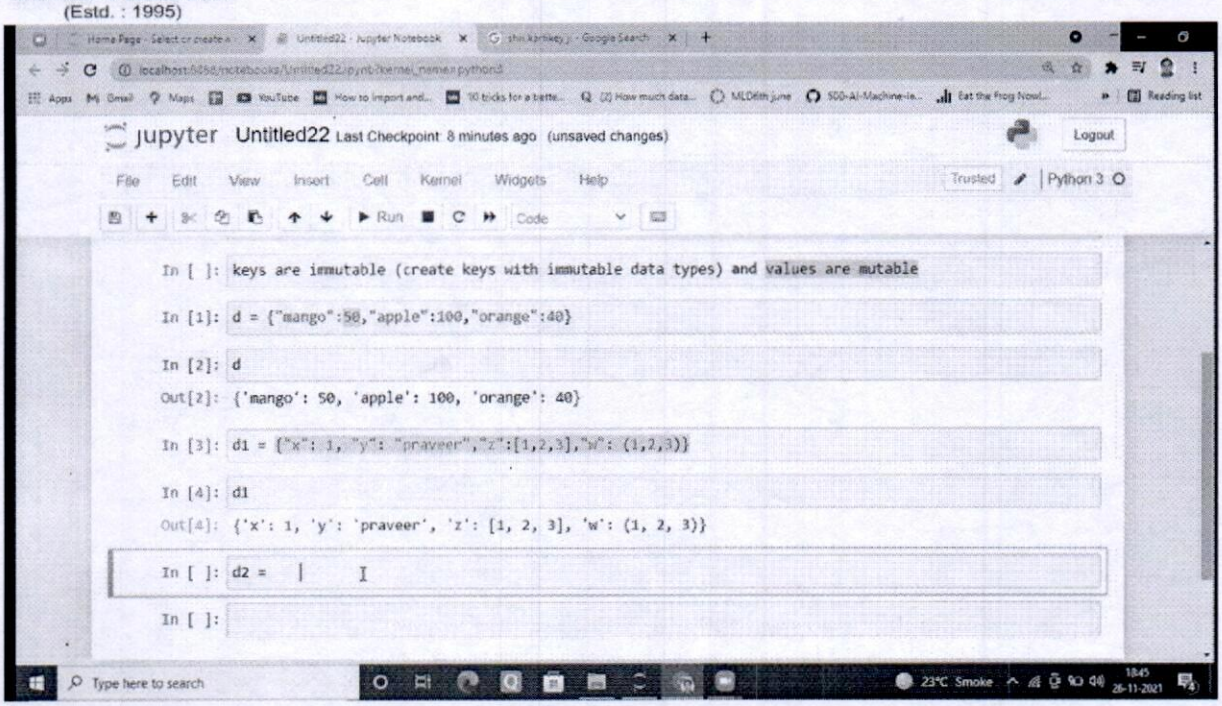

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Work Report

Name of Event: Expert Talk (Online Mode) on "**Automation in Power System Operation and Control** ".
Date of Event: 07th October, 2020.

Organized by: Rockwell Automation- Centre of Excellence, EEE Department, I T S Engineering College Greater Noida.

Event Coordinator: Mr. Rajiv Ranjan

Objective:

- To enhance the skill of students & faculty members in the field of **Automation in Power System Operation and Control.**

Report:

Rockwell Automation- Centre of Excellence, Department of Electrical & Electronics Engineering, I.T.S. Engineering College organized Expert Talk on Automation in **Power System Operation and Control** on **07th October, 2020.**. The talk was delivered by **Mr. Guru Sharan Singh, Assistant Professor, Electrical Engineering Department, Rajkiya Engineering College (REC), Banda U.P. (Government College).**. The event was started with welcome address by Prof. Upendra K. Agarwal, HOD, EEE department, I.T. S. Engineering College, Greater Noida..

Mr. Singh had discussed about the past, the present and the future of Automation in **Power System Operation and Control**. He explained that an electric power system is a network of electrical components deployed to supply, transfer, and use electric power. Power system operation and control is an important segment in electrical engineering which deals with the efficient, economical and reliable operation of different components of the power system to meet the continually changing load demand for active and reactive power.

Finally, the event coordinator, Mr. Rajiv Ranjan, Assistant Professor of EEE Department, ITS Engineering College, gave a Vote of Thanks to all participants and the guest.

This talk was very helpful to the students who want to make their career in Automation industry and the faculty members who are guiding the student's research & projects in automation.

Program Outcome:

- Students & Faculty members upgraded their knowledge in the field of Automation in power Industries.

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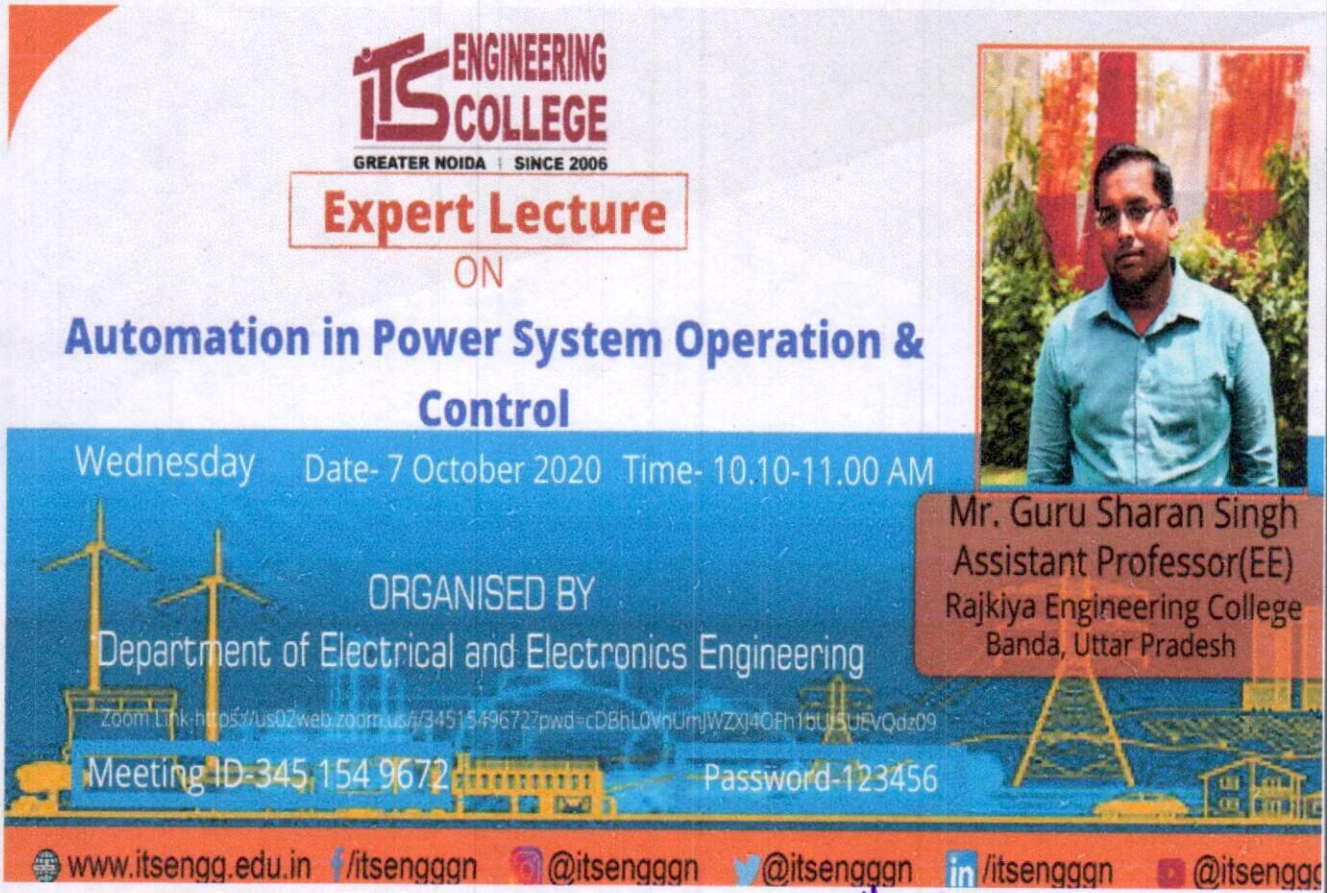
Scope of Improvement: To organize the workshop for long duration.

No. of participants: 32 students and 7 faculty members.

Coordinator:

(Rajiv Ranjan)
Asst. Prof.
EEE Dept.



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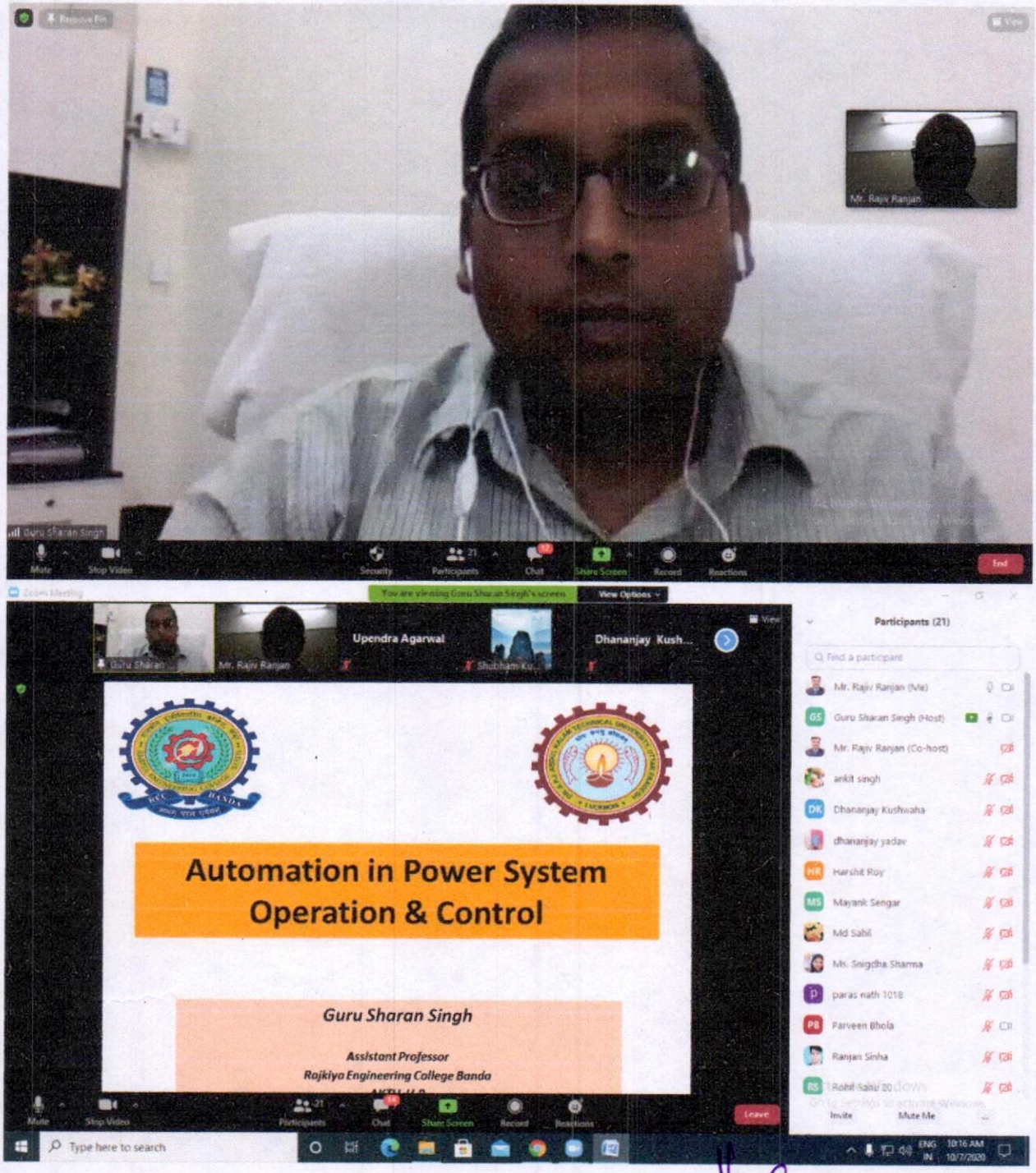

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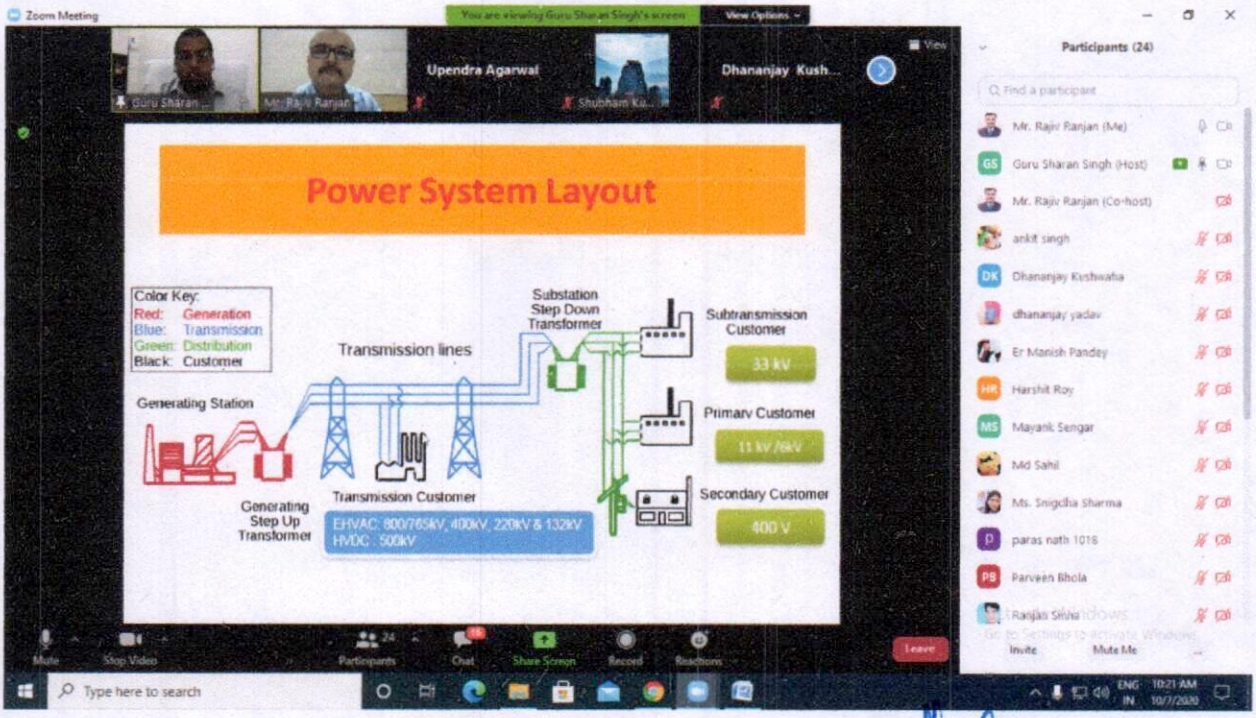
3/2



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Webinar Event

Title: Industrial IoT Application
Date: May 30, 2020
Organized by: Computer Science and Engineering Department, ITS Engineering College, Greater Noida
Time: 10: 00 AM- 11:00 AM
Centre of Excellence: SYSCOM
Platform: Zoom

Objective: The main objective of this webinar isto provide the conceptual knowledge on IoT.

Report:

A Webinar on "Industrial IoT Applications" was conducted by the Syscom Centre of Excellence, Department of Computer Science and Engineering, ITS Engineering College on May 30, 2020.

The speaker Mr. KartikRastogi, Assistant Professor, Deptt. Of CSE and Coordinator Syscom COE explained key industrial IOT applications such as autonomous vehicle, power management, quality control and wearables. The webinar started with important of Inter of things in industry and its wide variety of applications including home automation, industry smart city and many more. The key components used in designing an IOT platform were also discussed. Later an overview of development environment like Arduino Uno, Raspberry Pi and associated IDE was give.

The webinar was organized for the 2nd and 3rd year students of CSE. The HOD-CSE congratulated the Syscom COE coordinator for taking such an initiative and making students aware about its importance and applications.

Program Outcome: The participants have gained extensive details of subject knowledge along with practical knowledge. Practical examples enrich their concept on IoT.

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5.1.3 → ICT/Computing skills

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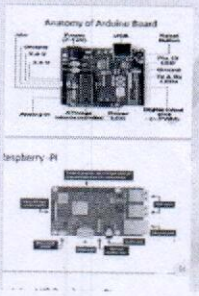
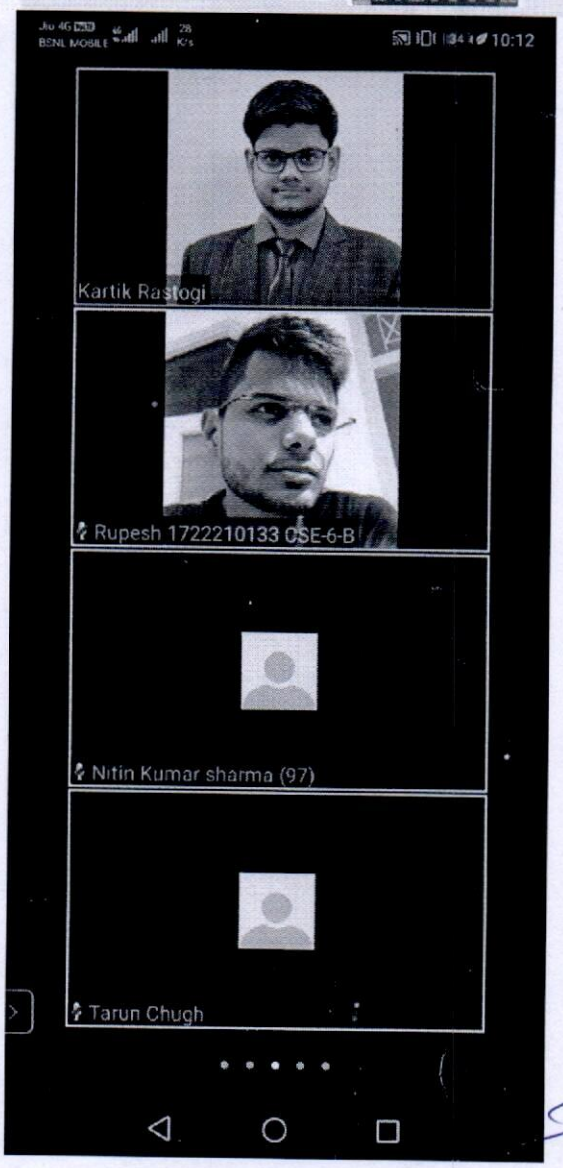
Live Webinar Glimpses

Webinar on Internet of Things

Held on 30th May,2020 at 10 AM

SPEAKER
Mr. Kartik Rastogi
(Asst.Professor CSE Dept.)





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S.NO	ROLLNO	NAME	SECTION
1	1722210061	BIKI PRASAD	A
2	1722210126	RAVI KUMAR VERMA	A
3	1722210067	GUSAIN SUBHAM	A
4	1722210149	SHAHIL KUMAR PRAJAPATI	A
5	1722210065	DEEPANSHU MISHRA	A
6	1722210078	JYOTI	B
7	1722210043	ANSHI SINGH	B
8	1722210090	MD AZHARUDDIN ANSARI	B
9	1722210138	SAIF QURAISHI	B
10	1722210025	AMANDEEP PRAJAPATI	B
11	1722210100	NEERAJ CHAUHAN	B
12	1722210146	SATYAM MANI TRIPATHI	B
13	1722210168	SUBODH KUMAR CHAUHAN	B
14	1722210122	RAHUL PRASAD	B
15	1722210119	PURNIMA	B
16	1622210033	ASHWANI SHARMA	C
17	1722210072	ISHIKA RANJAN	C
18	1722210063	CHAS CHACKO	C
19	1722210124	RAJESH KUMAR	C
20	1722210022	AMAN KASHYAP	C
21	1722210110	PAYSHVI GHODWALL	C
22	1722210060	BHAWANA GARG	C
23	1722210167	SRIPARNA MANDAL	C
24	1722210086	LOVEE SAXENA	C
25	1722210054	ASHIUTOSH SHARMA	C
26	1722210052	ASHISH KUMAR	C

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Name of Event: Virtual Automation Based Online Summer Internship Program

Date of Event: 15st May to 30th June 2020,

Organized by: ECE Department at NI Innovation Center.

Event Coordinator: Mr. Nitesh Pradhan.

Objective: 45 days Virtual Automation Based Online Summer Internship Program .

Report: The Department of Electronics and Communication Engineering of I.T.S Engineering College, Greater Noida, organized 45 days Virtual Automation Based Online Summer Internship Program. This Internship Program was coordinated and conducted by Mr. Nitesh Pradhan (Coordinator of NI Innovation Center) 15st May to 30th June 2020, . The program was based on LabVIEW, Multisim, myDAQ, my Rio and other toolkits of National instruments. There were **20 students** from ***ITS Engg College Greater Noida***.

Outcomes:

- Participants learn about LabVIEW and Arduino SimullED Software with mydaq, myRIo and Acquire knowledge.
- Designed more than 1000 program during internship.
- Designed various simulated projects and real time project
- Students completed CLAD exam-based question bank series. That is very helpful for CLAD exam.
- Two student cleared CLAD exam
  1. Ashish Kumar 2nd year ECE
  2. Sameer 3rd year ECE

Scope of Improvement:

- More advance Level workshop/ Internship Program can be organized every year

No. of Students attended: 22

Trainer & Coordinators
(Nitesh Pradhan)

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List of students

S.no.	Name of Student	Mail Id
1	MITHILESH KUMAR	mithileshkumarlr_ece17@its.edu.in
2	Apurav Gupta	apurav9818@gmail.com
3	Aashish Singh	aashishsinghjs_ece17@its.edu.in
4	Yashraj Jaiswal	yashraj.jaiswal10@gmail.com
5	ALAN JACOB	alancoursesonly@gmail.com
6	Uday Sharma	udaysharmaniit12345@gmail.com
7	Pavan Kumar	pavankumarrr_ece17@its.edu.in
8	Ameya Vikrama	ameyavikrama777@gmail.com
9	Suraj kumar gupta	surajkumar1379gupta@gmail.com
10	Bhanu Pratap Singh	bpsingh0440@gmail.com
11	Ankit Kumar Srivastava	Ankitkr.srivastavavks_ece17@its.edu.in
12	Nishant Kumar	nishantkumarss_ece17@its.edu.in
13	KAUSHIK SARKAR	Kaushiksarkar938@gmail.com
14	Raghav Saxena	raghavsaxena91@gmail.com
15	Pooja kumari	Poojakumarijd_cse17@its.edu.in
16	Syed Saleem Mushtaq Ahmed Khadri	ssmakhadra@gmail.com
17	Ravi bhushan	ravibhusharp_ece17@its.edu.in
18	Pankaj Singh	pankajsinghrs_ece17@its.edu.in
19	Prashant kumar rai	Prashantkrrairr_ece17@its.edu.in
20	Mohd Faizan Siddiqui	mohdfaizansiddiquiaa_cse17@its.edu.in
21	Ashish Kumar	ashishkuma09@gmail.com
22	Sameer	sameern_ece17@its.edu.in

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Work Report

Name of Event: Two Days Online Short Term Training Program on "PLC & SCADA"
Date of Event May 14-15, 2020.
Organized by: Rockwell Automation- Centre of Excellence, EEE Department, I.T.S Engineering College Greater Noida

Event Coordinator: Mr. Rajiv Ranjan
Objective:

- To sharpen the skill of students & faculty members in the field of PLC & SCADA.

Report:
Rockwell Automation- Centre of Excellence, Department of Electrical & Electronics Engineering, I.T.S. Engineering College organized Two Days **Online Short Term Training Program on "PLC & SCADA" on May 14-15, 2020** which was attended by 38 students and 7 faculty members. The event was started by welcome to Industry **Expert - Er. Manish Dubey, Automation Expert, Sofcon India Pvt. Ltd.** by Prof. Upendra K. Agarwal, HOD, EEE department, I.T. S. Engineering College, Greater Noida.

On the first day, Mr. Dubey explained about programmable logic controller (PLC) or programmable controller. PLC controller is an industrial digital computer which has been ruggedized and adapted for the control of manufacturing processes, such as assembly lines, or robotic devices, or any activity that requires high reliability, ease of programming and process fault diagnosis. He explained the Basic concepts of Relay, Switches and Digital Circuits, PLC Hardware Components, PLC Programming, RLL and process control. He guided and motivated the students by sharing his experiences with students.

On the second day, Mr. Dubey provided online training on Supervisory control and data acquisition (SCADA). SCADA is a control system architecture comprising computers, networked data communications and graphical user interfaces (GUI) for high-level process supervisory management, while also comprising other peripheral devices like programmable logic controllers (PLC) and discrete proportional-integral-derivative (PID) controllers to interface with process plant or machinery. The use of SCADA has been considered also for management and operations of project-driven-process in construction. Students learnt about Memory Tag, Animation Dialog Box, PLC & SCADA Interface and Human Machine Interface.

This training was very helpful to the students for making PLC-SCADA based project and faculty members who are guiding the student's projects in automation.

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Finally, Mr. Rajiv Ranjan, Assistant Professor of EEE Department, ITS Engineering College, gave a Vote of Thanks to our Guest and participants..

Program Outcome:

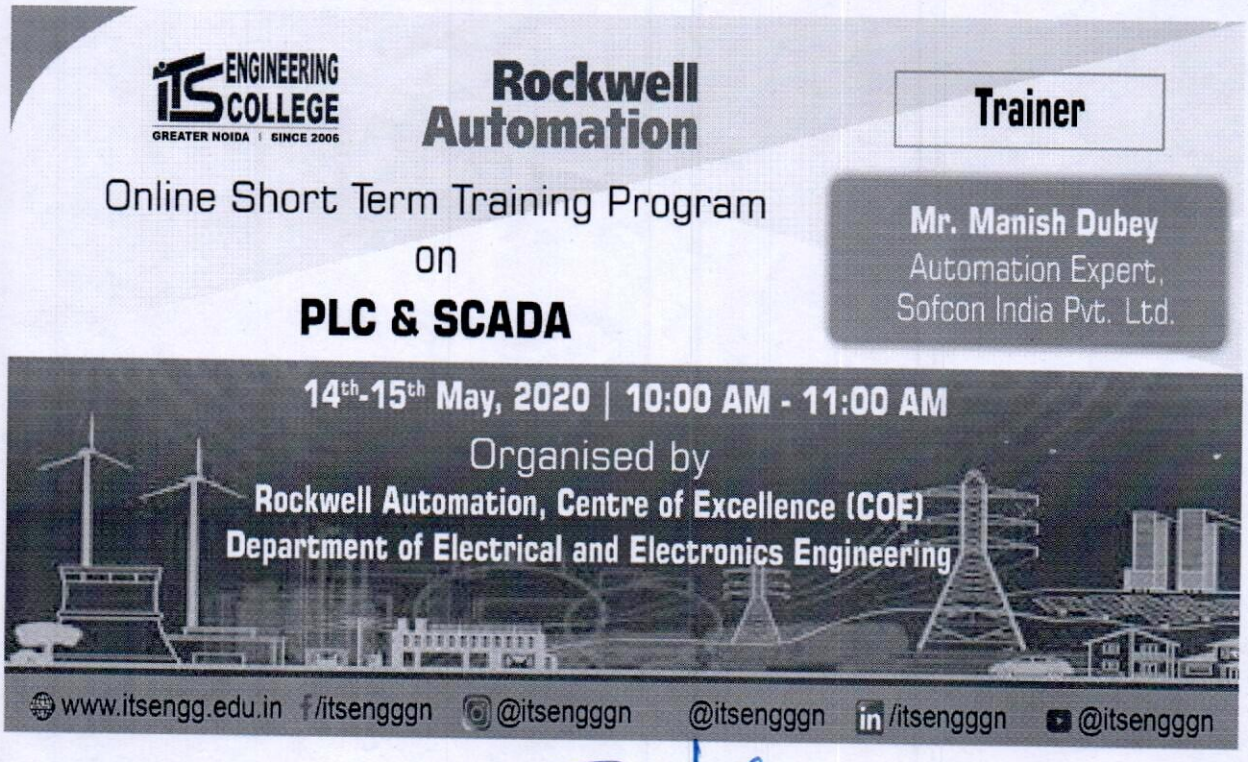
Students & Faculty members upgraded their knowledge in the field of PLC, SCADA & HMI

Scope of Improvement: To organize the workshop for long duration.

No. of participants: 38 students and 7 faculty members.

Coordinator:

(Rajiv Ranjan)
Asst. Prof.
EEE Dept.



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Name of Event:
2DaysHardware Integration with SensorsOnline Workshop

Date of Event:
4th& 5th April 2020

Organized by:
ECE Department at NI Innovation Center, COE.

Event Coordinator:
Mr. Nitesh Pradhan

Objective:
2 DaysOnline Workshop onHardware Integration with SensorsUsing NI myRIO and Sensor kit for2nd&3rdyear ECEstudent to learn about function of RIO and FPGA Based Programming

Report: The Department of Electronics and Communication Engineering of I.T.S Engineering college, Greater Noida, organized 2 daysonline workshop on NI my RIOby Mr. Nitesh Pradhan (Certified LabVIEW Trainer) at NI Innovation Center, Center of Excellence on4th & 5th April 2020. The workshop was based on NI myRIO, mechatronics kit & Sensor kit. Student work on standalone RIO, and learn how to designing, developing, and prototyping a real-time (RT) application that handles communication between the RT target and a host computer using the LabVIEW Real-Time Module. After attending this course, you will be able to determine if an RT solution is appropriate for a given problem. There were 18 students attended the Workshop from ECE Department.

Outcomes:

After attending this course, participant able to:

- Design Embedded platform.
- Convert and Write FPGA target-based code;
- If student will practicemore they will get the job in this filed

Coordinators
(Nitesh Pradhan)

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No. of Student attended: 18

S. No.	Participant name	Year
1	MITHILESH KUMAR	3rd year
2	ALAN JACOB	3rd year
3	Pavan Kumar	3rd year
4	Pankaj Singh	3rd year
5	KAUSHIK SARKAR	3rd year
6	Nishant Kumar	3rd year
7	Tanuj Saini	4th year
8	Yashraj Jaiswal	3rd year
9	NAMAN GARG	2nd Year
10	NIKITA PANDEY	2nd Year
11	OM GUPTA	2nd Year
12	PRABHAKAR	2nd Year
13	UDAY SHARMA	3rd year
14	VIKAS KUMAR	4th year
15	SWEETA PAL SINGH	2nd Year
16	MOHD ASHRAF	2nd Year

Workshop Plan

Hardware integration with sensors				
Workshop / Training Plan				
Day/ Time	9:10 to 11:00	11.10 to 12.30	13:30 to 15 :00	15.10 to 16:50
Day 1	Introduction about LabVIEW	NI myRIO	Testing	Circuit design
Day 2	Sensor study	Connection	Integration	Programming

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DEPARTMENTOF EEE

46, Knowledge Park-III, Greater Noida Distt. GautamBudh Nagar (U.P.)

LECTURE PLAN AND SYLLABUS OUTLINE

Value Added Certification Course

on

"Solar Technology"

(14 March to 15 May 2020)

For

EEE Students

Resource Person

Snigdha Sharma

(Assistant Professor – EEE)

Director
ITS Engineering College
Greater Noida

Introduction about the Course

About the Course: Highly efficient solar modules developed by using various photovoltaic technologies. This course will provide a platform to explore major photovoltaic technologies in the current market. Also it will focus on various technologies, which have the potential to be the major players for different applications in the future. This course will cover all aspects of photovoltaic including energy conversion, technologies and systems.

Why the Course is important to be part of this program: Solar power is the crucial future production method in the move to clean energy, and as economies of scale drive prices down; its importance will only increase. Solar energy has the least negative impact on the environment compared to any other energy source. It does not produce greenhouse gases and does not pollute the water. Although most active solar panels give average 18% efficiency but new advances have dramatically increased that number.

Course Objective& Outcomes:

- To develop a comprehensive technological understanding in solar PV system components.
- To provide in-depth understanding of design parameters to help design and simulate the performance of a solar PV power plant.
- Develop understanding on the PV plant design and select suitable technologies.
- Plan project implementation, operation and maintenance.
- Carry out techno-economic-environmental performance evaluation of a solar PV power plant.

Pre-requisites for Course:

- Familiarity with Basics of Solar energy
- Basic understanding about power sector
- Analytical skills to assess problems and find solution using technologies

Pedagogy:

- A combination of class-room interactions, assignment, tutorial, practical and case study

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Course Outline of Value Added Certification on "Solar Technology"

Lecture No.	Topic
Lecture 1	Introduction to solar power systems
Lecture 2	Determining energy needs and sizing a PV system
Lecture 3	Global solar PV deployment status, Solar policy in India – rooftop and ground mounted cost and subsidy on solar system
Lecture 4	The growth of photovoltaic markets
Lecture 5	Review of solar radiation components, radiation on tilted surface
Assignment 1	
Lecture 6	Following solar energy from source to panel
Lecture 7	PV sizing and output under different conditions
Lecture 8	Types of PV systems: Design considerations for standalone plant
Lecture 9	Design considerations for grid connected plant
Lecture 10	Rooftop PV plant: design consideration
Assignment 2	
Lecture 11	Types of mounting structures, standards
Lecture 12	Ground mounted PV plant: Array design and PV panel mounting, electrical layout, standards
Lecture 13	Performance parameter: Losses in solar PV power plant, Yield
Lecture 14	Capacity Utilization Factor and Performance Ratio
Lecture 15	PV module technology: c-Si, Thin-film technology
Lecture 16	Response to weather parameters
Lecture 17	Commercial module ratings, standards
Assignment 3	
Lecture 18	Inverter technologies
Lecture 19	Types of inverters, inverter selection
Lecture 20	Performance, power quality
Lecture 21	Module mounting structure, tracking system
Lecture 22	Net Metering
Lecture 23	Introduction to battery
Assignment 4	
Lecture 24	Battery technologies
Lecture 25	Standalone system and utility scale storage
Lecture 26	Solar radiation in an area
Lecture 27	Operating cost of home appliances

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Lecture 28	Preliminary site survey and feasibility study
Lecture 29	Solar home system design
Assignment 5	
Lecture 30	Monitoring of PV plant
Lecture 31	Best practices in operation, cleaning and maintenance
Lecture 32	Project
Seminar/ Expert talk / Industrial Visit	
Lecture 33	Assessment Test

Assessment methodology:

Quiz / Assignment Contribution	Test Contribution	Certification
40%	60%	Yes if Score □ 60
		No if Score □ 60 , Retest

Reference Books / Suggested Readings:

Text Books:

1. Winter C.J., Sizmann R.L., Vant-Hull L.L. (1991). Solar Power Plants: Fundamentals, Technology, Systems, Economics. Springer. ISBN: 3540188975.
2. Jordan P.G. (2013). Solar Energy Markets: An Analysis of the Global Solar Industry. Academic Press. ISBN: 0123977681.

Reference Books:

1. Islam M.R., Rahman F., Xu W. (2016). Advances in Solar Photovoltaic Power Plants. Springer. ISBN: 3662505193.
2. Sukhatme S.P. (2008). Solar Energy: Principles of Thermal Collection and Storage. Tata McGraw-Hill Education. ISBN: 0070260648. John Walkenbach, Microsoft Excel 2016 Bible, Wiley Publications, 2015

Useful Websites:

1. http://solarreviews.com/
2. http://solarelectricpower.org/
3. https://www.energy.gov/
4. https://www.solarenergy.org/
5. http://geostellar.com/
6. https://www.renewableenergyworld.com/
7. https://www.greentechmedia.com/

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8. https://www.seia.org/
9. https://www.solarpowerworldonline.com/
10. https://solarmagazine.com/
11. https://ases.org/

Learning from course related to Knowledge:

Ability to pertain knowledge about planning, project implementation and operation of solar PV power generation.

Learning from course related to Skills:

Ability to PV plant design and select suitable technologies and carry out techno-economic-environmental performance evaluation of a solar PV power plant.

.Student Attended the Course

Sr. No.	Roll No.	Student Name	21	1902220210002	Amir Muzafar Mir
1.	1822221001	Abhishek Kumar	22	1902220210003	Ankit Singh
2.	1822221003	Anurag Rishi	23	1902220210004	Dhananjay Yadav
3.	1822221004	Arjun Kumar	24	1902220210006	Imran Fayaz
4.	1822221005	Arun Kumar Verma	25	1902220210007	Manish Pandey
5.	1822221006	Asif Reja	26	1902220210008	Mayank Sengar
6.	1822221007	Ashutosh Pratap Singh	27	1902220210009	Md. Sahil Ansari
7.	1822221009	Dhananjay Kushwaha	28	1902220210010	Mohammad Faisal Wani
8.	1822221010	Harshit	29	1902220210011	Sachin Kumar
9.	1822221011	Himanshu Yadav	30	1902220210012	Shivendra Singh
10.	1822221014	Manish Kumar	31	1902220210013	Shubham Kumar
11.	1822221015	Md Danish	32	1902220210014	Sudheer Mishra
12.	1822221016	Mohammad Shadab	33	1902220210015	Tarish Khan
13.	1822221017	Nitendra Kumar	34	2002220219001	Md. Samiruddin Ansari
14.	1822221018	Paras Nath Yadav	35	1822221019	Ravi Kumar
15.	1822221019	Ravi Kumar			
16.	1822221020	Rohit Sahu			
17.	1822221021	Rohit Sahu			
18.	1822221022	Sadhana Singh			
19.	1822221023	Salman			
20.	1902220210001	Abhishek Kumar			

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Solar Energy Add Course Attendance

Sr. No.	Roll No.	Student Name	MAR 17	MAR 18	MAR 19	MAR 20	MAR 23	MAR 24	MAR 25	MAR 26	MAR 27	MAR 30	MAR 31	APR 2	APR 3	APR 9	APR 10	APR 16	APR 17	APR 23	APR 24	APR 29	APR 30	MAY 1	MAY 2	MAY 7	MAY 8	MAY 14	MAY 15	MAY 21	MAY 22	MAY 26	MAY 27	MAY 28	MAY 29
1.	1822221001	Abhishek Kumar		P		P		P		P	P						P		P			P		P		P			P		P			P	
2.	1822221003	Anurag Rishi	P	P	P	P			P		P			P	P	P					P	P	P				P			P		P			P
3.	1822221004	Arjun Kumar		P	P		P			P	P	P		P				P	P	P		P		P	P				P		P		P		
4.	1822221005	Arun Kumar Verma	P	P	.	P			P				P		P	P	P					P	P	P		P		P	P	P		P		P	
5.	1822221006	Asif Reja		P	P	P	P				P	P	P	P			P		P	P	P		P		P		P		P	P			P		P
6.	1822221007	Ashutosh Pratap Singh	P	P		P	P	P							P	P	P	P			P	P		P					P	P	P			P	
7.	1822221009	Dhananjay Kushwaha			P	P		P		P	P	P	P	P			P	P	P	P		P	P	P	P	P	P					P			
8.	1822221010	Harshit	P	P	P		P	P			P		P	P	P	P	P	P			P		P		P		P	P		P		P	P	P	P
9.	1822221011	Himanshu Yadav			P				P			P	P	P	P				P	P	P	P	P	P	P	P		P			P		P		
10.	1822221014	Manish Kumar	P	P		P	P	P		P	P	P	P	P		P		P		P	P	P	P	P	P	P	P	P		P	P	P			
11.	1822221015	Md Danish			P	P		P	P					P			P		P	P		P	P		P		P	P			P	P	P	P	P
12.	1822221016	Mohammad Shadab	P	P		P		P	P	P	P		P	P	P	P	P				P			P		P		P	P	P	P		P		P
13.	1822221017	Nitendra Kumar	P		P	P		P	P			P			P		P	P	P		P		P	P		P					P			P	P
14.	1822221018	Paras Nath Yadav	P								P	P		P		P		P	P	P		P			P		P			P		P			
15.	1822221019	Ravi Kumar		P	P	P	P	P	P		P		P	P	P		P		P	P								P	P	P	P	P		P	P
16.	1822221020	Rohit Sahu	P				P		P		P	P					P			P		P	P	P	P	P	P	P		P		P	P	P	P
17.	1822221021	Rohit Sahu			P	P			P				P	P		P	P	P	P		P		P		P		P	P		P		P	P	P	
18.	1822221022	Sadhana Singh	P	P			P	P			P	P	P		P	P	P	P	P		P		P			P		P		P	P				
19.	1822221023	Salman	P		P			P	P		P	P		P	P	P		P	P			P		P		P		P	P			P		P	P
20.	1902220210001	Abhishek Kumar		P		P	P	P	P			P		P	P	P		P		P		P		P	P	P	P			P		P	P		
21	1902220210002	Amir Muzafar Mir	P		P	P	P		P		P		P	P	P		P				P		P	P				P							
22	1902220210003	Ankit Singh	P		P		P	P	P		P	P		P		P	P	P	P		P	P	P		P	P	P		P	P	P	P	P		P
23	1902220210004	Dhananjay Yadav		P		P	P		P		P		P		P				P							P	P		P		P				
24	1902220210006	Imran Fayaz	P		P	P	P	P			P			P	P	P	P			P		P	P	P	P	P			P	P	P	P		P	
25	1902220210007	Manish Pandey			P		P	P	P			P	P				P	P	P		P		P		P	P	P	P	P			P	P	P
26	1902220210008	Mayank Sengar	P		P	P	P				P	P		P	P		P	P	P			P	P		P			P	P	P		P		P	P
27	1902220210009	Md. Sahil Ansari			P		P	P	P		P	P	P	P	P	P		P	P			P	P		P		P	P			P		P		
28	1902220210010	Mohammad Faisal Wani	P		P	P	P	P			P	P		P	P	P		P	P		P	P		P		P	P			P				P
29	1902220210011	Sachin Kumar		P		P	P	P	P				P		P	P	P	P		P	P	P		P	P	P	P	P		P	P			P	P
30	1902220210012	Shivendra Singh	P		P	P	P	P	P		P	P			P	P	P		P			P	P		P		P	P			P	P	P		
31	1902220210013	Shubham Kumar		P	P	P		P	P				P	P		P	P			P			P		P	P	P	P	P			P		P	P
32	1902220210014	Sudheer Mishra	P		P		P	P	P		P	P			P		P	P	P	P			P		P		P			P	P				
33	1902220210015	Tarish Khan		P	P	P					P		P	P		P		P	P			P	P	P	P				P	P	P		P	P	
34	2002220219001	Md. Samiruddin Ansari	P		P	P	P	P	P				P	P	P	P	P		P		P					P		P			P				P
35	1822221019	Ravi Kumar		P		P	P	P	P		P			P		P		P		P	P	P	P	P	P	P			P			P		P	

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LECTURE PLAN AND SYLLABUS OUTLINE

Value Added Certification Course

on

"Introduction to Programming with MATLAB"

(14 March to 15 May 2020)

For

EEE Students

Resource Person

Mr Parveen Bhola

(Assistant Professor – EEE)

Director
ITS Engineering College
Greater Noida

Introduction about the Course

About the Course: This course teaches computer programming to those with little to no previous experience. It uses the programming system and language called MATLAB to do so because it is easy to learn, versatile and very useful for engineers and other professionals. MATLAB is a special-purpose language that is an excellent choice for writing moderate-size programs that solve problems involving the manipulation of numbers. The design of the language makes it possible to write a powerful program in a few lines. The problems may be relatively complex, while the MATLAB programs that solve them are relatively simple: relative, that is, to the equivalent program written in a general-purpose language, such as C++ or Java. As a result, MATLAB is being used in a wide variety of domains from the natural sciences, through all disciplines of engineering, to finance, and beyond, and it is widely used in industry. Hence, a solid background in MATLAB is an indispensable skill in today's job market.

Why the Course is important to be part of this program: An introductory programming course uses MATLAB to illustrate general concepts in computer science and programming. Students who successfully complete this course will become familiar with general concepts in Electrical and Electronics Engineering, gain an understanding of the general concepts of programming, and obtain a solid foundation in the use of MATLAB.

Course Objective& Outcomes:

- You will learn fundamental computer programming concepts such as variables, control structures, functions and many others.
- You will learn about various data types and how to handle them in MATLAB.
- You will learn the powerful support MATLAB provides for working with matrices.
- You will learn about file input/output.

Pre-requisites for Course:

- Good knowledge of mathematical terms, like matrix, array, algebra, numbers, polynomial, differential equations.
- Computer\Laptop with licensed version of MATLAB

Pedagogy:

- Engineering problem solving using MATLAB

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Course Outline of Value Added Certification on
"Introduction to Programming with MATLAB "

Lecture No.	Content
Lecture 1	MATLAB (Basics): Introduction to MATLAB, MATLAB as a sophisticated calculator
Lecture 2	Syntax and semantics and creating plots in MATLAB.
Lecture 3	Addition, Subtraction, Multiplication, and Division of matrices using various MATLAB operators
Lecture 4	Different operation performed on matrices using MATLAB
Lecture 5	Functions: Introduction to the function
Lecture 6	Splitting the complex problem via function
Assignment 1 (Quiz/Programming Assignments)	
Lecture 7	Using the built-in function of MATLAB
Lecture 8	Random number generation and using it for different assignment
Lecture 9	How to print on command window
Lecture 10	Plotting the graph
Lecture 11	Finding the programming Error
Lecture 12	Debugging the programming error with help of Debugger
Assignment 2 (Quiz/ Programming Assignments)	
Lecture 13	Use of If statement
Lecture 14	How to use Nested If statement
Lecture 15	Relational and logical operators
Lecture 16	How to use different operators in MATALAB
Lecture 17	How to use For Loop
Lecture 18	How to use While Loop
Assignment 3 (Quiz/ Programming Assignments)	
Lecture 19	Break statement
Lecture 20	Logical Indexing

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Lecture 21	Introduction to the Data types
Lecture 22	Character array and Structures
Lecture 23	Cells type data
Lecture 24	The string type data
Assignment 4 (Quiz/ Programming Assignments)	
Lecture 25	Introduction to the Data types
Lecture 26	Character array and Structures
Lecture 27	Cells type data
Lecture 28	The string type data
Lecture 29	File input\ output
Lecture 30	Excel file handing in the MATLAB
Lecture 31	How to create, read and write in MAT-files and Excel file
Lecture 32	Introduction to various toolbox of MATLAB used in Electrical and Electronics Engineering.
Workshop / Expert Talk / Seminar	
Lecture 33	Project
Lecture 34	Assessment Test

Assessment methodology:

Quiz / Assignment Contribution	Test Contribution	Certification
40%	60%	Yes if Score □ 60
		No if Score □ 60 , Retest

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Reference Books / Suggested Readings:

Text Books:

1. Peter Issa Kattan, MATLAB for Beginners: A Gentle Approach, PHI Learning Pvt. Ltd., 2008.
2. J. Michael Fitzpatrickand Ákos Ledeczi, Computer programming with MATLAB, TMH Publication, 2015

Reference Books:

1. MATLAB programing fundamentals by Mathswork

Useful Websites:

1. www.mathswork.com

Learning from course related to Skills:

Ability to solvethe problems in engineering domain and prepare them for the placement as well.

Student Attended the Course

Sr. No.	Roll No.	Student Name	21	1902220210002	Amir Muzafar Mir
1.	1822221001	Abhishek Kumar	22	1902220210003	Ankit Singh
2.	1822221003	Anurag Rishi	23	1902220210004	Dhananjay Yadav
3.	1822221004	Arjun Kumar	24	1902220210006	Imran Fayaz
4.	1822221005	Arun Kumar Verma	25	1902220210007	Manish Pandey
5.	1822221006	Asif Reja	26	1902220210008	Mayank Sengar
6.	1822221007	Ashutosh Pratap Singh	27	1902220210009	Md. Sahil Ansari
7.	1822221009	Dhananjay Kushwaha	28	1902220210010	Mohammad Faisal Wani
8.	1822221010	Harshit	29	1902220210011	Sachin Kumar
9.	1822221011	Himanshu Yadav	30	1902220210012	Shivendra Singh
10.	1822221014	Manish Kumar	31	1902220210013	Shubham Kumar
11.	1822221015	Md Danish	32	1902220210014	Sudheer Mishra
12.	1822221016	Mohammad Shadab	33	1902220210015	Tarish Khan
13.	1822221017	Nitendra Kumar	34	2002220219001	Md. Samiruddin Ansari
14.	1822221018	Paras Nath Yadav	35	1822221019	Ravi Kumar
15.	1822221019	Ravi Kumar			
16.	1822221020	Rohit Sahu			
17.	1822221021	Rohit Sahu			
18.	1822221022	Sadhana Singh			
19.	1822221023	Salman			
20.	1902220210001	Abhishek Kumar			

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MATLAB Addon Co[illegible]e Attendance

Sr. No.	Roll No.	Student Name	MAR 17	MAR 18	MAR 19	MAR 20	MAR 23	MAR 24	MAR 25	MAR 26	MAR 27	MAR 30	MAR 31	APR 2	APR 3	APR 9	APR 10	APR 16	APR 17	APR 23	APR 24	APR 29	APR 30	MAY 1	MAY 2	MAY 7	MAY 8	MAY 14	MAY 15	MAY 21	MAY 22	MAY 26	MAY 27	MAY 28	MAY 29
1.	1822221001	Abhishek Kumar				P	P	P	P	P	P	P	P	P	P		P	P	P	P	P	P	P	P	P			P			P	P	P	P	
2.	1822221003	Anurag Rishi	P				P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			P		P	P		P	P	P	P	P
3.	1822221004	Arjun Kumar		P	P		P	P	P					P			P	P	P	P	P	P	P	P	P			P	P	P	P		P	P	P
4.	1822221005	Arun Kumar Verma				P				P	P	P	P	P	P	P	P	P	P	P	P	P		P			P	P		P	P	P	P	P
5.	1822221006	Asif Reja	P	P			P	P	P		P	P	P			P		P	P	P	P	P		P	P	P	P		P	P	P	P		
6.	1822221007	Ashutosh Pratap Singh			P	P	P	P	P	P			P		P	P		P	P	P	P	P					P		P	P		P		P	
7.	1822221009	Dhananjay Kushwaha	P	P			P	P	P	P	P	P		P										P	P			P	P					P	P
8.	1822221010	Harshit				P	P	P	P		P		P			P	P		P	P	P	P	P			P	P	P		P	P	P	P	P
9.	1822221011	Himanshu Yadav	P	P	P		P	P	P			P	P	P	P	P		P		P		P	P	P	P	P	P	P	P	P	P	P		P
10.	1822221014	Manish Kumar									P		P			P		P		P	P		P	P	P	P	P	P	P	P	P		P	
11.	1822221015	Md Danish	P			P	P	P	P	P	P	P	P	P		P	P	P	P	P	.	P	P	P	P	P	P	P	P	P	P	P	P	P
12.	1822221016	Mohammad Shadab		P	P						P		P	P		P	P	P		P			P	P	P	P	P	P	P	P	P	P	P	P
13.	1822221017	Nitendra Kumar	P	P		P	P	P	P	P		P			P	P			P		P		P	P	P	P	P	P	P	P	P	P		P
14.	1822221018	Paras Nath Yadav			P		P	P	P		P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
15.	1822221019	Ravi Kumar	P			P	P	P	P	P	P	P			P	P		P		P		P	P	P	P	P	P	P	P	P	P	P	P	P
16.	1822221020	Rohit Sahu		P			P	P				P		P		P	P		P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
17.	1822221021	Rohit Sahu	P		P	P	P	P	P		P			P		P	P		P	P	P			P	P	P	P	P	P	P	P	P	P	P	P
18.	1822221022	Sadhana Singh		P				P	P		P	P	P	P		P		P	P	P	P			P	P	P	P	P	P	P	P	P	P	P	P
19.	1822221023	Salman	P	P	P	P	P			P		P		P	P	P		P	P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
20.	1902220210001	Abhishek Kumar					P	P	P	P	P	P		P	P		P	P		P	P		P	P	P	P	P	P	P	P	P	P	P	P	P
21	1902220210002	Amir Muzafar Mir	P	P	P	P	P	P	P		P		P					P	P				P	P	P	P	P	P	P	P	P	P	P	P	P
22	1902220210003	Ankit Singh				P				P	P	P			P		P	P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
23	1902220210004	Dhananjay Yadav	P	P	P	P	P	P	P	P	P	P	P	P			P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
24	1902220210006	Imran Fayaz			P						P												P	P	P	P	P	P	P	P	P	P	P	P	P
25	1902220210007	Manish Pandey	P	P		P	P	P	P	P	P	P			P	P							P	P	P	P	P	P	P	P	P	P	P	P	P
26	1902220210008	Mayank Sengar			P	P	P	P	P	P	P	P	P	P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
27	1902220210009	Md. Sahil Ansari	P		P		P	P	P	P	P	P			P	P	P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
28	1902220210010	Mohammad Faisal Wani	P	P		P	P	P	P		P	P		P			P		P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
29	1902220210011	Sachin Kumar	P		P	P				P	P		P	P	P	P	P	P	P	P				P	P	P	P	P	P	P	P	P	P	P	P
30	1902220210012	Shivendra Singh					P	P	P			P		P			P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
31	1902220210013	Shubham Kumar	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P		P	P		P	P	P	P	P	P	P	P	P	P	P	P	P
32	1902220210014	Sudheer Mishra			P	P				P	P	P		P	P		P	P		P	P		P	P	P	P	P	P	P	P	P	P	P	P	P
33	1902220210015	Tarish Khan	P	P	P	P	P	P	P		P	P	P	P	P	.	.	.	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
34	2002220219001	Md. Samiruddin Ansari					P	P	P	P	P	P	P	P	P	P	P	.	.	P	P	P	.	P	P	P	P	P	P	P	P	P	P	P	P	P
35	1822221019	Ravi Kumar		P	P	P		P	P		P	P	P	P	P	.	.	P	P	P	.	.	P	P	P	P	P	P	P	P	P	P	P	P	P	P

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Name of Event: One Day Workshop on **Robotics & IOT**
Date of Event: March 3, 2020.
Organized by: EEE Department, I.T.S Engineering College Greater Noida

Event Coordinator: Mr. Rajiv Ranjan

Objective:

- To enhance the technical knowledge in Robotics & IOT

Report:

Department of Electrical & Electronics Engineering, I.T.S Engineering College Greater Noida organized One Day Workshop on **Robotics & IOT** for B.Tech students on March 3, 2020. The workshop is conducted by Mr. Shashant Kumar, Robotics & IOT- expert from Sofcon India Pvt Ltd. The Robotics & IOT technology deals with the concepts involved in interdisciplinary branch of engineering and science that includes Mechanical Engineering, Electrical & Electronics Engineering, Information technology, Computer science and others. Robotics deals with the design, construction, operation, and use of robots, as well as computer systems for their control, sensory feedback, and information processing. The Internet of things (IoT) is a system of interrelated computing devices, mechanical and digital machines are provided with unique identifiers (UIDs) and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

In today's workshop students learned about concepts of Robotics, Embedded C Programming, IR Sensor applications, Motor controlling through driver IC and Simulation on Proteus in first half of the session.

In post lunch session participants were able to understand about concepts of IOT, Raspberry pi, user interface development and hands on practical of home automation.

Finally, Mr. Rajiv Ranjan, Assistant Professor of EEE Department, ITS Engineering College, gave a Vote of Thanks speech.

Program Outcome:

- Students learnt about design consideration for Robitics & IOT System

Scope of Improvement: To involve the students for Project work and internship in Robitics & IOT technology.

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No. of Faculty attended: 06
No. of Student attended: 62
Coordinator:

Rajiv Ranjan
Assistant Professor
EEE Dept.

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Name of Event
One Day Arduino Simulation Workshop

Date of Event:
14th Feb 2020

Organized by: ECE Department at NI Innovation Center.

Event Coordinator: Mr. Nitesh Pradhan,
Objective: Arduino Simulation using Arduino SimulIED Software.

Report:

The Department of Electronics and Communication Engineering of I.T.S Engineering College, Greater Noida, organizedOne Day Arduino Simulation Workshop. This Workshop was coordinated and conducted by Mr. Nitesh Pradhan Coordinator of NI Innovation Center on 14th Feb 2020. The program was based on Arduino SimulIED Software which is an virtual platform for Arduino board simulation.

No. of Students attended: 43

S.N	Branch	No of student	College
1	3rdyear ECE	26	I.T.S Engg
2	2nd Year ECE	14	I.T.S Engg
3	4th Year ECE	03	I.T.S Engg

Outcomes:

- Student use Simuled a learns how can they design and work in Virtual Arduino board
- Now student able to design, test and verify their code and logic.
- Now student are able to design Arduino based projects virtually

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Coordinators
(Nitesh Pradhan)

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Name of students attended the class

S. No.	Name of Participant	Year
1	ABHAY	2nd Year
2	UDAY SHARMA	2nd Year
3	ANKITA PANDEY	2nd Year
4	AKANKSHA MISHRA	2nd Year
5	ANKIT GUPTA	2nd Year
6	HARSH PUNDIR	2nd Year
7	KALPASH KUMAR	2nd Year
8	MOHD SHAKAIB GHAZI	2nd Year
9	MUSADIQ SADEEQ	2nd Year
10	NAMAN GARG	2nd Year
11	NIKHIL SINGH	2nd Year
12	OM GUPTA	2nd Year
13	RAJAT GUPTA	2nd Year
14	RAKSHIT TIWARI	2nd Year
15	RAVINDRA SINGH	2nd Year
16	SATRAJEET NEOGI	2nd Year
17	SHAHRUKH AMBER	2nd Year
18	SHASHWAT TRIPATHI	2nd Year
19	SHREYAS THAKUR	2nd Year
20	SHUBHAM VERMA	2nd Year
21	TANMAY SRIVASTAVA	2nd Year
22	UDAY SHARMA	2nd Year
23	UDAY SHARMA	2nd Year
24	VISHAL KUMAR BAITHA	2nd Year
25	VISHAL	2nd Year
26	Vishal kumargiri	2nd Year
27	Akshay Mishra	3rd Year
28	Mohit sharma	3rd Year
29	Sashikant Joshi	3rd Year
30	Jayendra Gautam	3rd Year
31	Sharad Singh	3rd Year
32	AmeyaVikrama	3rd Year

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33	Nikhil Jain	3rd Year
34	Satyam Jaiswal	2nd Year
35	Akshat madhavan	3rd Year
36	Pankaj Singh	3rd Year
37	Antariksh Gupta	3rd Year
38	Mithileshkumar	3rd Year
39	Rohan Gupta	3rd Year
40	Abhishek Jaiswal	3rd Year
41	Madhavi ranjan	4th Year
42	Sarvesh Singh	4th Year
43	SUHAIL IRSHAD RATHER	4th Year

Program Outline

S.No	Topic 9.10 AM- 12.30PM		Topic 1.00 PM- 4.50 PM
1	Code Wring and Simulation		Sensor interfacing

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Name of Event

One day Workshop on Introduction to the Internet of Things and Cloud

Date of Event:

31st Jan 2020

Organized by: ECE Department at NI Innovation Center.

Event Coordinator: Mr. Nitesh Pradhan,

Objective: One day Workshop on Introduction to the Internet of Things and Cloud

Report:

The Department of Electronics and Communication Engineering of I.T.S Engineering College, Greater Noida, organizedOne day Workshop on Introduction to the Internet of Things and Cloud. This Training Program was coordinated and conducted by Mr. Nitesh Pradhan Coordinator of NI Innovation Center from 31st Jan 2020. The program was based on Internet of Things and Cloud.

No. of Students attended: 20

S.N	Branch	No of student	College
1	2nd Year ECE	11	I.T.S Engg
2	2nd Year CSE	9	I.T.S Engg

Outcomes:

- Student learns about Cloud Concept for IOT.
- Student learn how can they sent their data into cloud.
- Student Get free certificate from Udemy just after this courses.

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Coordinators
(Nitesh Pradhan)

Name of students

S. No	Name of Participant	Year & Branch
1	Vishal kumarbaitha	2nd Year ECE
2	Om Gupta	2nd Year ECE
3	Ashish	2nd Year ECE
4	Anand pandey	2nd Year CSE
5	Tushar verma	2nd Year ECE
6	Akanksha Mishra	2nd Year ECE
7	Ankit Gupta	2nd Year ECE
8	Ravindra singh	2nd Year ECE
9	Vishal	2nd Year ECE
10	Naman Garg	2nd Year ECE
11	Tanmay Srivastava	2nd Year ECE
12	Rishavkumar	2nd Year ECE
13	Divyansh	2nd Year CSE
14	Prem Narayan	2nd Year CSE
15	AYUSH GUPTA	2nd Year CSE
16	Saurabh rai	2nd Year CSE
17	Amlendu Shekhar	2nd Year CSE
18	Anand pandey	2nd Year CSE
19	Swagat Sriram Bara	2nd Year CSE
20	Akash	2nd Year CSE

Program Content

- Introduction to IoT and Cloud
- IoT Devices, Networks and Systems
- Where do Cloud Platforms come in?
- What do Cloud Platforms offer?
- Hands-on with a Cloud Platform
- IoT Security Challenges
- IoT and Digital Storage Challenges

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Work Report

Name of Event: One Day Workshop on "Advancement in Industrial Automation & Control".
Date of Event: Oct 22, 2019
Organized by: Rockwell Automation, Centre of Excellence, EEE Department, I.T.S Engineering College Greater Noida

Event Coordinator: Mr. Rajiv Ranjan

Objective:

- To enhance skill of students & faculty members in the field of PLC, SCADA & HMI.

Report:

The Rockwell Automation, Centre of Excellence ,Department of Electrical & Electronics Engineering, I.T.S. Engineering College organized One Day Workshop on "Advancement in Industrial Automation & Control" on October 22, 2019 which was attended by 44 students , 8 faculty members and 2 Lab technician.

The event was started with Saraswathi Vandana and an introductory speech by Dr. Vikas Singh, Executive Director, I.T.S Education Group. Prof. Upendra K. Agarwal, HOD, EEE department, I.T. S. Engineering College welcomed the chief guest Mr. Umesh Kumar, Automation Expert, VS Automation Pvt. Ltd. Delhi, with a flowers bouquet. The workshop was started by honourable guest Mr. Umesh Kumar and most of the students are enlightened by his expertise. In the workshop, he guided and motivated the students by sharing his experiences with students. Students from different engineering branches as Mechanical, Civil, Computer Science, Electronics and Electrical, got opportunity to work on PLC, HMI & SCADA based industrial projects. All faculty members from different departments, whose area of interest is Automation, also attended the program. It was very prestigious for ITS Engineering College to have such dignified and very knowledgeable expert in the field of Automation. Dr. Vikas Singh, Executive Director of ITS Engineering College gave Token of Appreciation to Mr. Umesh Kumar.

Finally, Mr. Rajiv Ranjan, Assistant Professor of EEE Department, ITS Engineering College, gave a Vote of Thanks speech.

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Program Outcome:

Students & Faculty members upgraded their knowledge in the field of PLC, SCADA & HMI

Scope of Improvement: To organize the workshop for long duration.

No. of participants: 44 students, 8 faculty members and 2 Lab technician.

Coordinator:

(Rajiv Ranjan)
Asst. Prof.
EEE Dept.

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Name of Event:
2 days Control system and Simulation

Date of Event:
4 -5 Oct2019

Organized by:
ECE Department at NI Innovation Center, COE.

Event Coordinator:
Mr. Nitesh Pradhan

Objective:
2 DaysWorkshop on**Control system and Simulation**for 2nd&3rdyear ECE& EEEstudent to get specialized to get Control system and Simulation toolkiton LabVIEW.

Report: The Department of Electronics and Communication Engineering of I.T.S Engineering college,Greater Noida, organized2 days workshop on"Signal Processing"by Mr. Nitesh Pradhan (Certified LabVIEW Trainer) at NI Innovation Center, Center of Excellence on4 -5 Oct2019. The workshop was based on Control system and Simulationof LabVIEW Platformto learn how to design signal, how to process & store it and how to apply the concept of signal processing.There were 16students attended the Workshop from ECE and EEE.

Outcomes:

- The student learns aboutControl system and SimulationLabVIEWand Acquire knowledge.
- Students has designed more than 25 simulation program Program during training program.
- Student can use the Control system and Simulation toolkit for their subject lab
- This training program will help yours student in their Control system and SimulationSubjects also student will a good practical approach in their Placement time

No. of Student attended: 21

S.N	Branch	No of student	College
1	4th year ECE	9	I.T.S Engg
2	3rd Year ECE	12	I.T.S Engg

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Coordinators
(Nitesh Pradhan)

Control system and Simulation				
Workshop / Training Plan				
Day/ Time	9:10 to 11:00	11.10 to 12.30	13:30 to 15 :00	15.10 to 16:50
Day 1	Introduction about LabVIEW	Control system	Model Design	Programming
Day 2	Control Design	Simulation	PID Controller	Programming

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Name of Event:
2DaysReal Time Data AcquisitionWorkshop
Date of Event:
Sept 28 & 29, 2019
Organized by:
ECE Department at NI Innovation Center, COE.
Event Coordinator:
Mr. Nitesh Pradhan

Objective:

2 DaysWorkshop on***Real Time Data Acquisition***Using NI myDAQfor 2nd&3rdyear ECE& EEEstudent to get specialized to get Data Acquisition, connection of sensor and storage in pc.

Report: The Department of Electronics and Communication Engineering of I.T.S Engineering college,Greater Noida, organized2 days' workshop on"***Real Time Data Acquisition***"by Mr. Nitesh Pradhan (Certified LabVIEW Trainer) at NI Innovation Center, Center of Excellence onSept 28 & 29,, 2019. The workshop was based on NI myDAQ, NI DAQmx and Instrumentation I/O toolkits of LabVIEW Platform. Student acquire 1 channel 1 sample, 1 channel N sample, N channel N sample analog Data. There were 48 students attended the Workshop from ECE Department.

Outcomes:

After attending this course, participant able to:

- Develop integrated, high-performance data acquisition systems that produce accurate measurements
- Acquire data from sensors, such as thermocouples and strain gages, using NI data acquisition hardware
- Apply advanced understanding of LabVIEW and the NI-DAQmx API to create applications
- Eliminate measurement errors due to aliasing and incorrect signal grounding

Coordinators
(Nitesh Pradhan)

No. of Student attended: 48

Workshop Plan

Real Time Data Acquisition				
Workshop / Training Plan				
Day/ Time	9:10 to 11:00	11.10 to 12.30	13:30 to 15 :00	15.10 to 16:50
Day 1	Introduction about LabVIEW	my DAQ connection	Simulated DAQ	Data Acquisition
Day 2	Sensor study	Data Acquisition	Storage	Programming

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Name of Event:
2 daysSignal Processing Workshop

Date of Event:
Sept 21& 22, 2019

Organized by:
ECE Department at NI Innovation Center, COE.

Event Coordinator:
Mr. Nitesh Pradhan

Objective:
2 DaysWorkshop on**Signal Processing**for 2nd&3rdyear ECE& EEEstudent to get specialized to get Signal Processing toolkits on LabVIEW.

Report: The Department of Electronics and Communication Engineering of I.T.S Engineering college,Greater Noida, organized2 days workshop on"Signal Processing"by Mr. Nitesh Pradhan (Certified LabVIEW Trainer) at NI Innovation Center, Center of Excellence onSept 7-8, 2019. The workshop was based on Signal Processing toolkit's of LabVIEW Platformto learn how to design signal, how to process & store it and how to apply the concept of signal processing.There were 30students attended the Workshop from ECE and EEE.

Outcomes:

- The student learns aboutSignal Processing toolkit on LabVIEWand Acquire knowledge.
- Students learns how to design signal, how to process & store it and how to apply the concept of signal processing,
- Students has designed more than 30 Program during training program.
- Student learns about how to design circuit and use in practical and theory.
- This training program will help yours student in their Signa Processing & Signal System Subjects also student will a good practical approach in their Placement time

Scope of Improvement:

- The hands-on training sessions and interactive sessions could be given more importance.

No. of Student attended: 30

Coordinators
(Nitesh Pradhan)

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Name of Event
2 Days Basic LabVIEW Workshop

Date of Event:
8th& 9thAugust 2019

Organized by: ECE Department at NI Innovation Center.

Event Coordinator: Mr. Nitesh Pradhan,
Objective:2 Days Basic LabVIEW Workshop

Report:

The Department of Electronics and Communication Engineering of I.T.S Engineering College, Greater Noida, organized2 Days Basic LabVIEW Workshop. This Workshop was coordinated and conducted by Mr. Nitesh Pradhan Coordinator of NI Innovation Center on 8th& 9thAugust 2019. The program was based on LabVIEW Programming platform which is product of National Instruments .

No. of Students attended: 40

S.N	Branch	No of student	College
1	3rdyear ECE	12	I.T.S Engg
2	2nd Year ECE	28	I.T.S Engg
3	4th Year ECE	0	I.T.S Engg

Outcomes:

- Student learns about Graphical Programming
- Now student able to design their basic program using data type.
- Student able store data in hardware

Coordinators
(Nitesh Pradhan)

Program Outline

S.No	Topic 9.10 AM- 12.30PM		Topic 1.00 PM- 4.50 PM
1	Introduction of LabVIEW		Numeric and Boolean data type
2	String, array and dynamic data type		Folder, Project & VI

Director
ITS Engineering College
Greater Noida