

**Webinar on "IOT"**

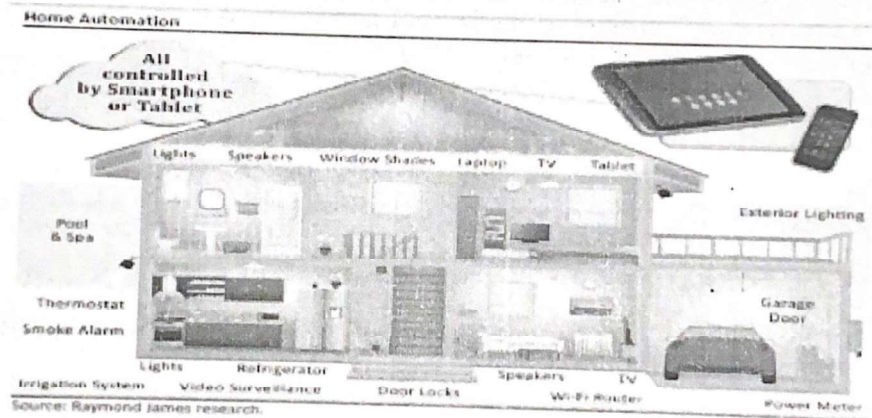
**Dated: 1<sup>st</sup> December, 2020**

The webinar was conducted by **Mrs. Aayushi Purohit.**

The webinar was about the emerging technology called Internet of Things or IoT. It talked about the importance of this technology in our day to day life and how almost all devices around us use IoT these days. Ranging from Medicine, Military, Transportation to simple devices like Air Conditioner; everything is now connected by the internet and makes life easier. The webinar then talked about how IoT also helps in monitoring the Supply Chain Management of any product.

In conclusion the webinar highlighted the various sectors that contain job opportunities in IoT like Sensors and how we can attain industry training to get make use of these opportunities.

**IoT Applications : Intelligent Home**



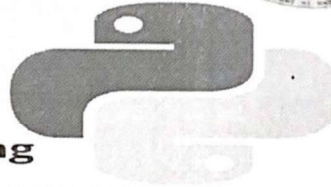
**AAYUSHI PUROHIT's screen**



## Webinar on "Python Programming"

Dated: 28<sup>th</sup> October, 2020

Department of CSE organized a Webinar on "Python Programming" on 28<sup>th</sup> Oct 2020 for CSE 2<sup>nd</sup> year and CSE 3<sup>rd</sup> Year. The expert was Mr. Arun Dabral, 4Achievers, Noida. He has covered the introduction and installation of Python, data structures used in Python, research problems like Social media mining, Predictive analysis, Big Memory, data reduction packages etc. and discussed machine learning using python. Overall, it was an informative program and the speaker has discussed the topics very well and entertained every query raised by the students.



### Live Project on Python Programming

**Maharaja Surajmal Institute of Technology**

in association with

**4 Achievers , Noida**

**Presents**

**Webinar on Live Project on Python Programming  
organised by CS Deptt.**

**E- Certificates will be Provided**

**Expert : Mr. Arun Dabral**

Python Expert

**Zoom Meeting Id**

**891 3519 6127**

**Date : 28 Oct 2020 (Wednesday)**

**Time : 12PM Onwards**

**Link to Register for Webinar or Scan QR Code**

<https://forms.gle/qBsisKihKG5kxnuu7>



C-54 , Sector - 2 , Noida

[www.4achievers.com](http://www.4achievers.com)



**Webinar on "Career Avenues through education abroad in post covid 19 scenario"**  
**Dated: 10<sup>th</sup> September, 2020**

Jamboree is the leading institute offering specialized classroom and online test prep solutions for study abroad entrance exams like GMAT, GRE, SAT, TOEFL and IELTS. Jamboree conducted a seminar on GRE and GMAT and various countries where students can go abroad to study for the student of Maharaja Surajmal Institute of Technology. They explained the pros and cons of each country and what all is required to study there. They explained the importance of the papers and how to crack these exams. They explained the importance of time management and verbal skills required.

**Jamboree™**



**WEBINAR**

In association with - CSE department (MSIT)

**CAREER AVENUES  
THROUGH EDUCATION ABROAD  
IN POST COVID 19 SCENARIO**

**ADMISSIONS • GRE/GMAT PREP  
MS | PhD | MBA | MIM**

**SEPT 10, 2020 (THUR)  
05:00 PM**



**SPEAKER**  
**Soumyo Gupta**  
CEO, Jamboree Education

**REGISTER NOW TO PARTICIPATE**  
FOR MORE INFORMATION  
**72919 91563**

### Seminar on "Machine learning and Robotics"

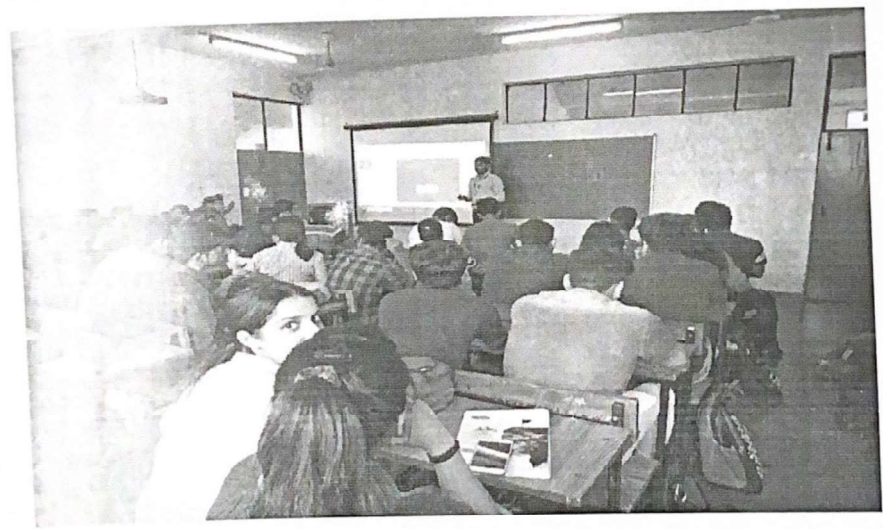
Date: 5<sup>th</sup> February 2020

A seminar on Machine learning and robotics for the CSE-3<sup>rd</sup> year Students was held on 5<sup>th</sup> February, 2020. The topics related to Artificial Intelligence such as Data Science and Machine Learning were discussed very diligently by Dheeraj Singh, member of Training Basket.

He spoke about the impact of AI on the wider world by briefing about the main components of Machine learning. He explained the basic difference between supervised, unsupervised and reinforced. Anaconda Navigator was explained by the speaker through live examples of using the software in front of the audience.

The speaker cleared all the doubts of the students by conducting a question and answer round for the topic. He even discussed the basics of the topic by elaborating on the difference between interpretation and compilation, why python is mostly used in deep learning etc.

Views on numpy interpreter were also expressed by the speaker. A live illustration on Face and Eye detection using HAAR cascading classifier was displayed to the students in order to explain the algorithm and coding behind the working of the specified. By this, the seminar came to an end. The seminar was undoubtedly a fruitful and knowledgeable event for the students of MSIT.

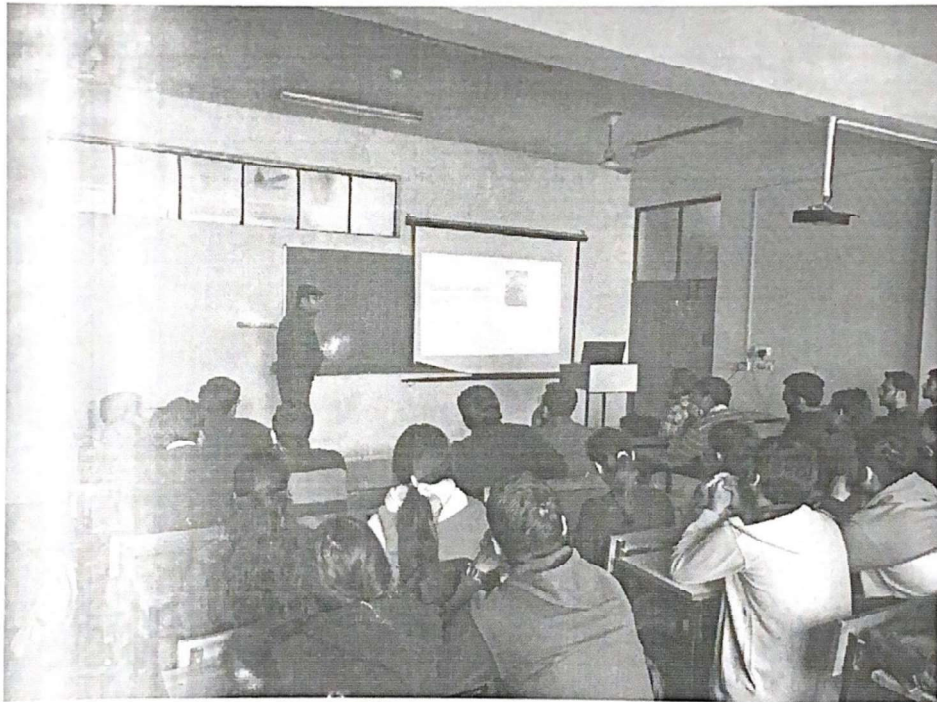




### Workshop on “Hands on Python & Machine Learning”

Date: 4<sup>th</sup> February, 2020

The workshop “Hands on Python & Machine Learning” was organised on 4th February, 2020 for CSE-2<sup>nd</sup> year students. The Expert was Webtek Technologies. It was an informative session about the basics of Python and Machine Learning. The session specifically focused on the correct approach to learn Python which would ultimately result in a better attempt at interviews. The session included live demonstration of the code in Python and Graphical representation through the use of Jupyter Notebook. The session was concluded with a quick quiz about everything they had taught during the session. They also motivated us to attend weekly free sessions that they organize at their office.

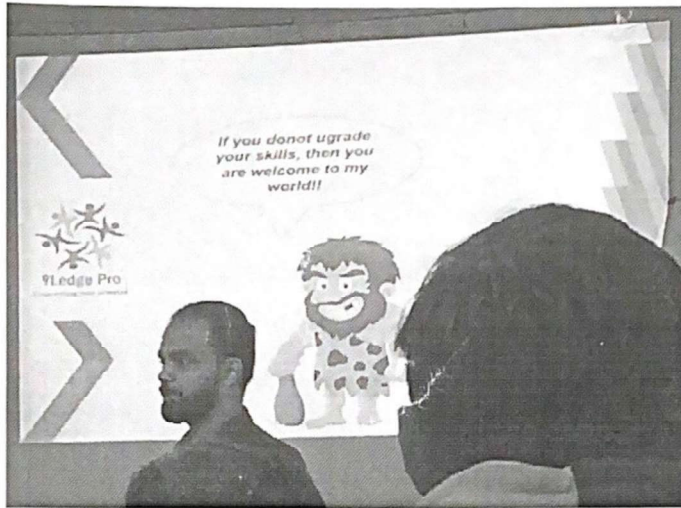




### Seminar Report on "Microsoft Certification"

A seminar/workshop has been organized for the students of CSE 2nd year on 22nd January, 2020. The talk was given by Mr. ParthShukla from 9LedgePro. 9LedgePro is a team of skilled knowledge workers whose mission is to assist students in developing skills and help students in obtaining Microsoft Certifications.

The speaker gave an introduction and started presentation with the definition of skill development and its importance in today's world.

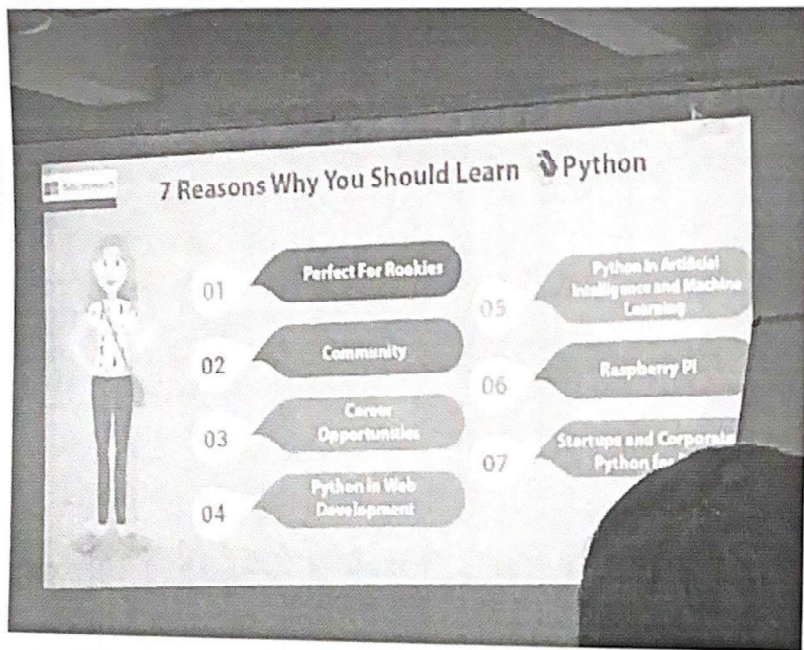


He showed a picture of Satya Nadella, the CEO of microsoft and used him as an example that one does not need to be good in programming to land a job in a Tech Giant company as he was merely an electrical engineer by degree.

There the importance of skill came up. Then he showed another photo of a 14 year old boy, TanmayBakshi who at this age was hired by IBM as an AI Engineer and rejected an offer from Google before that.

There too the importance of skill was shown as he started from an early age and worked his way towards success. Next students were shown some statistics of how many employees in India are actually skilled in their profession compared to people who just want to earn money and quite surprisingly the percentage of skilled people was very low. The demand does not meet the supply

of skilled people. He explained the importance of python programming language in the tech world. It is used in every branch of computer science like: Web Development ,App Development ,Machine learning etc.



The speaker gave many examples. Then he informed about Microsoft Student Partners (MSP). It is basically a platform to test knowledge on various technical skills. The pass percentage of the exam is 70%. If the students pass the test, it sets them apart from the crowd and they acquire a lifelong tag from Microsoft. He continued about the Microsoft Certification Programme and its benefits. Then he told us about various workshops on different skills like ethical hacking, python etc. To conclude the seminar he demonstrated what ethical hacking is by actually hacking a student's mobile who volunteered for it. Everyone was amused by that. Overall the talk was very informative and got many of the students interested in the programme.



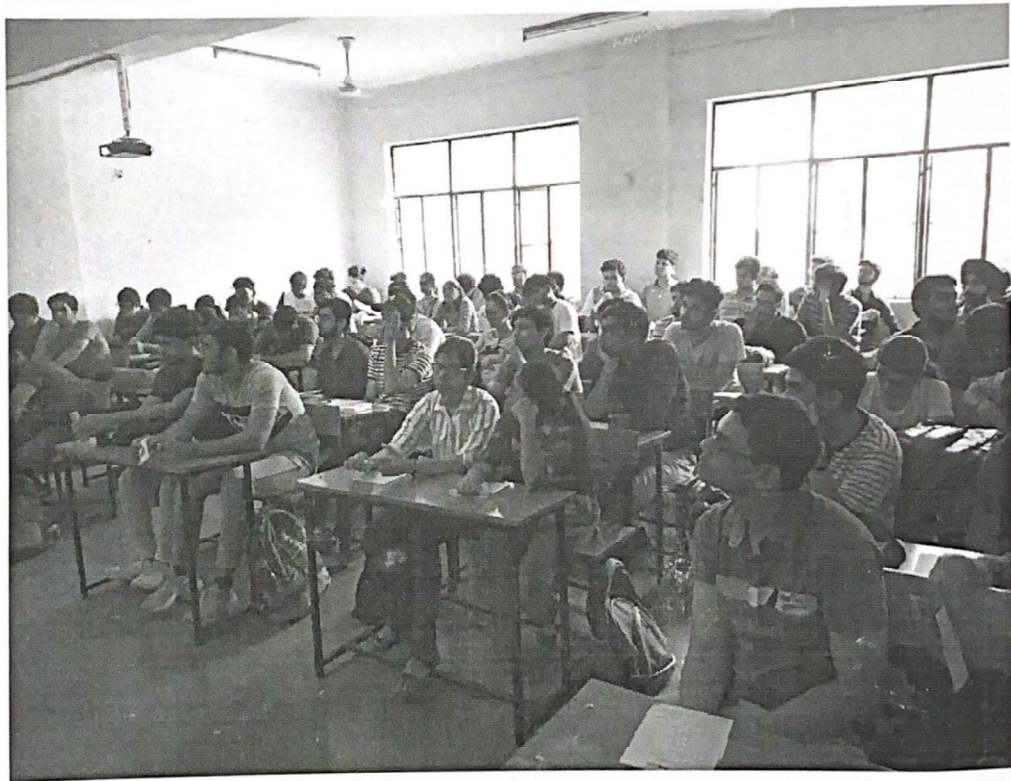
### **Seminar on “Importance of Research Papers in Higher Education”**

A seminar on “Importance of Research Papers in Higher Education “ was conducted by CSE Department on 16 January 2020 for CSE 3<sup>rd</sup> year students. The Expert was Mr. Prashast Kumar Singh, COO, Bestie Inc., Canada, and alumni of CSE batch 2014.

In this seminar he discussed how to write a good research paper and told the significance of research papers for higher studies. He motivated the students for writing the research papers. He specifically mentioned that all those students who are interested in pursuing for MS/M.Tech must write at least 2 research papers.

He also shared his experience of getting good placement and his experience of working with a startup with students. He further increased the enthusiasm of all the students to do hard work. He stated one statement that “if you work consistently you will get it”

All the students were highly motivated by his inspiring words and after having a good interactive session with him.





## Seminar on "Python and Databases"

Dated: - 11th September 2019

A seminar was organised in our college by DUCAT for CSE students of 3<sup>rd</sup> and 5<sup>th</sup> Semester the details are as follow:-

### **INTRDUCTION**

The main aim of seminar was giving students basic knowledge of DATABASE and PYTHON on industry point of view. Speakers told us about the importance of these concepts in IT Industry and invited us to join their institute DUCAT. For such courses and summer training

### **ABOUT DATABASE**

They told us following points about Database

- Importance of Database
- DBA work in industry
- Backend-frontend
- How different companies use DBMS
- Soft wares to access DBMS
- Difference between DBMS and RDBMS
- Codd's Rules for RDBMS

### **ABOUT PYTHON**

They told us following points about PYTHON

- Need of python
- Applications of python
- How python different from other languages
- History of python
- Future of Backend Language-PYTHON
- Benefits of using PYTHON

### **OTHER DETAILS**

- VENUE – Room No.-105 , MSIT, Janakpuri East, New Delhi
- TIMINGS – 10:00 AM-12:00 Noon

### **FEEDBACK**

Most of the students liked that Seminar and also want to attend 2hr. Workshop separately for each DATABASE and PYTHON. All Students really appreciate such seminars held in our institute

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## Machine Learning with Python

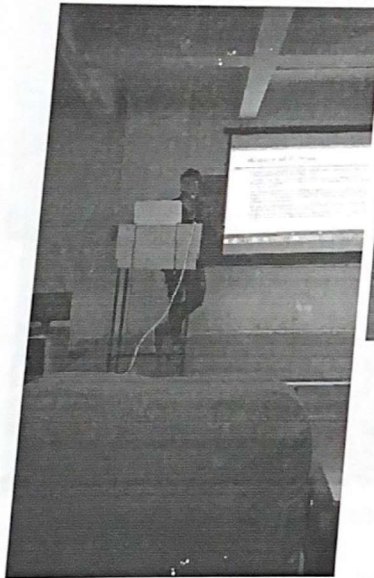
Date: 4<sup>th</sup> April 2019

A seminar regarding machine learning with python by the Training Basket. It was held in seminar hall 406 from 10:00 am to 12:00 pm. The session was conducted by Mr. Rishabh Raj an expert in the field. The session began with him explaining what Python is and moving on to the history, features and advantages of Python. He also demonstrated simple programs to show how easy it is to code in python. He also talked about how python is based on the concepts of OOPs. Then he explained the fundamentals of coding in Python such as the variables, operators, datatypes, control flow exception handling and functions.

Mr. Rishabh introduced machine learning with a basic example. He explained how important it is to be good in maths through examples. Then he explained what datasets are and various applications are such as spam filtering, fraud detection etc. He moved on with the types of machine learning: supervised, unsupervised and reinforcement learning. The basic steps to follow are understand the problem statement, gather data, prepare and process the data, choose a model, training, evaluation, parameter tuning and then prediction. The important parts of machine learning are data mining and data analysis.

Why should we use python for machine learning? It is because python has a vast set of libraries and less syntax. The key libraries for machine learning are NumPy, SciPy, pandas and matplotlib.

The session concluded with the summary. Maths is important and in that linear algebra, statistics and probability. Learn the programming language, data science, machine learning pipeline and visualising results.





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Date: 25<sup>th</sup> March 2019

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### Tech Explica Seminar on industrial training

On 25<sup>th</sup> March 2019, Tech Explica conducted a 2-hour seminar on industrial training in cutting edge technologies like Python, Machine Learning, Artificial Intelligence, etc. Throughout the seminar they gave various details about the on-going technologies, various advancements under going in those technologies and also explained why Python language is so popular and is the best language to choose when starting with Machine Learning. They also discussed about the scope that we as a student have in those areas. The seminar included discussions on various topics like Database, Big Data, Data Analysis, Data Analytics, Data Science etc. along with a detailed introduction to Machine Learning which answered various questions like "What is machine learning?", "Where to start from?", "What are the various resources to learn from?", "Scope of machine learning in the future?" etc.

The facilitator Mr. Utkarsh Sharma also told us how they can help us achieve our goals in these technologies by giving a brief introduction about their recent works and how they have been constantly helping various companies to upgrade their resources in these areas.

In the end they took a short MCQ test to judge our basic concepts of programming.

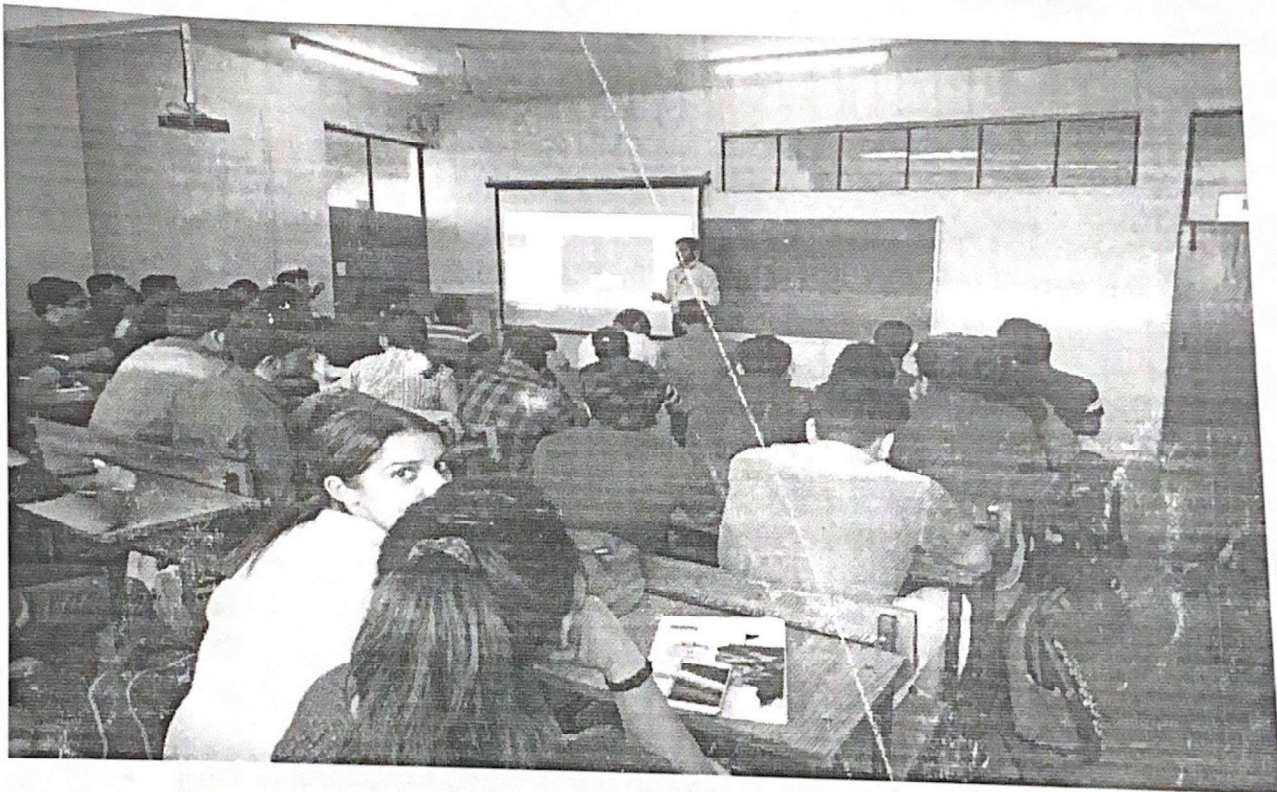
The workshop was very interactive and the facilitator was energetic throughout the seminar, the students too gave a positive response about the seminar.

CSE 3<sup>rd</sup> year & CSE 2<sup>nd</sup> year students



## SEMINAR ON PERSONAL INTERVIEW BY T.I.M.E.

A seminar on "Personal Interview" was conducted by T.I.M.E on 18th February 2019 for the students of IT(M) 3rd year and CSE(M) 3rd year. During the one hour seminar the speaker covered various vital aspects of personal interview, like its importance, procedure and ways in which students can prepare for it. The speaker also informed students about the ideal time that the interview lasts for. The students were informed that there are three major types of questions in a personal interview: personality related or the "Tell me about yourself" question, academics related and lastly, questions relating to general knowledge. These categories were discussed in detail and students were given a plethora of tips that they can keep in mind for ensuring a good personal interview. The speaker shared the experiences of himself as well as many other students who have already appeared for personal interview so that the students can understand how an actual personal interview proceeds. The speaker also informed students about various other important topics like the difference between hobbies and interests and the difference between extra-curricular and co-curricular. He also highlighted the importance of dressing properly and gave tips for ensuring that one is dressed properly for a personal interview. At the end, the speaker invited questions from the students and answered them at length.

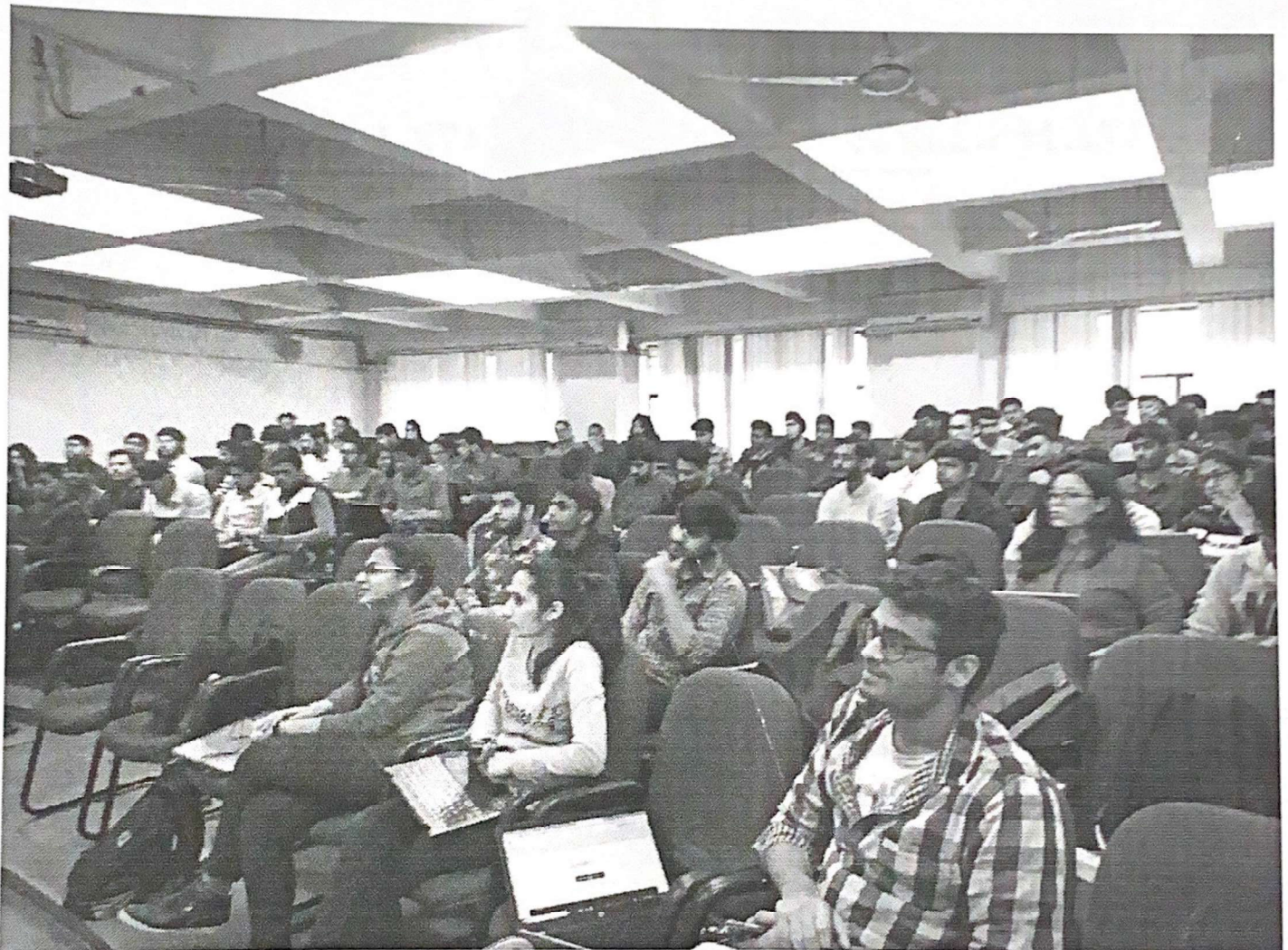




## JAMBOREE

Date 18<sup>th</sup> January 2019

Jamboree is the leading institute offering specialized classroom and online test prep solutions for study abroad entrance exams like GMAT, GRE, SAT, TOEFL and IELTS. Jamboree conducted a seminar on GRE and GMAT and various countries where students can go abroad to study for the student of Maharaja Surajmal Institute of Technology. They explained the pros and cons of each county and what all is required to study there. The explained he importance of the papers and how to crack these exams. They explained the importance of time management and verbal skills required .





## Workshop by TIME Institute

Date: 16<sup>th</sup> October 2018

On 16<sup>th</sup> October 2018, a workshop by the TIME institute was conducted on how one should prepare for an interview for the students of 3<sup>rd</sup> year CSE department. The students were taught how to prepare their resume and arrange its contents to make it more impressive. The students were also taught how to enter and sit during an interview. And how you should behave and how your body language should be. They also told what all types of interviews that can happen, how to prepare for them and how to show the best in you. The workshop was very much appreciated by the students and said that it was very much helpful for them to prepare for their placements next year.



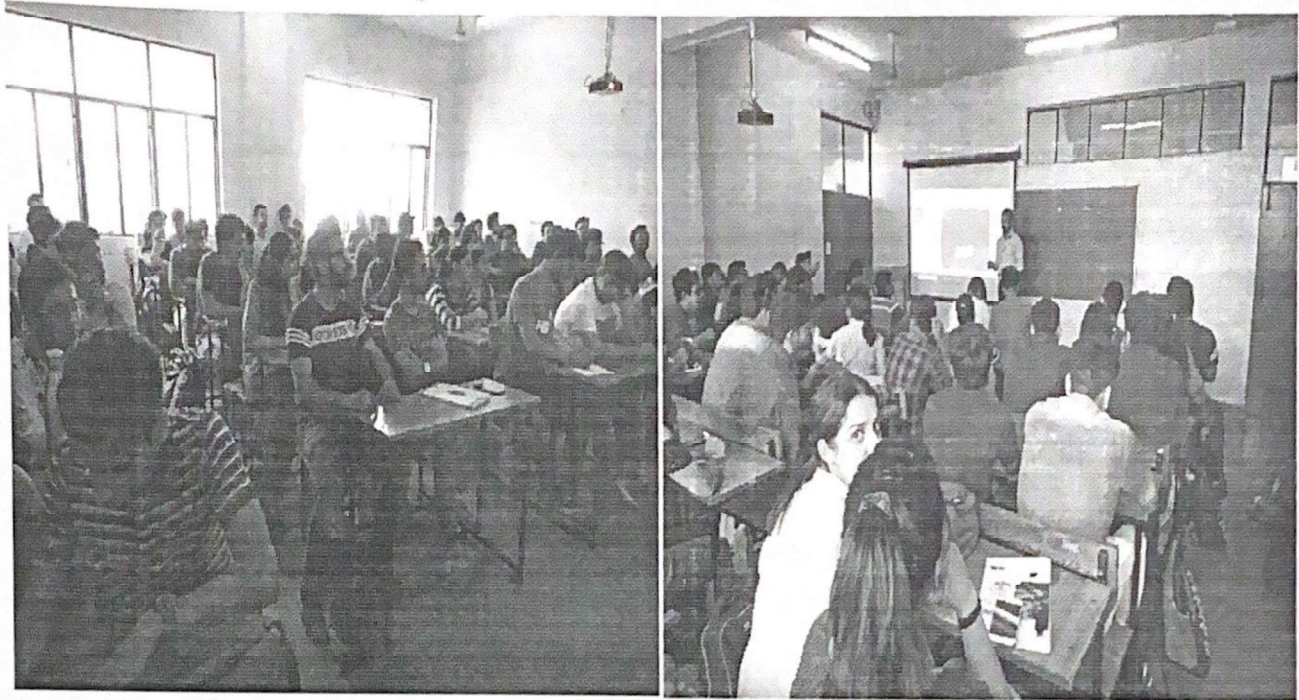
Prakash



## PYTHON

Date: 8 October 2018

On 8<sup>th</sup> October 2018, a seminar was conducted on Python for the students of 2<sup>nd</sup> and 3<sup>rd</sup> Year of the Computer Science and Engineering Department. The session was an introduction to Python and various applications that can be based on python. The students were introduced to how Python being a very simple to understand language can be used in various fields, such as Artificial Intelligence, Internet of Things, Android development and many more. The session also consisted of how to create a simple Python programs and an introduction to its interpreter. The session ended with demo of some of the Applications created in Python.



Speaker - Mr. Ravi Shankar Jodha Aptoon Solutions



**5 GOLDEN RULES OF GETTING PLACED - A WORKSHOP BY MR.  
HRIDAY G S**

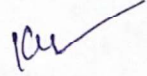
Date: 10 September 2018

On 10<sup>th</sup> September 2018, Mr. Hriday G S conducted a seminar for the students of Maharaja Surajmal Institute of Technology on 5 golden rules of placement. The seminar was organized by the placement cell. The seminar was a captivating and interactive session. The students were actively involved in the discussion. The 5 Golden rules that were discussed are:

- Integrity is the highest virtue unless human life is at immediate risk
- Know your institution
- Defend your institution and don't compare institutions
- No negatives: remove words couldn't, wouldn't, may not, will not, shall not, I preferred XYZ from your dictionary
- Be assertive and humble not aggressive or defensive

The students were highly enthusiastic and excited with the seminar. They also responded very positively towards it.

Mr. Hriday G S formerly worked as the Asst. PF Commissioner at EPFO, Ministry of Labour, Govt. of India and attained AIR rank 2 in the UPSC entrance exam. He is currently the Director of Academics at AnkGanit Solutions Pvt Ltd.

  
(Kanta Sheeran)  
Incharge - Student  
Activities)

## Report for the Delhi Visit (Connect With SIMS):

### Students who visited Delhi

1. Niyati
2. Anant Sharma
3. Kshitij Srivastava

23<sup>th</sup> August 2018

• **Maharaja Surajmal Institute of Technology –**  
The team Connect with SIMS visited Maharaja Surajmal Institute of Technology ,Delhi and presented before the students of Second year students to make them aware about the Symbiosis Family as well as make them aware of why they should pursue post-graduation. We also made them aware of the different opportunities that our college provides apart from just education, for eg taking part in events like TEDX , Market beat ,Incubation Center and many more .  
The strength of the students was 56.They asked us very genuine questions like how should they prepare for SNAP, which subjects to Focus on as the paper does not have sectional cut off, how is the campus and mess food. It was an interactive session which helped us spread awareness about our college. We would like to thank Navdeep Bohra who helped and guided us though out the process and helped us to arrange the entire event.

### GLIMPSE OF THE EVENT







100  
(Kaita Sheelan)

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## Workshop on "SwitchToCode"

Dated: - 15th March 2018

The '#SwitchToCode' workshop was conducted on 15<sup>th</sup> March 2018 by coding ninjas at MSIT lab 05. Ms. Nidhi Agarwal who is one of the main faculty at Coding Ninjas was the speaker for this workshop. She was accompanied by Ms. Aayushi Bhatjiwale who is the marketing head of Coding Ninjas. This workshop included various brain teasers, brief on programming fundamentals, questions from data structures, intro to competitive programming, career prospects in programming and Q&A session conducted over a period of two hours from 12:30pm-2:30pm. Coding Ninjas T-shirts were given as prize throughout the workshop to students who solved the brain teasers. Coding Ninjas notepads were also distributed among the students who attended the workshop.



## Session On Higher Education

A session was conducted by Endeavor on higher education for BTech Students on (18/1/18). The session begins with a video showing how a student gets confused about future when student goes in final year of engineering.

This was followed by small discussion on various fields of higher education including MTech, UPSC, MS and MBA.

There was a detailed discussion on current job scenario in India. Sir supported their stuff by providing stats about Number of jobs available in India to Number of Students graduating every year. This was followed by detailed discussion on selecting MBA as higher education.

Sir gave background of IIM's and the selection process in IIM's. There was discussion on Group Discussion that are consider important for selection. Sir told us how to start a group discussion and what approach should be followed to get maximum acceptance at GD's.

After this projected out the best MBA colleges across country which includes

Indian Institute of Management (IIM-A) (Ahmedabad)

Indian Institute of Management (IIM-C) (Kolkata)

Indian Institute of Management (IIM-B) (Bangalore)

Xavier Labor Research Institute (XLRI) (Jamshedpur)

Indian Institute of Management (IIM-L) (Lucknow)

Faculty of Management Studies (FMS) (New Delhi)

They told us about the selection process in these top B-Schools of India and exams that we should take in future.

The discussion finally ends with small overview and Q/A session.

## **AICTE Sponsored two days Seminar Organized by CSE Department**

An AICTE sponsored two days seminar on “Advances in Speech Technology- A way Towards Intelligent Human Computer Interaction” was organized by CSE Department on 27-28, November 2017.



**AICTE SPONSORED  
TWO DAYS NATIONAL SEMINAR  
ON  
ADVANCES IN SPEECH TECHNOLOGY**  
A WAY TOWARDS INTELLIGENT HUMAN COMPUTER INTERACTION

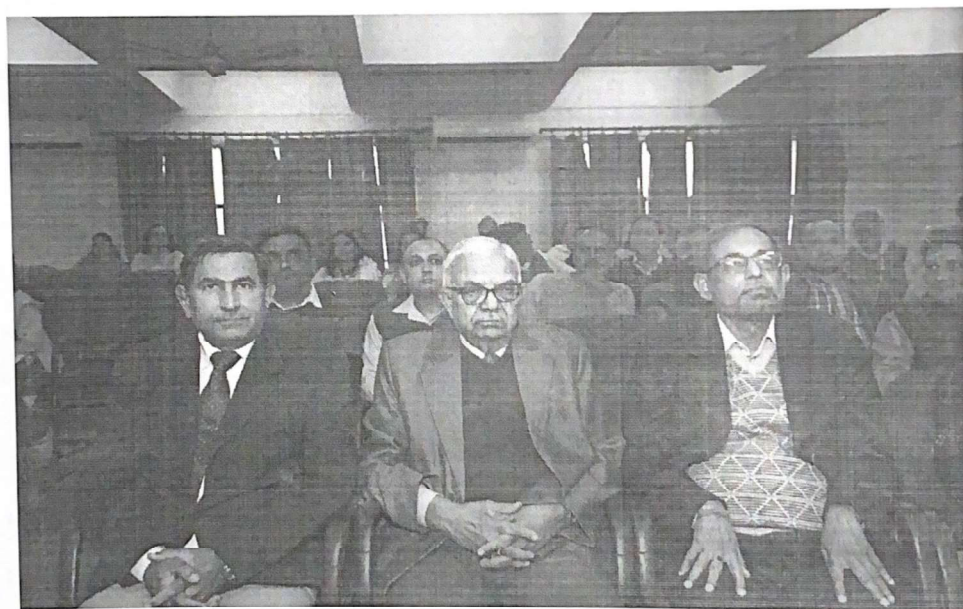
**27<sup>TH</sup> - 28<sup>TH</sup> NOVEMBER, 2017**



**ORGANIZED BY  
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING  
MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY  
C-4, JANAKPURI, NEW DELHI-110058**

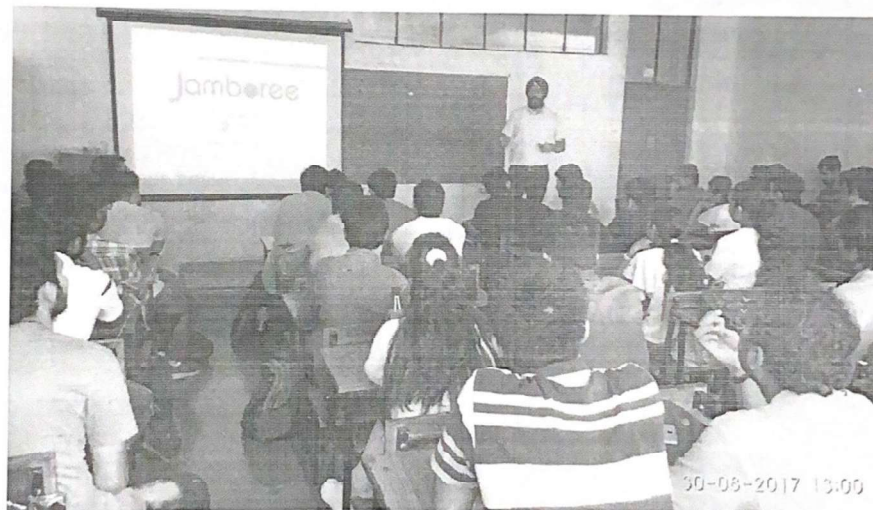
AFFILIATED TO GGSIPU | APPROVED BY AICTE  
ACCREDITED BY NBA (CSE & IT)  
NAAC ACCREDITED 'A' GRADE | ISO 9001:2008 CERTIFIED





**Overseas Education Seminar by The General Manager of Jamboree education pvt. Ltd. Mr. Harpreet Singh on 30th august, 2017.**

A seminar was organised by Jamboree education pvt. Ltd. for the students of CSE 5th Semester on 30th august, 2017. The General Manager of Jamboree education pvt. Ltd. Mr. Harpreet Singh interacted with the students. The main areas of his talk was GRE, GMAT, the gateway test for Masters, MBA studies in the abroad as well as India top notch Institutes, Profile Building, Masters / MBA Deferred admission program available without work experience, SOP & LOR's related information, Career and employment prospects after Masters or MBA & ROI (Return on Investment). He also discussed with the students about the educational and visa challenges in different countries. All the students found the session very valuable and interactive.





**Big Data and Hadoop System seminar by Mr. Rajeev Lakra from Jamboree education pvt. Ltd. on 30th August, 2017**

A seminar was organised on 30th August, 2017 on Big Data and Hadoop System for CSE 3rd Semester students. Mr. Rajeev Lakra from Jamboree education pvt. Ltd. gave a brief introduction of Big data and Hadoop Systems to the students. Big data is based on the 3 V's- Velocity, Volume, and Variety. If these following parameters increase at regular intervals than the data can be considered as big data. In 2001, Google launched GOOGLE FILE SYSTEM and MAPREDUCE. The core of the technology was the master slave architecture. In 2003, Dough Cutting with an 11-member team framed the most efficient big data platform, HADOOP. It was accomplished by the support of Yahoo. After 3 years in 2006 Hadoop had its 100 nodes and in 2008 it was handed over to Apache as an open source platform. Most students appreciated the session and showed interest. The seminar proved to be a good learning experience for all the students and received an overall positive feedback.

# SEMINAR REPORT

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A seminar was organised in our college by CETPA Info. Tech for CSE/IT students of 4<sup>th</sup> and 6<sup>th</sup> Semester the details are as follow:-

## INTRODUCTION

The main aim of seminar was giving students basic knowledge of DATABASE and PYTHON on industry point of view. Speakers told us about the importance of these concepts in IT Industry and invited us to join their institute CETPA Info. Tech. For such courses and summer training

## ABOUT DATABASE

They told us following points about Database

- Importance of Database
- DBA work in industry
- Backend-frontend
- How different companies use DBMS
- Soft wares to access DBMS
- Difference between DBMS and RDBMS
- Codd's Rules for RDBMS

## ABOUT PYTHON

They told us following points about PYTHON

- Need of python
- Applications of python
- How python different from other languages
- History of python
- Future of Backend Language-PYTHON
- Benefits of using PYTHON

## OTHER DETAILS

- VENUE – Room No.-206 , MSIT, Janakpuri East, New Delhi
- TIMINGS – 12:30 PM-2:30 PM
- DATE – Mar 7, 2017

## FEEDBACK

Most of the students liked that Seminar and also want to attend 2hr. Workshop separately for each DATABASE and PYTHON. All Students really appreciate such seminars held in our institute



# SEMINAR REPORT

A seminar was organised in our college by HEADSTART EDUCATION (Business partner of IBM) for CSE/IT students of 2<sup>nd</sup> and 3<sup>rd</sup> year the details are as follow:-

## INTRODUCTION

The main aim of seminar was giving students basic knowledge of Big data with HADOOP on industry point of view. Speakers told us about the importance of these concepts in IT Industry and invited us to join their institute Headstart Education For such courses and summer training

## ABOUT BIGDATA

They told us following points about BIG DATA

- Big data is a problem not a solution
- How Big Companies like Google, Facebook, yahoo etc stores their data
- What is Big Data-Huge amount of data
- Different Companies contributes to find solution of Big Data-Evolution of Hadoop
- IBM History and role in Big Data

## ABOUT HADOOP

They told us following points about HADOOP

- Need of Hadoop
- How servers process such a huge amount of data using parallel processing
- Hadoop software – IBM infospare biginsize
- How different companies use hadoop to extract useful data from big data with examples
- Hadoop can extract data in the form of video, text, audio of any other form
- Finally we run an application based on hadoop
- They told us about increasing demand of hadoop as a latest technology

## OTHER DETAILS

- VENUE – Room No.-206 , MSIT, Janakpuri East, New Delhi
- TIMINGS – 12:30 PM-2:30 PM
- DATE – Feb 7, 2017

## FEEDBACK

It was really an interactive session .They clear most of our doubts and also told us about some interview questions based on hadoop . Most of the students were really enjoyed that seminar and we really appreciate such seminars in our institute.

**MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY**  
**COMPUTER SCIENCE DEPARTMENT**

**Report**

**On**

**TOPIC: Seminar on Digital Marketing**

Department of Computer Science & Engineering organized a seminar on "DIGITAL MARKETING" on 18th October, 2016(Tuesday). The chief guest and key speaker of the event was Dr. Kapil Anand, founder of IIPDS (International Institute of Professional and Digital Studies), Corporate Trainer and Business Consultant. Mr. Siddharth Kaul (Team Leader of Janakpuri branch), Mr. Rahul Yadav and Mr. Praveen Gupta (Training Coordinators) graced the occasion by their presence. The seminar started with a brief introduction of Digital Marketing concept by Mr. Praveen Gupta, followed by a motivational and inspiring speech by Dr. Kapil Mathur. He discussed about the digital marketing and provided an insight for the International Institute of Professional and Digital Studies. IIPDS is India's largest independent integrated learning and development house. It provides Training and Skill Development Programs along with opinion and analysis on Digital Marketing. He discussed various modules under IIPDS including Digital Marketing Fundamentals, Website Planning, Blogging, Search Engine Optimization, Google Adwords, Social Media Marketing, E-mail marketing, Web Marketing, Youtube Marketing, Affiliate Marketing, E-commerce marketing and Online Reputation Management. Students were encouraged to utilize technology in a better way. The event ended with an interactive session with students where many students actively participated and asked doubts which were cleared satisfactorily. The seminar was held under the supervision of Dr. Naresh Kumar (Asst. Prof. CSE Dept.) and Mr. Navdeep Bohra (Asst. Prof. CSE Dept.).



## Coding Competition IEEE CS MSIT

IEEE CS MSIT organised a coding competition in association with Hacker earth on 5th February 2017.

The competition was held online and received over 450 registrations from all over India.

Top 3 winners were :-

- 1) Abhishek Sajwan, IIT Roorkee
- 2) Vineet Shah, IIT Indore
- 3) Raghav Agarwal, IIT Kharagpur

And top 3 winners from Msit where:-

- 1) Saurabh Gupta
- 2) Himanshu
- 3) Ankush Garg

The competition was a great success and the hard work of the organisers was appreciated by everyone.

  
Ms. Savita Ahlawat  
Reader, CSE

**MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**WORKSHOP ON GAME DEVELOPMENT**

Dated: 11-08-2016

A Workshop on "Game Development Workshop Using Java Script" was organized by Computer Science and Engineering Department. It was held on August 11, 2016. More than one hundred students of CSE and IT departments of both shift had been participated in this workshop. Workshop was taken by Coding Blocks. Coding Blocks is a private organization situated in Pitampura, Delhi which conducts various training programs, seminars, hands-on workshop for undergraduate students on various topics like java, game development and android etc. Skill development is very important in today's competitive world. They have various modules which can be taken up by the students as per their convenience. The speakers of the workshop are Mr. Prateek Narang and Mr. Arnav Gupt headed by Mr. Rajesh Sachdeva.

In this workshop, students came to know about game development using javascript and phaser and by using these technologies two games are build that are Pokemon and Mario game. The editor Brackets issued for development of these games. There were two way conversations between speakers and students.

Pokemon game was bulid using technologies:

1. HTML5 canvas
2. Javascript

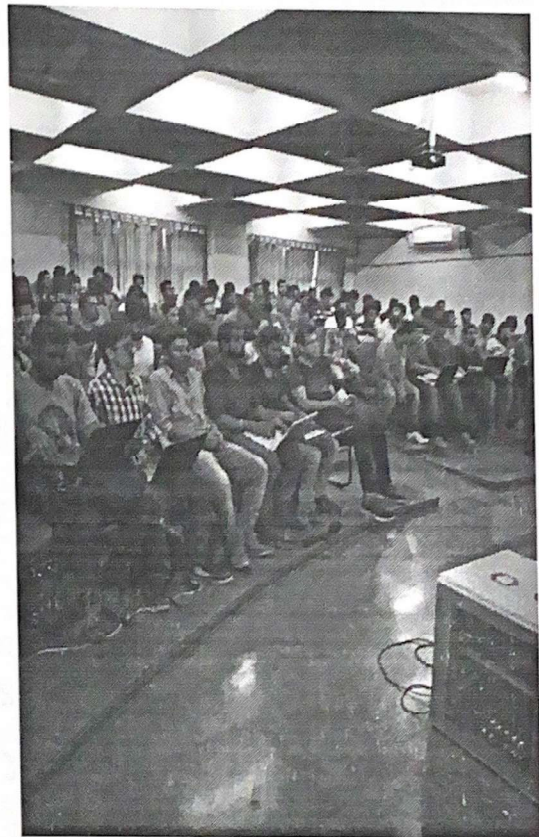
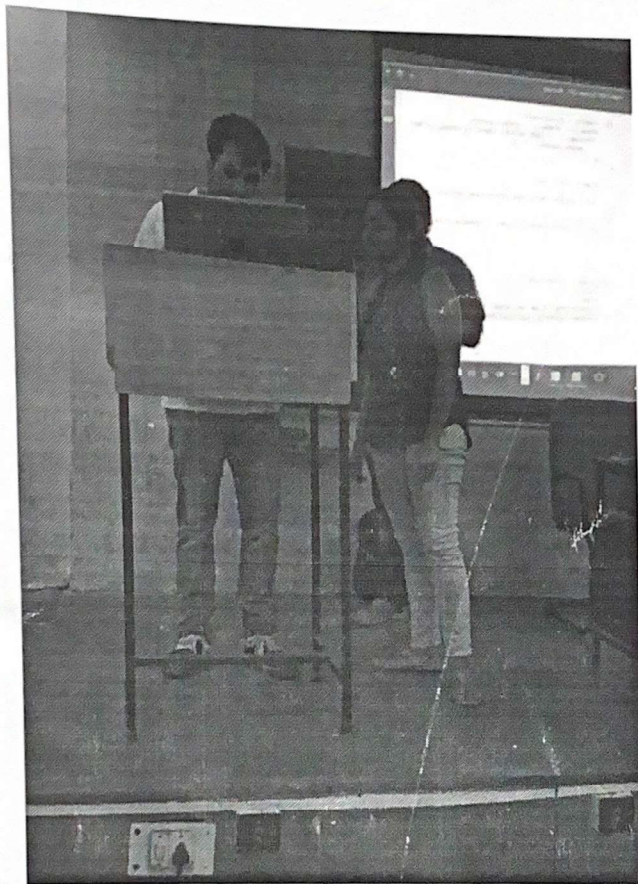
Mario game was build using technologies:

1. HTML
2. Phaser
3. Javascript

*Anah*  
11/8/2016



Overall, this workshop was knowledgeable and interactive and students tried to know about the development of games and how technologies can be used in computer Science and Engineering.



## Faculty Development Program on Data Science

Data is the new oil. It is an immensely untapped valuable asset and the tech industry is booming with the urge to learn more about it. Looking at the uprising demand of Data Science in the industry, the **Information Technology Department** of *Maharaja Surajmal Institute of Technology*, in association with **4 Achievers, Noida**, organized a **5-day Faculty Development Program** to augment their knowledge.

The program took place from **28 December 2020 to 1 January 2021**, from 11 am to 1 pm each day. It was commemorated by a leading Data Science and Machine Learning Expert, **Mr Nitin Shrivastav**, who enlightened the faculty with his top-notch teaching skills.

**Day 1 & 2** included the elaboration on Topics related to Python, including:

- ✓ Features of Python
- ✓ Uses of Python
- ✓ Why Python is popular?
- ✓ Libraries of Python
- ✓ Companies using Python
- ✓ Types of language
- ✓ Why this Language is for Machine Learning and Artificial Intelligence?

After the first 2 days, the foundation had been laid and it was time to work upon some advanced learnings. So the **next 3 days** were dedicated to topics such as:

- ✓ **Data Analytics**; to understand and analyse what we can infer from data.
- ✓ **Supervised Learning**; to train a model based on a given outcome.
- ✓ **Unsupervised Learning**; to identify patterns in data sets containing data points that are neither classified nor labelled.
- ✓ **Reinforcement Learning**; to learn in an environment in order to maximize the notion of cumulative reward.
- ✓ **Neural Networks**; to recognize underlying relationships in a set of data through a process that mimics the way the human brain operates.
- ✓ **Deep Learning**; an artificial intelligence function that imitates the workings of the human brain in processing data and creating patterns for use in decision making.

This program proved to be a great way of giving boost to the discussion of Data Science among the faculty members and provided appreciable insights to everyone. It was, thus, a very fruitful program indeed and the knowledge gained will forever be beneficial.

Preech  
10/01/2021



## CAREER PROSPECTS AVAILABLE AFTER B.TECH IN INDIA AND ABROAD

A webinar was conducted by Information Technology department of MSIT in collaboration with AdmitKard discussing the career prospects which are available after B.tech in India and abroad . The webinar was conducted on 5 November 2020 at 5:00 PM.

The poster is for a live webinar. At the top left is the MSIT logo. The text reads: 'DEPARTMENT OF INFORMATION TECHNOLOGY, MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY, ORGANISED BY: ANURAMA KALRA IIT DPT, MSIT, DELHI'. The AdmitKard logo is at the top right. The main title is 'MSIT PRESENTS: CAREER PROSPECTS AVAILABLE AFTER BACHELORS, IN INDIA AND ABROAD'. Below this is 'LIVE WEBINAR'. The date and time are 'DATE & TIME | 05:00 PM, 5TH NOV' 2020'. There are two speaker portraits: Speaker 1, Shantanu Gupta, Master of Data Analytics, Deakin University, Australia; and Speaker 2, Ananya Mukherjee, M.Sc. in Informatik (Computer Science), TU Kaiserslautern, Germany.

The main purpose of the webinar was to put light on the various available options for students, both in India and Abroad. As it was an interactive session so the mentors were on the panel to answer the various questions asked by the students and guide them for their upcoming future.

69 students attended the webinar and the top questions which were included were as follows :-

- 1) Various Options available after B. Tech .
- 2) Exams required for these options .

- 3) Comparison between masters in India vs Masters Abroad (ROI , Cost , Value of degree etc ) .
- 4) Countries which are providing Masters degrees in the above mentioned options.
- 5) Exams one has to give for studying abroad .
- 6) Details of exams like syllabus, preparation, cost ,avg idea of scores required etc.
- 7) Effect of COVID on studying abroad.

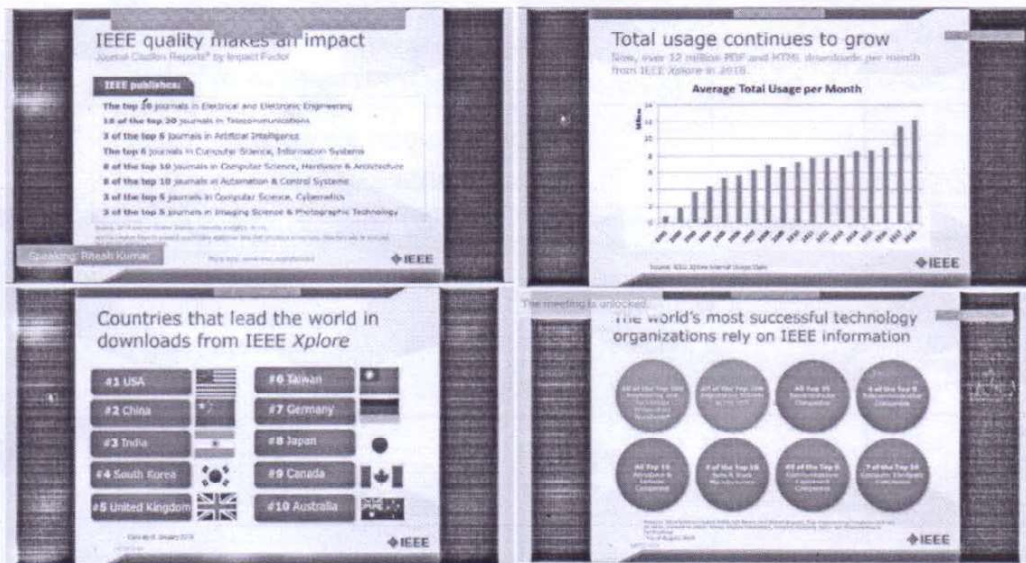
The webinar was conducted on the platform "webinar jam". The speakers of the webinar were :-  
1 Ananya Mukherjee , M. Sc. Computer science , TU KAISERLAUTER , GERMANY  
2 Shantanu Gupta , Master of Data Analytics , Deakin University , Australia

*Jyoti Khurana*

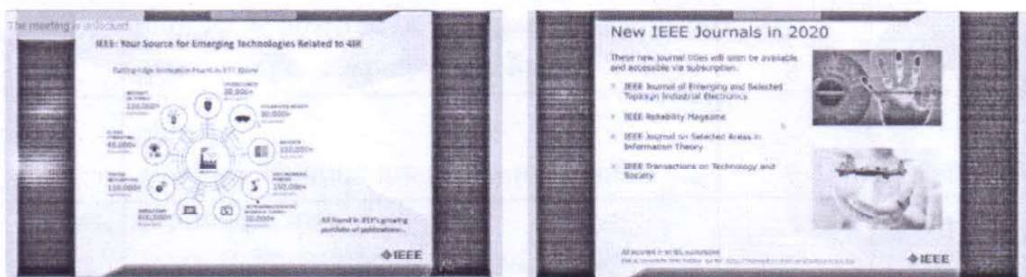


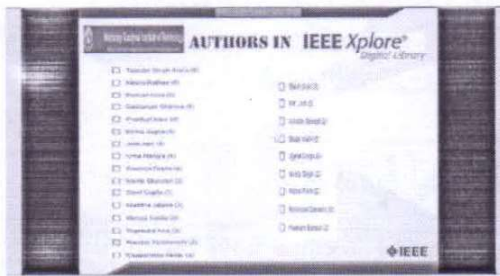
# IEEE Webinar Report

Strengthening the bond between IEEE and Maharaja Surajmal Institute of Technology, the IT Department of the college organized a Virtual Technical Talk on "IEEE Xplore Digital Library: Delivering Research Better Than Ever" on the effective usage of IEEE Xplore Digital Library Platform with ASPP Online and POP Online collection on 23 October 2020 at 2 pm.

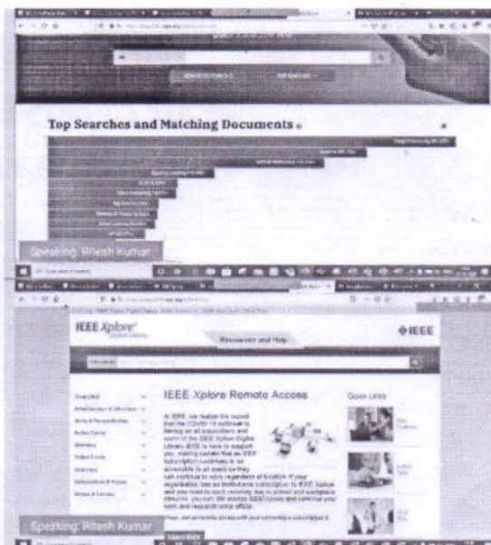
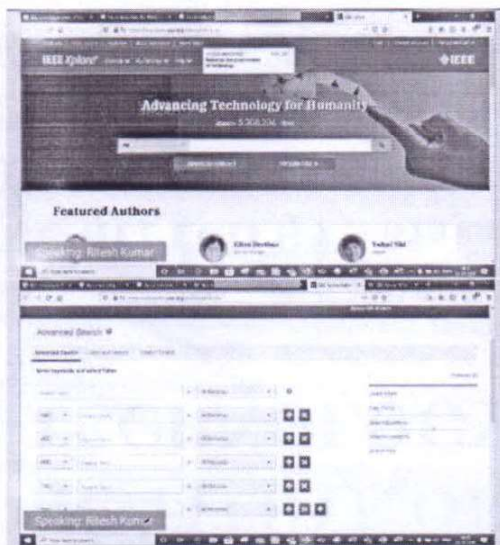


The speaker of this talk was Mr Ritesh Kumar from IEEE Client Services EBSCO Information Services with exceptional prior experience. The talk commenced with a brief overview of IEEE and the initiatives IEEE has taken in times of COVID-19. The growth of usage of IEEE resources over the years and new upcoming technologies were also illustrated clearly. Also, the Authors of several Research Papers from MSIT were highlighted and appreciated.





This was followed by a live hands-on session on the IEEE Xplore website to elucidate on the efficient searching of the required papers for R&D. A wholesome overview of the website was provided, after which, a step-by-step procedure was followed explicitly and each method of searching was elaborated effectively. The credentials, for accessing the free content during COVID-19 times, were also shared with the attendees.



The talk concluded with a Q&A session with the audience and all the queries were cleared with precise answers. This session was thus, very helpful for everyone who wished to increase their knowledge in the Research and Development domain by accessing the free content provided by IEEE for the college.

AB  
 (Dr. Anupama Kaushik)



# MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY

## Activities Organized by IT Deptt. (1st Shift)

### Faculty Development Programmes:

Sr. No.	FDP/Seminar for Faculty	Organization/ Industry	Date
1.	Faculty Development: Planning and Management for Institutional Excellence	Conducted by NITTTR, Chandigarh through ICT	18th – 22th November, 2019

### 1. STC on “Faculty Development: Planning and Management for Institutional Excellence”

Department of Information Technology has organized one week Short Term Course (STC) on “Faculty Development: Planning and Management for Institutional Excellence” from 18th – 22th November, 2019 conducted by NITTTR, Chandigarh through ICT. The course coordinator for this program was Dr. Rakesh K. Wats, Professor & Head, Media Centre, NITTTR, Chandigarh. STC started with inauguration session and registration with the remote centers. On the first day, Dr. L.N. Mittal (Prof., NITTTR) emphasized on a topic “Building World Class Institutions – Role of faculty”. On the second and third day, Dr. Rakesh K. Wats, Dr. Sanjeev Chadha (Prof. MGSI Public Administration) & Dr. Monika Agarwal (Prof. UIAMS, PU, Chandigarh) gave very informative lectures on Planning and Management, Teacher Effectiveness and Development – Concept & Systematic Design of Faculty Development Programmes respectively. On the fourth day, Dr. Sanjiv Gupta (SML ISUZU) discussed the Role of Leadership and Dr. S. Dutt told the importance of motivation for self Development. On the last day, necessity & importance of Outcome Based Education was discussed by Dr. B.S Pabla. In the end, Dr. Rakesh K. Wats took the presentation and feedback about STC from all the remote centers. Overall, it was an impressive and enlightening program and all the speakers have discussed their topics very well and respond every query raised by the participants.



Coordinated by: Mr. Surender Singh (Assistant Professor, IT Deptt)

*Surender*



# MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY

Department of Information  
Technology

3<sup>rd</sup> Dec., 2018

## REPORT on 1 Week FDP on the Topic "Data Science using R"

Department of Information technology organized a one week faculty development program on "Data Science using R" from 26<sup>th</sup> Nov. to 30<sup>th</sup> Nov., 2018. This program was ICT based and conducted by the department of Computer Science and Engineering, NITTTR, Chandigarh. The course coordinator for this program was Mrs. Shano Solanki, Assistant Professor, NITTTR, Chandigarh. She started the FDP with inauguration session and registration with the remote centers. On the first day, she has covered the introduction and installation of R. On the second day, Dr. Gaurav Kumar (MD, Magma Research and Consultancy, Ambala) covered data structures. On the third day, Dr. Gaurav Kumar explained 'How to import data-sets' into R and missing value treatment in R.



On the fourth day, Dr. Gaurav Kumar discussed some research problems like Social media mining, Predictive analysis, Big Memory, data reduction packages etc. On the last day, Er. Nanak Chand discussed machine learning using CARET tool I and II. At the end, Mrs. Shano Solanki took the feedback about FDP from all the remote centers.

Overall, it was an informative program and all the speakers have discussed the topics very well and entertained every query raised by the faculty.

Co-ordinator  
*Prabhjot Kaur*  
Dr. Prabhjot Kaur



# MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY

C-4, Janakpuri, Delhi – 110058

## Report of event: Expert Talk

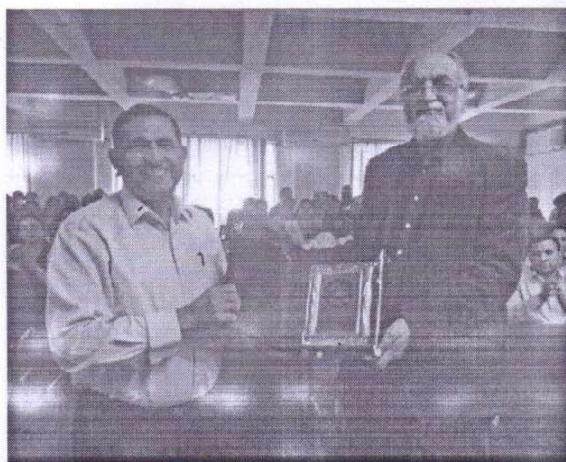
ORGANISED BY THE DEPARTMENT OF INFORMATION TECHNOLOGY

Dated: Feb 28, 2018 (Wednesday)

## PHOTOVOLTAIC RESEARCH: An Indian Perspective

The department of Information Technology organized an expert talk on the **prospects of research in the field of Photovoltaics in India** and this thoughtful and enlightening talk was delivered by Prof.

Vikram Kumar of the department of IT for the teaching staff of MSIT.



The talk mainly encompassed the **following topics**:

1. **World Energy Demand:** The developed and developing nations' needs, considering the various global and official statistics were thrown light on.
2. **Solar Energy and Devices:** The structures, uses, functioning and applications of solar energy and in particular solar cells were discussed.



3. Crystalline Silicon Cells: The various modules, ratios of efficiency and feasibility factors were discussed.
4. PV Systems: International PV scenarios, price trends, global and per capita capacities were talked about.
5. Solar Farms: Installation and establishment of solar farms using solar panels in rural and urban households and other setups was explained.
6. National Solar Mission: The researches of the Ministry of New and Renewable Resources (MNRE) and Department of Science and Technology – Solar Energy Research Initiative (DST – SERI) were thoroughly discussed.
7. Renewable Energy: The professor discussed the global and national avenues to be explored available and the extended scope of development of these renewable energy resources.
8. International Scenario and Global Trends
9. New Technological Upgradations: Newest advancements in the field of photovoltaics were explored. The various avenues available were also thrown light on.
10. Global Value Statistics: The various global figures established and compiled on a global level were incorporated in the talk by the esteemed professor.
  - a. R&D Avenues: The scope of the research in the field of photovoltaics was explored.

The faculty had a series of questions and answers and the Q&A session was very fruitful and interactive. The Speaker was facilitated by the Director of MSIT, Dr. K.P. Chaudhary.

*Sharma*

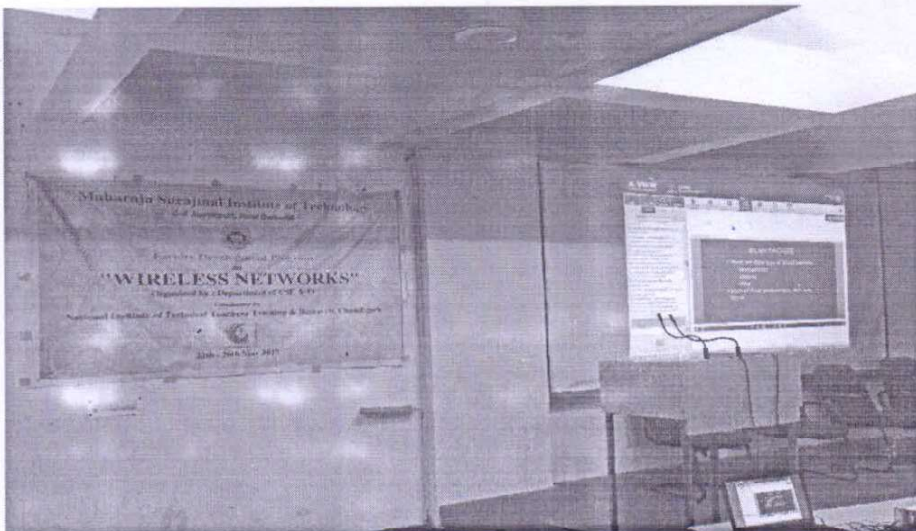


## Report on FDP

The Information, Technology and Computer Science departments of MSIT organized an ICT based Faculty Development Programme on Wireless Networks from 22<sup>nd</sup> – 26<sup>th</sup> May, 2017 conducted by NITTTR Chandigarh. The FDP was majorly attended by the faculties of both the shifts and few participants were from Maharaja Surajmal Institute also. There were total of 56 participants.

On the first day i.e on 22<sup>nd</sup> May, 2017 after the inaugural session “Introduction to Wireless Communication” talk was given by the course coordinator of this FDP Dr. Rakesh Kumar, Assistant Professor, NITTTR Chandigarh and by the later half of the day “IP Address Configuration” was discussed by one of the faculty of NITTTR Mr. Amit Doegar. For the rest four days various topics like Introduction to Cellular Technologies, 4G LTE Networks, Wireless LAN and MAN, VANET, Introduction to NS2, NS3, security issues in WiFi, Importance of Research Methodology in Engg. , WSN 802.15.1 and WSN 802.15.4 were discussed. All these topics were very useful for the faculty of CSE and IT and also for those who were pursuing research in wireless.

After the last talk on WSN 802.15.4 on 26<sup>th</sup> May, 2017 an online test was conducted for all the participants as the qualifying criteria for the certificates of NITTTR. The FDP ended with the Feedback and valediction where the course coordinator of this FDP Dr. Rakesh Kumar, announced the exemplary performance of the participants of our institute who topped the online test.





Surender

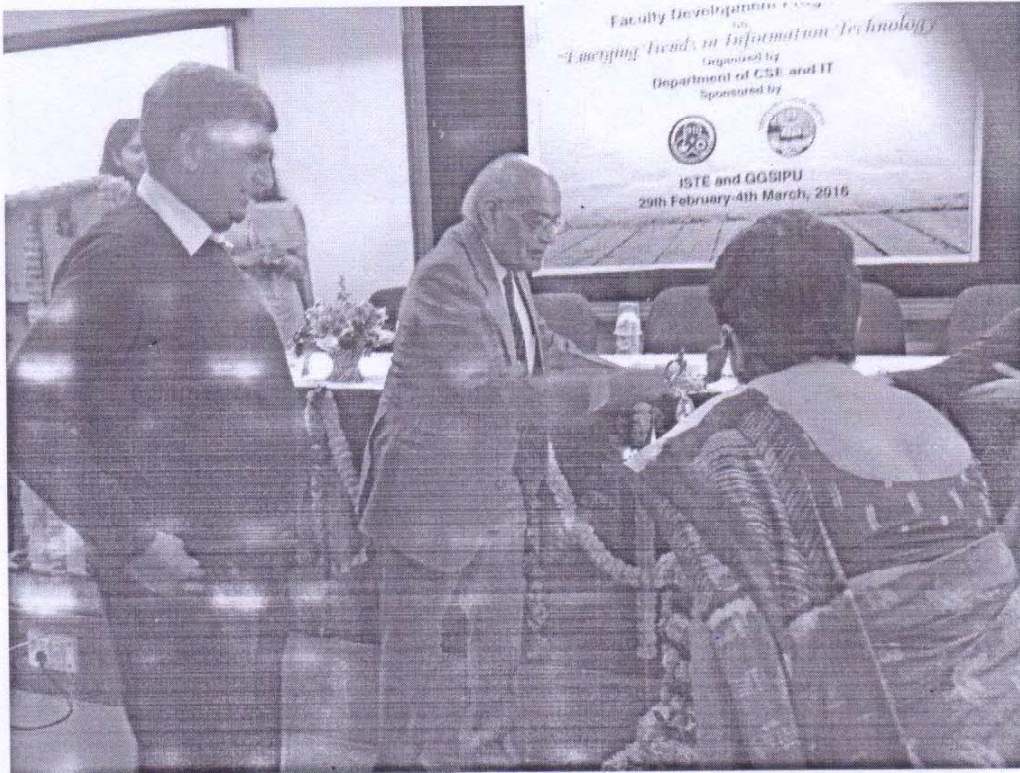


## FDP on "Emerging Trends in IT"

The Faculty Development Program held at **Maharaja Surajmal Institute of Technology** finished with a great success with the indebted support of **Surajmal Memorial Education Society** for the event.

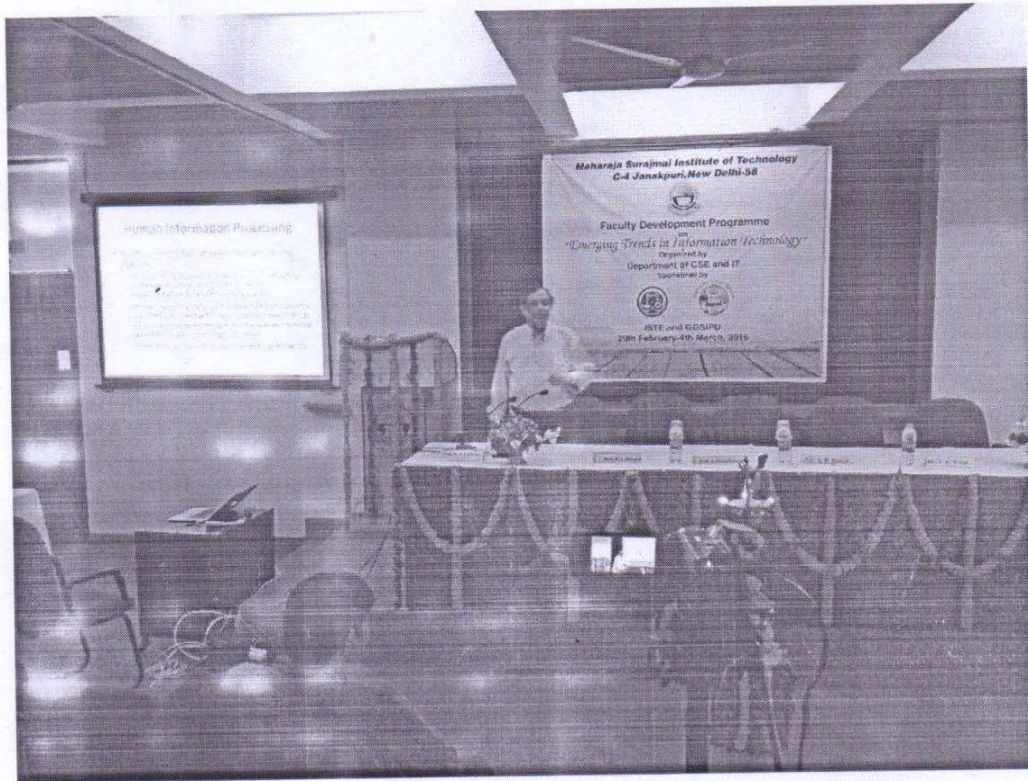
The contributions of various academicians, researchers and beau-crates that accepted the invitation and presented their talk are:

**Prof. K.L. Chopra, IITD:** - Very knowledgeable talk by the great academician. Prof. Chopra was the founder of thin films laboratory at IITD and micro science laboratory IIT Kharagpur. He told the role of thin films in our daily life. Everything in the day to day activity, directly or indirectly, depends on thin films.





**Prof. Shantanu choudhary**- Another eminent speaker from **IIT Delhi**, throws light on the very new research area that is, deep learning he explained how this **Deep Learning Networks** performs better as compared to neural networks in various applications and also discusses the various research areas and open issues on Deep Learning.





**Ms. Upma Srivastava, Sr. IAS** – Explains the importance of **ethics** not only in our professional life but also in our personal life. Her talk lies in the practical view of ethics rather than the idealistic situations.





**Prof. S.D. Joshi:** A renowned mathematician shows the importance of Mathematical concepts in any problem solving any problem statement can be mapped with three variables -: Measure, Set of Possible outcomes and sample space. He also explained the importance of random variable and stochastic process.





**Prof. S.K. Garg, DTU-** Prof. Garg was Head of department of Training and Placement in DTU for a long time, he has a close relation with the top industrial personals, and in his talk he shared us the gap between the academics and industries that he learnt from his experiences. He explained the lack in the current curriculum that ultimately results in the failure of producing quality engineers.





**Prof. Kehar Singh, IITD-** Faculty at MSIT is fortunate to got the chance to listen and interact with the legend of **optical technology** Prof. Kehar Singh. His main emphasis on optical informatics and optical processing computers, especially inthe field of:-

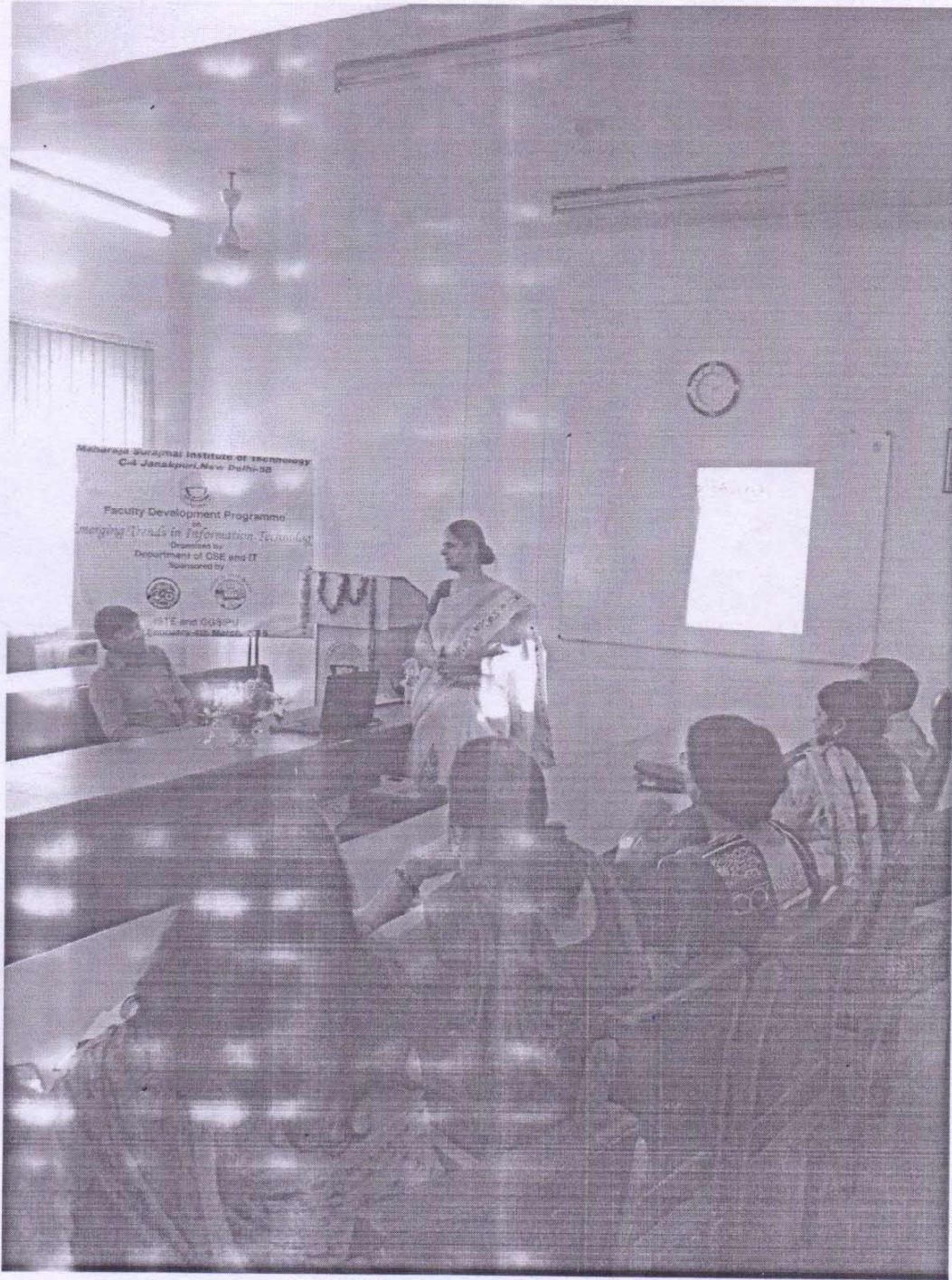
- Pattern recognition.
- Image processing.
- Artificial Intelligence.

He emphasized on the fact that optical technology is the science of 21<sup>st</sup> century, and is very-very fast than digital technology.





**Prof. Arvinder Kaur, GGSIPU-** Prof Arvinder kaur is a software professional she explained the current limitations in the present software design techniques for example:- ER diagram and DFDs. and how these can help students to improve their design skills.





**Prof. Daya Gupta, DTU :** Prof. Daya Gupta explains a very potential field in software development known as agile methodology. In her talk she explained the challenges, limitations and current open research issues in this field. Beyond these, she also put stress on methodology selection domain, since software community supports a wide range of methodologies and paradigms for development.





Prof. MN Hooda: -Explained the role of technology in teaching, how ICT helps to deliver your lecture efficiently and effectively. He told various impacts of ICT on contemporary higher education and also discussed the potential future developments. He also explored some challenges in higher education like cognitive tutors, need for developing a model, collaborative authoring etc.



The five-day faculty development program concluded on 4<sup>th</sup> March, 2016. The FDP programme received an overwhelming response with 45 participants from Computer science and Information technology department of Maharaja Surajmal Institute of Technology.

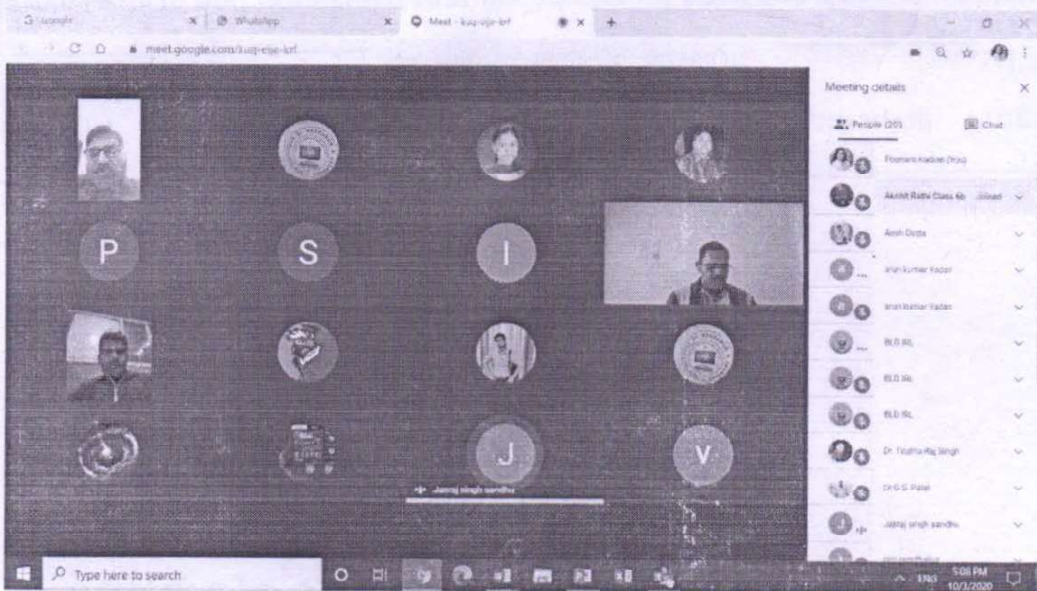
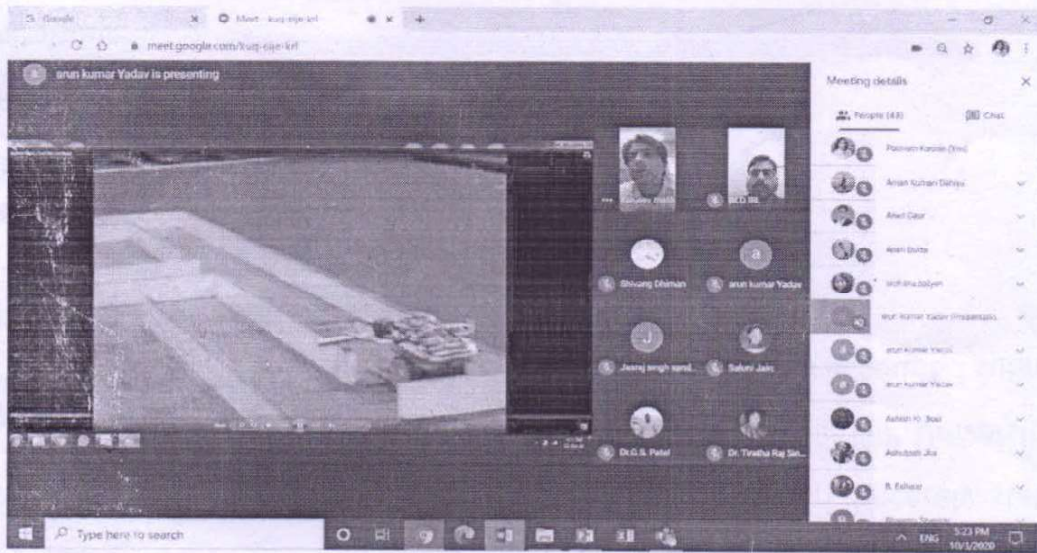
  
14/03/16.



**Webinar on "Embedded System: Robotics and IoT"**

**Dated: 3<sup>rd</sup> Oct., 2020**

The Department of Electronics and Communication Engineering organized a live webinar on "Embedded System: Robotics and IoT" on October 3, 2020. Embedded System is a scientific platform, which is extensively used in Robotics and IoT. The lecture was highly technical, educative and interesting. The webinar was conducted in collaboration with BLD Institute of Research. The students of II, III, and IV year of the ECE department attended this webinar. This session introduced a complete journey from understanding to working with Embedded Systems, specifically in the applications of Robotics and IoT. The students were encouraged to pursue or choose their minor/major projects in these areas. The webinar was concluded with an extensive Question & Answer round.



*Rajm*



25<sup>th</sup> Sept., 2020

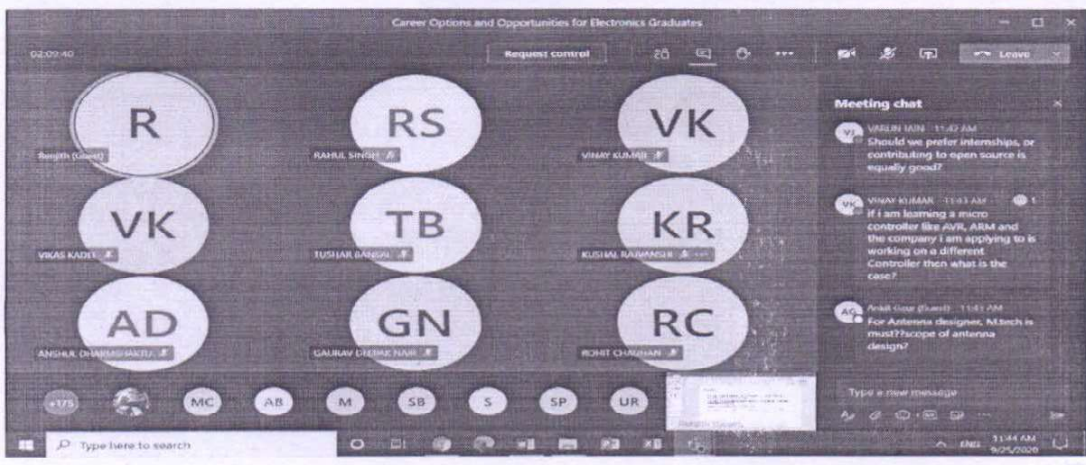
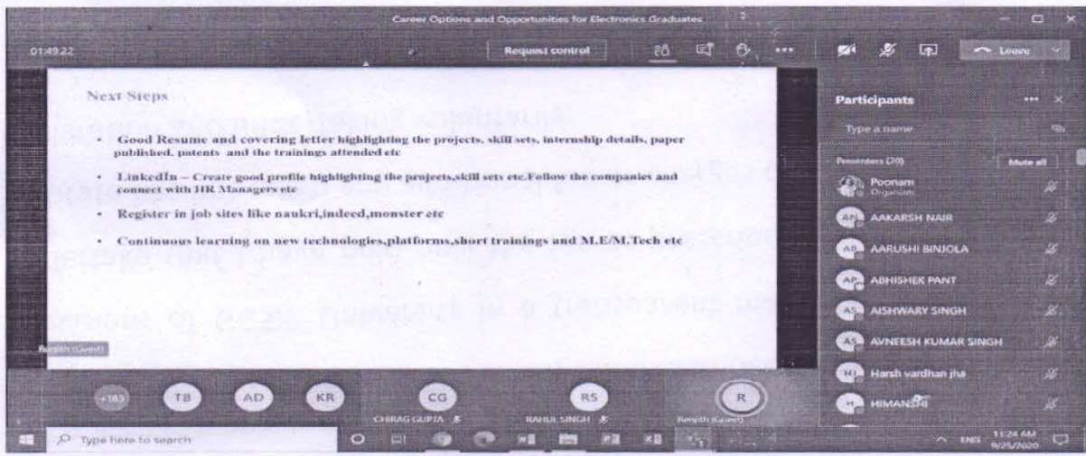
### Webinar on Career Options and Opportunities for Electronics Graduates

The Department of Electronics and Communication Engineering (ECE) and Electrical and Electronics Engineering (EEE) organized a webinar on "Career Options and Opportunities for Electronics Graduates" on 25<sup>th</sup> September 2020 for 3<sup>rd</sup> and final year students. Mr. Renjith CV, an Electrical Architect- Medical imaging at Philips Healthcare was the speaker. He holds 18+ years of experience in Electronics/Embedded hardware & product design/testing.

Key points of the lecture were

- Opportunities in the core Electronics field.
- Product Development and Industry.
- Opportunities after Engineering (Higher Study/Job etc).
- Enhancement of skill sets and the short term/online training in Embedded System, DSP, VLSI, AI/IoT etc.
- Overview about the expectation from industries.

During the webinar registered students shared their doubts about the placements process.



*Poonam*



### Webinar on "Python + Machine Learning"

Dated: 18<sup>th</sup> Sept., 2020

The Department of Electronics and Communication Engineering organized a live webinar on "Python + Machine Learning" on September 18, 2020. Python and Machine learning are the two formidable scientific platforms, which are used in almost all areas of engineering. The lecture was highly educative and interesting. The lecture was delivered by highly accomplished expert Mr. Nitin Shrivastva, in association with 4 achievers, Noida. The students of II, III, and IV year of ECE department attended this webinar. This session introduced basics of Python language, application of Python in Machine Learning, and various Machine learning application based projects to ECE students. The students were encouraged to pursue or choose their minor/major projects in these areas. The webinar was concluded with an extensive Question & Answer round.

**ACHIEVERS**  
WE BUILD PROFESSIONALS

**LIVE WEBINAR**

on  
**Python + Machine Learning**

Date : 18th September , 2020  
Time : 3:30PM

**Link to Register for Webinar**  
<https://forms.gle/9Hv159qFsTbt2HiC7>

**Faculty Coordinator : Ms. Poonam**  
**Contact : +91-9990734070**

**Organized by**  
Dept. of Electronics and Communications Engineering ,  
Maharaja Surajmal Institute of Technology Delhi  
In association with  
**4 Achievers , Noida**

```

data science
machine learning
artificial intelligence
python software development
see score google
python

In [ ]: Machine Learning

In [ ]:
diastoliccount    hbc      hemoglobin    insulin    glucose    sugar    result
0          94          38          202          99          120      Yes
1          78          55          67          88          98       No
2          12          53          45          66          87       Yes
3          23          76          77          87          112      No

training of your model with previous data (in making the prediction)

In [ ]:

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*Poonam*



Dated: 25<sup>th</sup> Feb., 2020

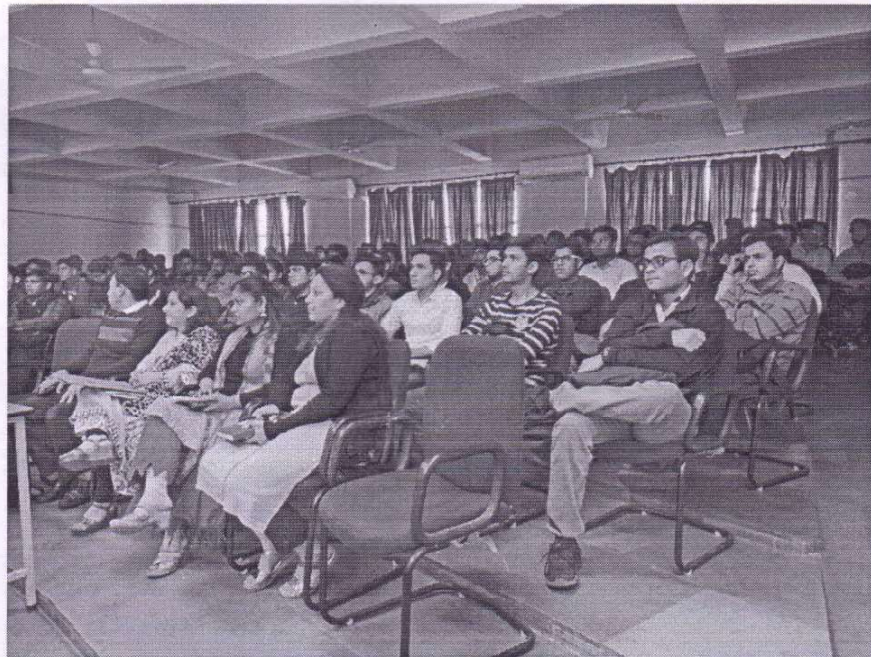
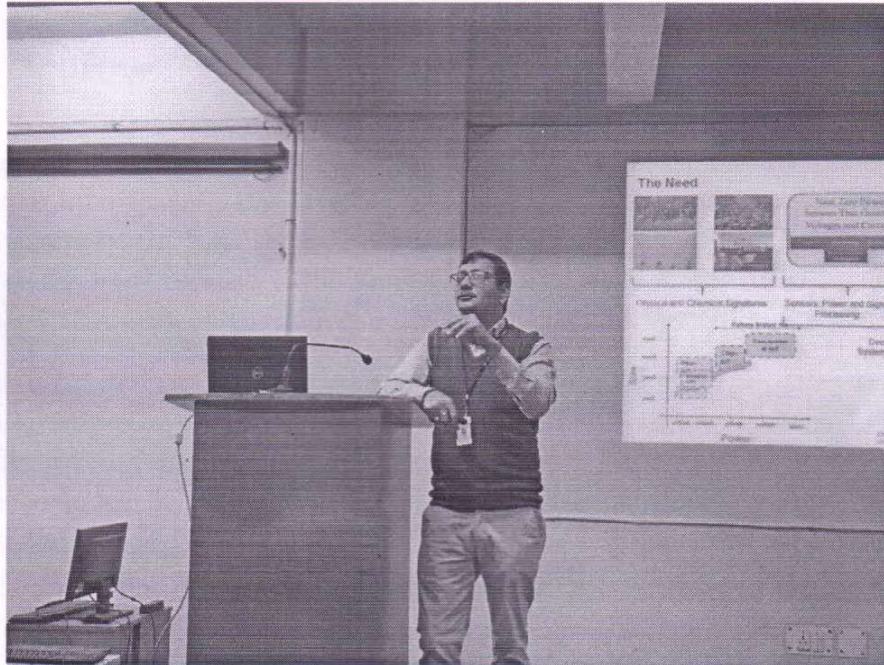
### Lecture on “Microwave Measurements: Interdisciplinary Area”

The Department of Electronics and Communication Engineering organised the lecture on “**Microwave Measurements: Interdisciplinary Area**” on February 25, 2020. The lecture was delivered by highly accomplished expert by Dr. S.K. Dubey , Scientist, Apex Level Standards & Industrial Metrology, NPL, Delhi. He has been awarded **URSI Young Scientist Award** at 2nd URSI AT-RASC, Gran Canaria, Spain for his work on uncertainty evaluation in quantum system in April 2018.

The lecture started at 9.00 am .The speaker started the lecture in a very interesting way and allured the audience with his interesting way of presentation. He gave an overview about biological effect of EM radiations, Electromagnetic Induced transparency, E-field Probes and sensors, SAR probes, microstrip antenna, Iot, 5G, millimeter waves, Lora and computational modelling of biological tissue in EM radiations. Dr Dubey talked about various ongoing DSD projects and various upcoming research fields in electronics and communications. He showed the video of a laser based music control project that is being done in his lab by his Ph.D. scholar.







He guided the students about various fields in which they should pursue their projects. He offered students to visit his research lab in NPL and encouraged them to do or choose their minor/major projects in these areas. Overall, the lecture was highly educative and interesting for faculty as well as students of ECE department.

*Pravali*



26.8.2019

# Report

## Maharaja Surajmal Institute of Technology

### Department of Electronics and Communication Engineering

**Name of Event:** Seminar

**Title:** What After Graduation

**Date of event:** 26<sup>th</sup> August, 2019

**Faculty Coordinators:** Dr. Sudesh Pahal, Associate Professor, ECE

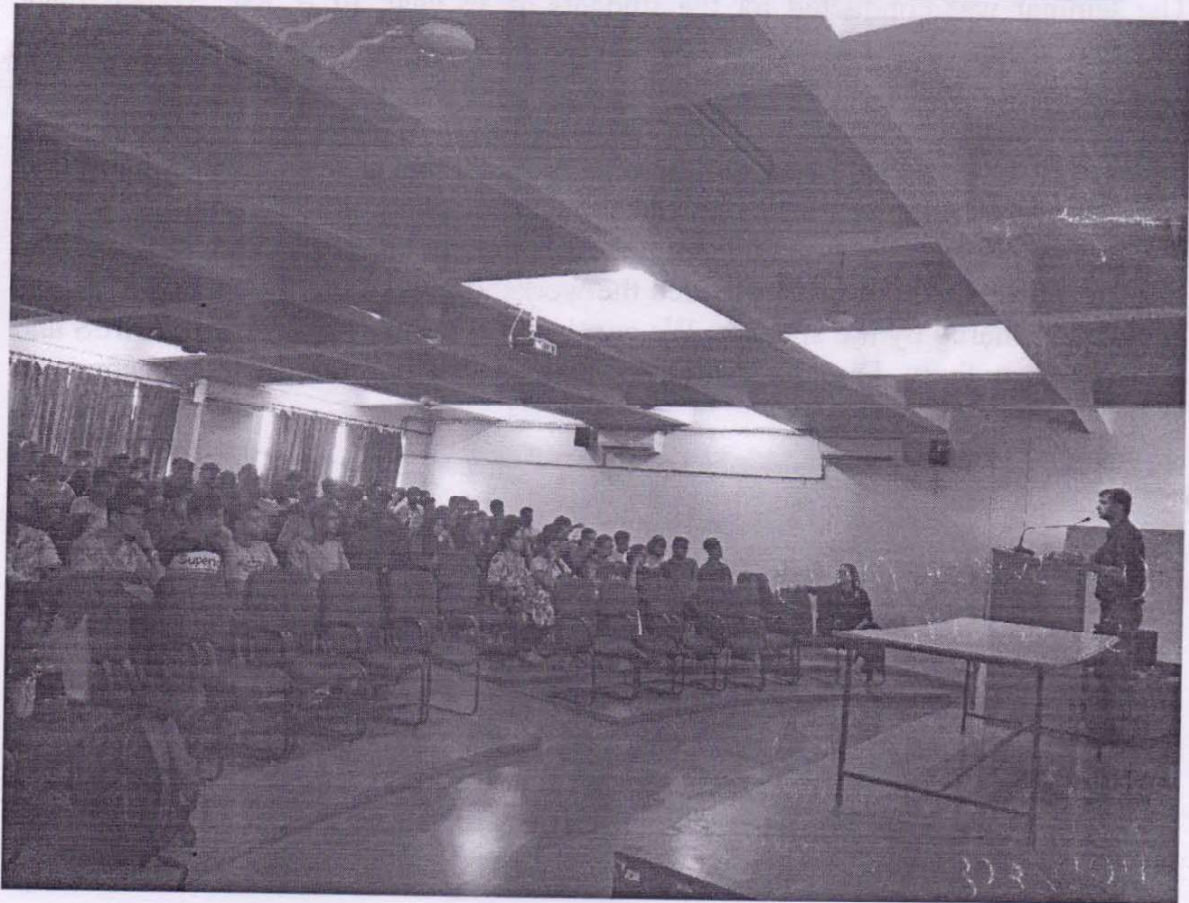
**Resource Persons:** Mr. Amit Poddar, T.I.M.E. Education

The seminar was conducted for the students of 3<sup>rd</sup> year, ECE. Mr. Amit Poddar, Faculty, T.I.M.E. was the resource person for the event. The speaker has more than 20 years of experience in teaching industry & working as a senior regional head in T.I.M.E. He has expertise in preparing students, those who get their calls from different IIMs for GD/PI., soft skill training provider. He gave an idea about options after graduation training. He also talked about scholarship options for higher studies in India and abroad. Many students got their doubts cleared in this session. The students of the institute, who attended the workshop, were highly benefitted by the knowledge shared by the speaker. We are thankful to the Management, SMES and Dr. K.P. Chaudhary, Director, MSIT for their kind support and encouragement to

Dr (Dr. SUDESH PAHAL)  
Seminar IIC

*T. U...*  
HOD, ECE

organize the event. The event was highly appreciated by the participants.



AM



## Report

### Maharaja Surajmal Institute of Technology

#### Department of Electronics and Communication Engineering

**Name of Event:** One day Workshop

**Title:** IoT using Raspberry pi and Arduino

**Date of event:** 28<sup>th</sup> August, 2019

**Faculty Coordinators:** 1. Prof. Archana Balyan, Professor, ECE

2. Dr. Sudesh Pahal, Associate Professor, ECE *SP*

**Resource Persons:**

1. Mr. Sanjit Singh, CETPA Infotech Pvt Ltd., Noida

2. Mr. Abhishek Kumar, CETPA Infotech Pvt Ltd., Noida

3. Mr. Dipankar Malik, CETPA Infotech Pvt Ltd., Noida

The one day workshop was conducted for the students of 2<sup>nd</sup> year, ECE, in two sessions from 10am to 1:00pm and 1:30pm to 3:00pm. The invited speakers from CETPA Infotech Pvt Ltd., Noida delivered lecture and gave knowledge about training and internship opportunities in IoT to students. Mr. Sanjit Singh, an eminent faculty at CETPA with great experience in this area, delivered a talk on basic concept of IoT, Raspberry pi and Arduino in the first session. The speakers introduced the audience to the upcoming research and real time projects in the field of Internet of things. He also demonstrated the hardware projects on IoT and interfacing with raspberry pi during the second session. He explained various ways to implement real time projects on IoT and raspberry pi. The faculty members and students of the institute, who attended the workshop, were highly benefitted by the knowledge shared by the speaker. We are thankful to the Management, SMES and Dr. K.P. Chaudhary, Director, MSIT for their kind support and encouragement to organize the event. The event was highly appreciated by the participants.





98/17/19 (Dr. SUDESH BHAL) Seminar, Incharge

HOD, ECE

*Tanuj Aggarwal*

5-9-15



Mock Exam conducted by TIME educations for GATE exams

Event report

March 13, 2019

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A free mock exam was conducted by **TIME Institute** which was organized by the Electronics and Communication Engineering Department of Maharaja Surajmal Institute of Technology, Delhi.



All the interested students of ECE- 1, and ECE- 2 took the exam conducted by **TIME Institute**, on March 13, 2019 at the respective classrooms. Exam duration was of 1 hour in which all the students were tested for their knowledge up to 5<sup>th</sup> semester.

The exam consists of the questions based on mathematical as well as technical knowledge. Each and every question was of 4 marks with a negative marking of 1 mark.

**TIME Institute** provided a reward for qualifying the exam with good marks. According to them anyone who will be scoring a 100% mark will get a 100% scholarship in their various courses.



Also, the students will receive a discount according to their scores in the mock exam conducted by the institute.



**TIME Institute** is a well renowned name in the field of providing coaching classes and right path for studying and preparation of GATE or any other entrance exam. **TIME Institute** offers entrance coaching for CAT, GATE, IPM, CLAT, BANK PO, SSC CGL, GRE, GMAT, IIT Foundation.

Triumphant Institute of Management Education Pvt. Ltd. (T.I.M.E.) is India's leading test-prep institute with a pan-India presence and is headquartered in Hyderabad. Established in 1992, T.I.M.E. today operates out of 248 offices located in 117 towns and cities across the country. Over 40 IIT/IIM graduates form part of the core team at T.I.M.E.

T.I.M.E. is today acknowledged as a multi-location, multi-programme training specialist run on corporate lines and offers a wide range of programmes not only for national and state-level entrance exams like the CAT, MAT, JEE MAIN, and JEE ADVANCED but also for international exams like GMAT, GRE, IELTS and TOEFL.

Through its Campus Recruitment Training conducted at various engineering colleges across the country every year, T.I.M.E. trains thousands of students in aptitude tests and communication skills as a part of preparing them for their campus placements.



T.I.M.E. also offers a unique IIT Foundation programme aimed at students of the classes 7th, 8th, 9th and 10th. This programme focuses on strengthening the student's conceptual clarity of the fundamentals of Mathematics, Physics and Chemistry.

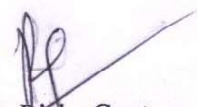
In keeping with its tradition of always maintaining a watchful eye on market trends and tapping them, T.I.M.E. has introduced training programmes for Bank PO & Clerical exams, SSC CGLE, GATE, CDS, CSAT (paper 2) and CLAT.

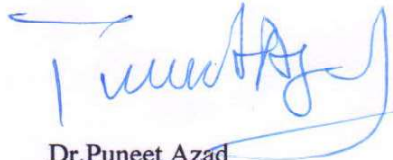
T.I.M.E. has achieved an important milestone of training more than 20 lakh students since inception and over 1.5 lakh students in the last year alone for the various entrance examinations.

When it comes to results, T.I.M.E. has always been head and shoulders above the rest. 2429 T.I.M.E. students were a part of T.I.M.E.'s flagship programme, the CAT, made it to the prestigious Indian Institutes of Management (class of 2017-2019). 12 T.I.M.E. students got 100 percentile in CAT 2016.

Finally, after the exam many aspirants talked with the TIME institute officials regarding there courses and hoe to apply for them. Moreover, the students found that test very helpful because those officials said that the mock test conducted by them was based on the pattern of entrance exam.

The overall feedback of the students was positive as they learnt a lot and were wanting to organize more of such workshops in the college.

  
Dr. Richa Gupta  
(Incharge)

  
Dr. Puneet Azad  
(HOD, ECE)

14.3.2019

Maharaja Surajmal Institute of Technology  
C-4, Janakpuri, New Delhi-110058

Department of ECE  
**Seminar Report**

**Topic :** Embedded Systems and applications

**Speaker :** Mr. Jitender Singh from TICO

**Faculty Co-ordinator:** Dr. Sudesh Pahal

**Date & Time:** 14.3.2019 at 10:00 AM

**Venue:** Seminar Hall, Room no.206

A seminar has been organized by Dr. Sudesh Pahal, Department of Electronics and Communication Engineering at MSIT on 14<sup>th</sup> March 2019 on the topic "**Embedded Systems and Applications**". The resource person was Mr. Jitender Singh, Director, TICO institute of embedded technologies. He is having more than 25 years experience in Embedded Technologies industry & working as a Director in TICO institute. He has expertise in training and preparing students for core Electronics companies in India and abroad. The students of 3<sup>rd</sup> and 2<sup>nd</sup> year attended this seminar.





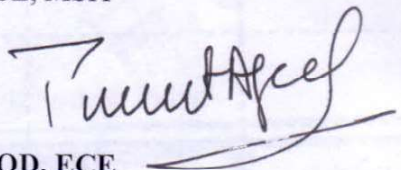
The speaker inspired the students for preparing for the core companies by his lecture. He also motivated them for having knowledge of core subjects in depth. The students were also got awareness about the requirements of core industries. The talk was very interactive and inspiring for students. It will definitely be very beneficial in taking decision for their final year projects and placement in core companies.

821  
15/3/19

**Dr. Sudesh Pahal**

Seminar Incharge

ECE, MSIT



**HOD, ECE**

21/4/19

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13.3.2019

### Notice

It is informed to 3<sup>rd</sup> year and 2<sup>nd</sup> year students of Electronics and Communication Engineering that a seminar is being organized on the topic "Embedded Systems and Applications" on 14<sup>th</sup> March 2019 from 11am to 1 pm in Room no. 206. The attendance is compulsory for all.

8/8  
13/3/19

Dr. Sudesh Pahal

Seminar Incharge

ECE, MSIT

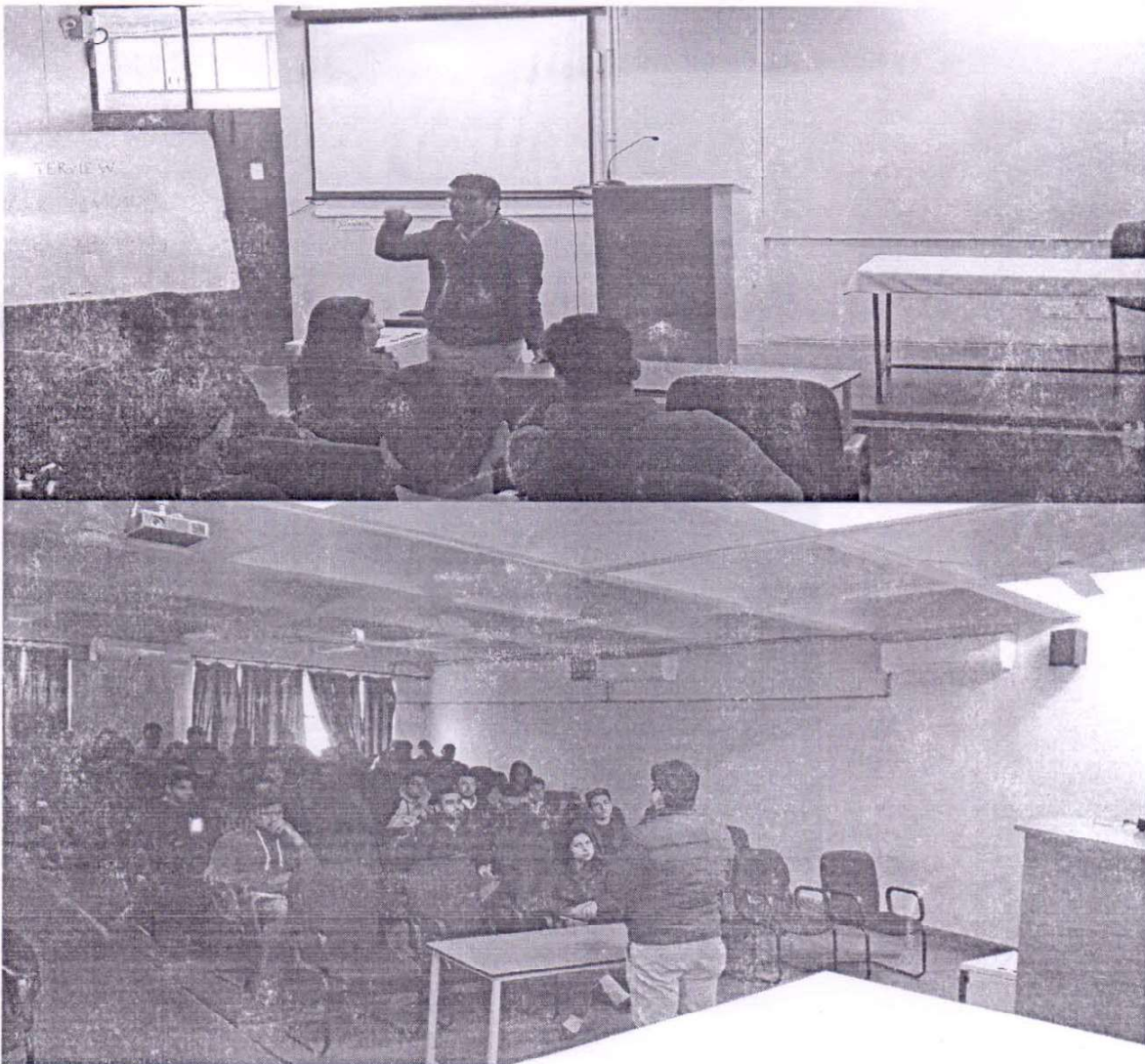
HOD, ECE



1.2.2019

## Seminar Report

A seminar has been organized by Dr. Sudesh Pahal, Department of Electronics and Communication Engineering at MSIT on 31<sup>st</sup> January 2019 on the topic "MBA in India and Abroad". The resource person was Mr. Abhishek Vyas from T.I.M.E coaching institute. Who is B.Tech, from Usmania university and MBA from MDI, Gurgaon. He is having more than 11 years experience in teaching industry & working as a Senior faculty member in T.I.M.E. He has expertise in preparing students, those who get their calls from different IIMs for GD/PI. The students of 3<sup>rd</sup> year attended this seminar.



*Sudesh Pahal*  
Dr. SUDESH PAHAL  
(Seminar ITC)

HOD, ECE

*T. Anand*  
5.9.19



Index

Topic

2nd  
10



The speaker gave very motivating talk regarding preparation for higher studies in India and abroad. The students were also got awared about the soft skill requirements of industry. Various options for scholarships and study loans along with list of top business schools were also listed by the speaker. The talk was very interactive and inspiring for students. It will definitely be very beneficial in taking decision for their higher studies.

*Signature*  
12/19

**Dr. Sudesh Pahal**

Seminar Incharge

ECE, MSIT

*Signature*

**HOD, ECE**



353  
13.10.2018

**Maharaja Surajmal Institute of Technology  
C-4, Janakpuri, New Delhi-110058**

**Department of ECE**

**EXPERT LECTURE REPORT**

**Topic : Mental Health & Psychology: Myths & Reality**

**Speaker : Dr. Nabhit Kapoor, Founder President, Peaceful mind Foundation and Global youth mental health forum**

**Faculty Co-ordinator: Prof. Archana Balyan**

**Date & Time: 13.10.2018 at 11:00 AM**

**Venue: Seminar Hall, Room no.206**

An expert lecture on “Mental Health & Psychology: Myths & Reality” was held on 10<sup>th</sup> October, 2018 on the occasion of “World Mental health day”. The guest lecture has been organized by department of ECE to bring awareness among the faculty and students about mental illness and its major effects on people’s life worldwide.

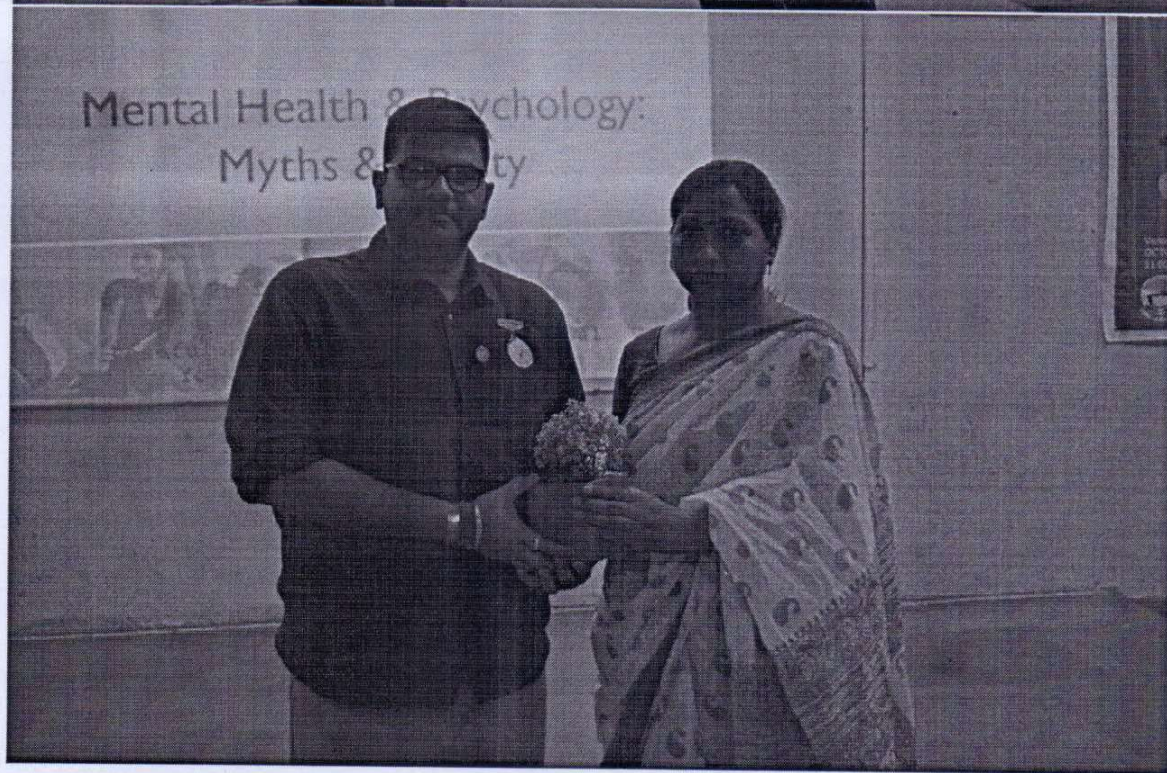
Dr. Puneet Azad, H.O.D, ECE welcomed Dr. Nabhit Kapoor, Founder President, Peaceful mind Foundation and Global youth mental health forum, resource person to deliver the lecture.





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This was followed with presenting a memento to Dr. Nabhit Kapoor by Dr. Puneet Azad and a plant sapling by Prof. Archana Balyan as a token of gratitude for educating faculty and students on mental illness.





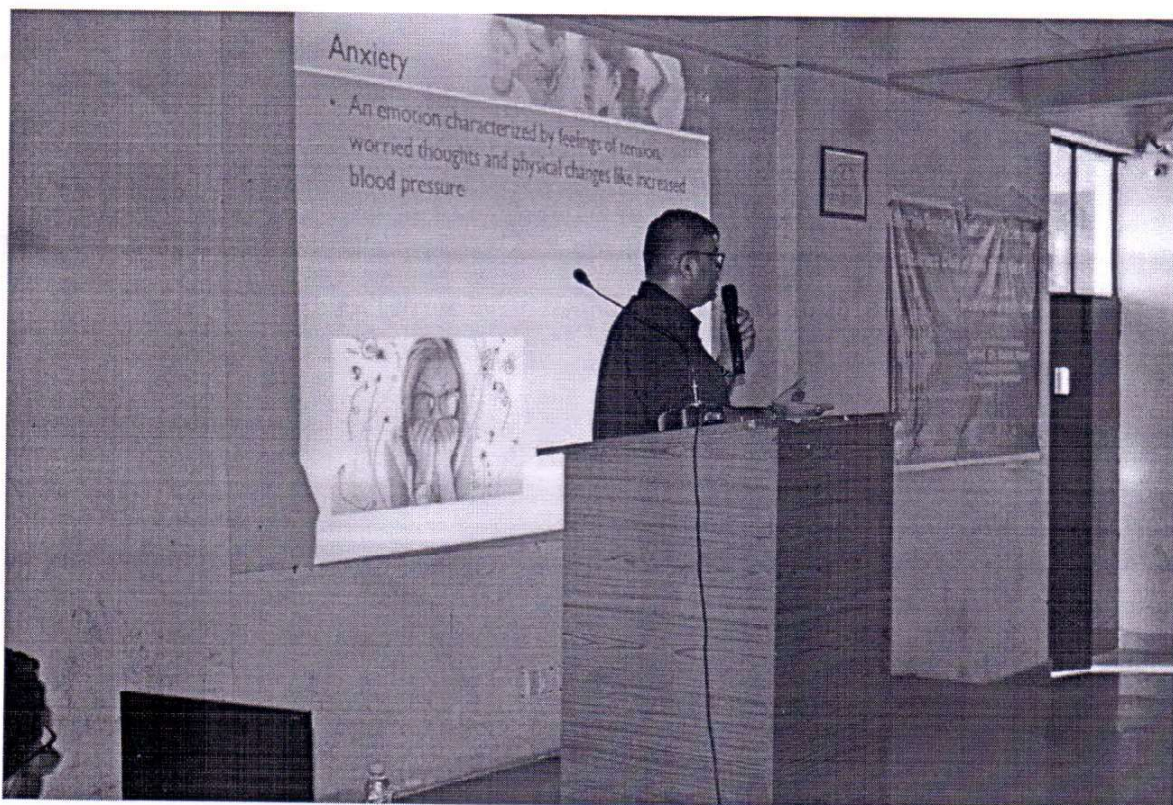
### Guest Profile

**Dr Nabhit Kapur**, named as most influential Psychologist Globally by FAAVM Canada, is a Psychology expert, social sector entrepreneur, pioneer, professional mentor of positive mental health and well- health and well being among all sections of society.

He has been granted recognition as Chairperson of Global Psychology and Language Research Association and Ambassador-at-Large, Spokesperson (Mental Health) for the United Refugee Green Council as well as Global Ambassador of Healthcare, Canada.

His efforts towards meeting the needs of families' psychological well-being, adolescent mental health and community living have been appreciated by the Ministry of Health & Family Welfare, India.

The session was continued by Dr. Nabhit Kapoor , who began with introduction to what is meant by psychology and the importance of role of psychologists in the life of people dealing with mental illness. Following which, Dr. Nabhit Kapoor shed light on various emotions such as stress, anxiety, depression and their associated symptoms. He shared his knowledge, experiences and thoughts on mental health.



Guest Lecture by Dr. Nabhit Kapoor on 10.10.2018



The session ended with with vote of thanks proposed by Prof. Archana Balyan wherein she thanked the management and Prof. K.P Chaudhary, Director , Maharaja Surajmal Institute of Technology for extending their support to organize expert lecture on mental illness . She appreciated faculty members, student coordinators and participants for successful conduction of the event.





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Seminar on "Health and Nutrition Awareness"

Event report

September 8,2018

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To celebrate the month of September as nutrition month, ECE department organized a Seminar on "Health and Nutrition Awareness" on September 8, 2018 (12:30 pm onwards) in Seminar Hall (# 206). **Nutrition and health plays an important role in our life**

Deputy Director ,HODs and faculty members of all departments who attended the Seminar.



Nutrition is important because it provides a source of energy required to perform the activity. The food we eat impacts on our strength, training, performance and recovery."

The agenda for the seminar are:

1. Update on current scenario of nutrition in food and its effect on present day life
2. Discussion on health challenges and age related challenge



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### 3.Solution of these challenges with smart supplementation and precautions

**Mr. Yashpal Solanki:** Arjun award winner and Gold / Silver medalist in Judo in Commonwealth and Asian Games and currently DSP, Punjab Police delivered the talk.

He is International Level Judo Player. He is Gold medalist in Judo in Commonwealth and Asian Games and currently DSP, Punjab Police . He began his career in Judo in 1987. He is Playing continuously for the last 25 years and representing country at the international level.He made earnest efforts to bring laurels and fame for country by participating in approx. 40 world class championships



The session ended with vote of thanks and Memento given to Mr. Yashpal Solanki by Dr.Poonam Bansal.

Dr. Richa Gupta  
(Incharge)

Dr.Puneet Azad  
(HOD,ECE)



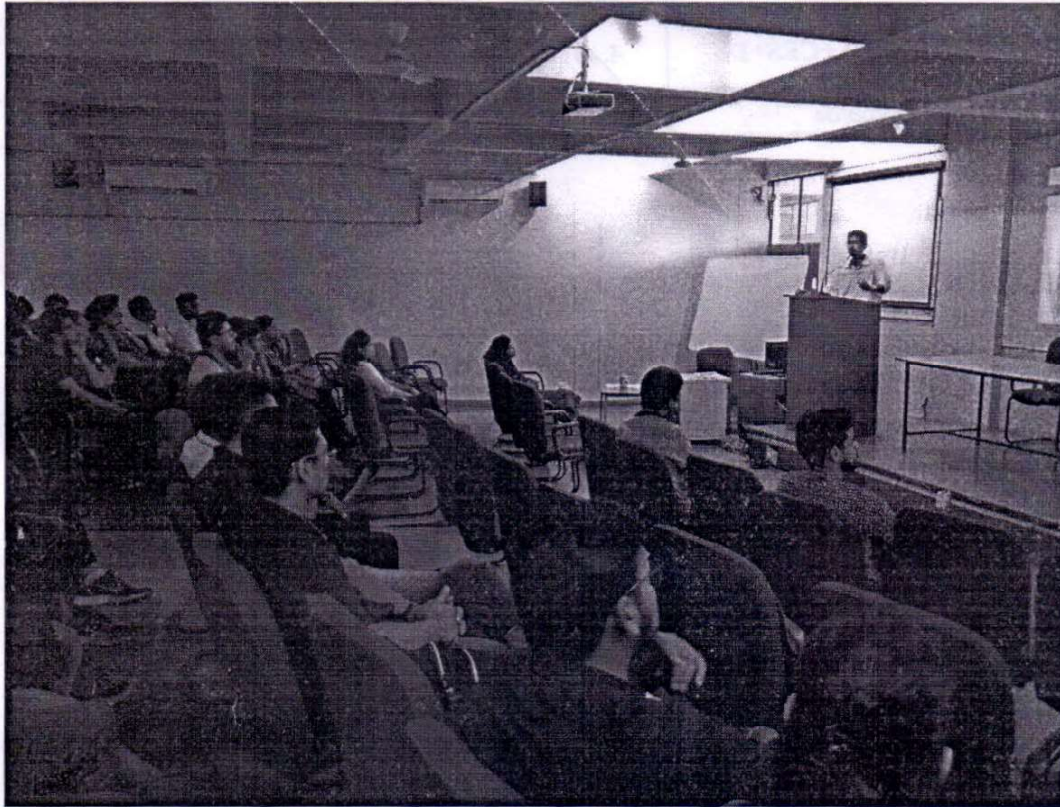
Carrier Counseling Session conducted by TIME educations

Event report

August 29, 2018

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A Carrier Counseling Session was conducted by **TIME Institute** which was organized by the Electronics and Communication Engineering Department of Maharaja Surajmal Institute of Technology, Delhi. The session was conducted by Mr. Lokesh Malik from IIT Chennai.



All the students of ECE- 1 and ECE-2, 5<sup>th</sup> Semester attended the session. The session duration was of 1 hour.





**TIME Institute** is a well renowned name in the field of providing coaching classes and right path for studying and preparation of GATE or any other entrance exam. **TIME Institute** offers entrance coaching for CAT, GATE, IPM, CLAT, BANK PO, SSC CGL, GRE, GMAT, IIT Foundation.

Triumphant Institute of Management Education Pvt. Ltd. (T.I.M.E.) is India's leading test-prep institute with a pan-India presence and is headquartered in Hyderabad. Established in 1992, T.I.M.E. today operates out of 248 offices located in 117 towns and cities across the country. Over 40 IIT/IIM graduates form part of the core team at T.I.M.E.

T.I.M.E. is today acknowledged as a multi-location, multi-programme training specialist run on corporate lines and offers a wide range of programmes not only for national and state-level entrance exams like the CAT, MAT, JEE MAIN, and JEE ADVANCED but also for international exams like GMAT, GRE, IELTS and TOEFL..



**Agenda's addressed in the session**

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The purpose of seminars is multifaceted, the core idea being to address the burning issues in the student community with utmost proficiency with the help of our highly qualified pool of speakers.

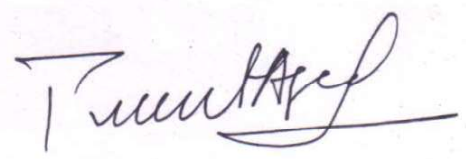
**The issues addressed are as follows:**

1. **Indian Engineering services-** A boon to Indian Economy, All about ESE: The opportunities involved, Change in the EXAM pattern.
2. **PSU & GATE-** An informative session on the job offerings from Public Sector undertakings and their subsequent opportunities.
3. The importance of Core subjects in GATE & ESE careers opportunities after B.Tech.
4. **Career opportunities after B.tech-** A Session on the wide gamut of opportunities that can be tapped by an engineering graduate.
5. **How to crack GATE/ESE/PSU-** A roadmap presentation to be given on the same enlightening students with the small nuances behind clearing such competitive examinations.

The overall feedback of the students was positive as they learnt a lot and wanted to organize more of such Seminars in the college.



Dr. Richa Gupta  
(Incharge)



Dr. Puneet Azad  
(HOD, ECE)

**Workshop for ECE Students on Design of Simulator and Tapered slot antenna for Energy Harvesting**

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**Event Report**

**February 8-10,2018**

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The three Days free workshop and a hands on session on Design of Simulator and Tapered slot antenna was organised by the Electronics and Communication Engineering Department of Maharaja Surajmal Institute of Technology, Delhi

The session was for interested students in antenna designing of ECE department, and was organised from 8<sup>th</sup> to 10<sup>th</sup> February 2018 at Satellite and Antenna Lab. The Full Day Session from 9 AM to 4 PM. The session was taken by the Mr. Aakash bansal, Researcher CSIR-CEERI, Pilani. It was attended by around by around 20 students from second year.



The six hour long session on Day 1 started from a detailed introduction of the Electromagnetic and Maxwell equations. Introduction to MATLAB and FDTD Analysis. The attendees were provided by the ADS and COMSOL software which was installed in the laptops of all the students.

*The long session on Day 2 started from a detailed introduction of the Microstrip Antennas, feeding techniques and design methodologies. Introduction to tapered slot antennas and designing and testing different antennas on COMSOL.*



The Day 3 session begins with the work on different ideas in projects and demonstration of simple microstrip antenna.

The projects considered to be initiated are :Study of Effects on Bandwidth with variations in Design and Design of Microstrip Antennas for Ad-Hoc Networks.

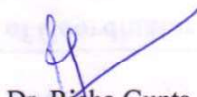


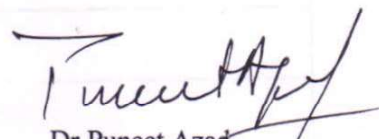
During the workshop students were taught how to use the software for their needs, calculations for their antenna design and how to check the bandwidth of the array antenna and check the radiation patterns, modifications required for the betterment of their design. Along with it Students were shown a demo of how to get their Antenna printed using the photo-resist sheets, Besides this they were shown and taught how to use VNA(Vector Network Analyser) and test their antenna on it.

Refreshment was provided to all the attendees along with the certificate to those who printed their antenna.

Queries were cleared and trainer encouraged students for queries and satisfied them with relevant answers. Various conceptual doubts of students were cleared. Before moving to the session on how to publish your research and gave them important tips in making their work published.

The overall feedback of the students was positive as they learnt a lot and wanted to organize more of such workshops in the college

  
Dr. Richa Gupta  
(Incharge)

  
Dr. Puneet Azad  
(HOD,ECE)





Sandeep Gupta  
Director  
(M.Tech. IIT Delhi)  
+91 7042595864

Workshop for ECE Students on PCB Designing  
Event report  
January 30,2018

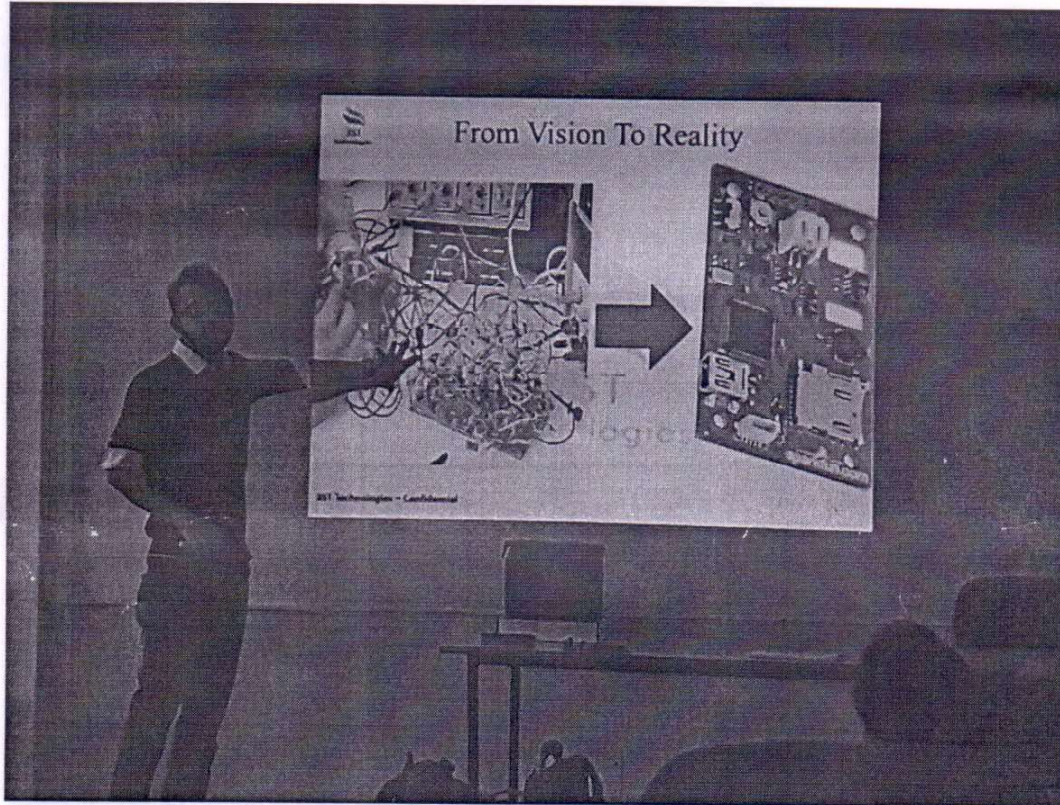
**3ST Technologies Pvt. Ltd.**  
TRAINING TECHNOLOGY TRANSITION

C-65, Upper Ground Floor, Sector 2, Noida - 201301  
e-mail : sandeep.gupta@3sttechnologies.com

[www.3sttechnologies.com](http://www.3sttechnologies.com)

A free workshop and a hands on session on PCB Designing and Communication Engineering Department of Maharaja Surajmal Institute of Technology, Delhi.

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The session was for interested students in PCB Designing of ECE department, and was organised on 30<sup>th</sup> January 2018 at Seminar Hall 206. The 2 Hour Session from 12:30PM to 2:30 PM. The session was taken by the Mr. Sandeep Gupta (3ST Technologies Pvt.Ltd.).It was attended by around by around 50 students from 2<sup>nd</sup> year.





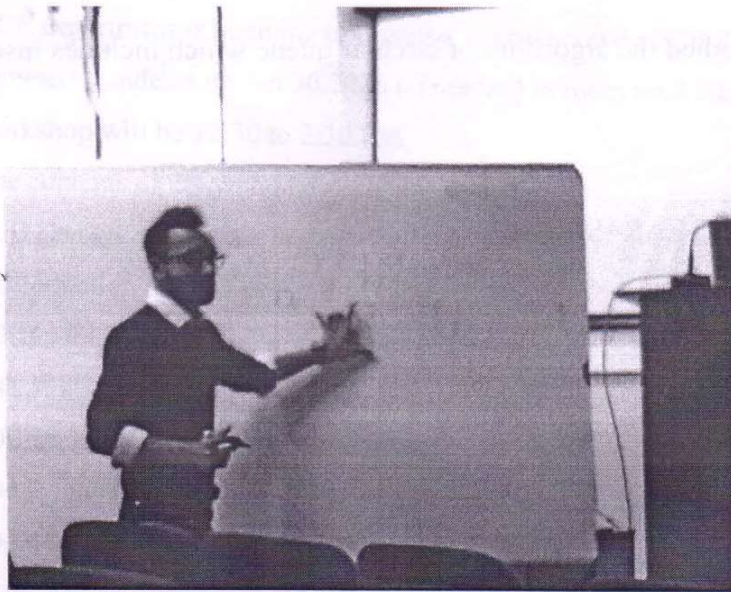
The two hour session started from a overview or introduction of the PCB, why we use it, what are its advantages and what are its specifications . Use of PCB in everyday life and how to design a PCB and a PCB layout. The attendees were provided by the GEDA software and DIP trace software. GEDA is an ECAD or EDA application suite. GEDA is almost oriented towards printed circuit board design.

During the workshop students were taught how to use the software for their needs, codes for components design and how to check the components placement , modifications required for the design of PCB. Along with it Students were shown a demo of PCB design of different fabrication process how to form a layer PCB design, Besides this they were shown and taught how a PCB is form and test it's track and how to the fabricate the components on it.

They taught us about the basic electronic components and there symbols. And how these symbol are also represented in software. They provide a demonstration of 2 layer PCB.

They design a simple symmetric design of a circuit with DIP trace software.

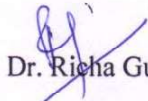
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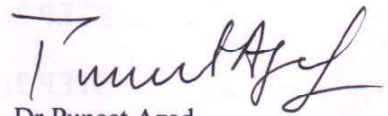


Queries were cleared and trainers encouraged students for queries and satisfied them with relevant answers. Various conceptual doubts of students were cleared. Before moving to the session on how to make a PCB design and how to form track on it they taught us how to form a layout of any circuit.

Each one present there got personal attention from the host so that no one feel neglected. They show different technologies relate to PCB design and give there overview to understand the technologies.

The overall feedback of the students was positive as they learnt a lot and were wanting to organise more of such workshops in the college.

  
Dr. Richa Gupta  
(Incharge)

  
Dr. Puneet Azad  
(HOD, ECE)



24 Jan 2018

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Note

ECE department is planning to organize a workshop on PCB design for ECE (IV semester) students on Jan 30, 2016 (Tuesday) in room no.# 206. The timings of workshop will be 12:30 to 2:30 PM.

The contents of the workshop are as follows.

PCB Design

- a. Introduction to PCB designing
- b. Different software and h/w used in PCB designing
- c. Basic electronic components
- d. Different terminologies related to PCB design
- e. Designing a simple Schematic on DIP trace software
- f. Demonstration of PCB design

Putting forward for your kind approval.



Dr. Richa Gupta

(Incharge)

*ECE-I, IV sem has no class on the said date and lecture of ECE-II have been rescheduled on Mondays (29/1/18 & 5/2/18)*

Dr. Purnet Azad

(HOD)

*Purnet Azad*  
*24.1.18*

Director, MSTT



*24.1.18*

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mail

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COMPOSE

## Proposal Regarding one hour Workshop for ECE Students of MS

Inbox (324)

Starred

Sent Mail

Drafts (172)

journal

moodle detial

paper in que

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phd

project 2016



richa



? **sandeep gupta** <sandeep.gupta@3sttechnologies.com>  
to me

Respected Richa Ma'am,

Please find below the contents of what we can deliver in an hour workshop in differen session for the students.

1. VLSI
  - a. VLSI awareness
  - b. Introduction to Verilog basics
  - c. Writing simple hardware program in Verilog
  - d. Demo on FPGA kit of a simple project
2. Embedded Systems
  - a. Embedded awareness
  - b. Embedded components awareness
  - c. Walkthrough of Embedded project C code
  - d. Demo of simple Embedded projects
3. PCB Design
  - a. Introduction to PCB designing
  - b. Different software and h/w used in PCB designing
  - c. Basic electronic components
  - d. Different terrtinologies related to PCB design
  - e. Designing a simple Schematic on DIP trace software

No Hangouts contacts

[Find someone](#)

Hope you find the contents of each workshop interesting.  
Do revert back with a date and time when we can schedule a seminar in your college

Thanks and regards

**-Sandeep Gupta**

Director

3ST Technologies Pvt. Ltd.

C-65, Upper Ground Floor, Sector-2, Noida (UP) - 201301



Reschedule Time table

Class	Date	Time
L/CoA/211/SM	29/1/18	1:30-2:30 <del>1:30-2:30</del>
T/AE-II/A/201/AP	5/2/18	1:30-2:30 <del>1:30-2:30</del>
T/CoA/C/211/SM	5/2/18	1:30-2:30 <del>1:30-2:30</del>
T/EMFT/B/207/RG	5/2/18	1:30-2:30 <del>1:30-2:30</del>

Workshop for ECE Students on Antenna Designing through ADS

Event Report

By Aakash Bansal, Navneet Jha, Utkarsh Kumar Singh

October 9, 2017

A free workshop and a hands on session on ADS(Antenna Design Suite) was organised by the Electronics and Communication Engineering Department of Maharaja Surajmal Institute of Technology, Delhi

The session was for interested students in antenna designing of ECE department, and was organised on 9<sup>th</sup> October 2017 at Seminar Hall 206. The Full Day Session from 10 AM to 4 PM. The session was taken by the Mr. Aakash bansal(Research Intern CSIT-CEERI,



Pilani, Navneet Jha(MSIT Alumni) and Mr. Utkarsh Kumar Singh(Third Year student in MSIT) It was attended by around by around 70 students from different years

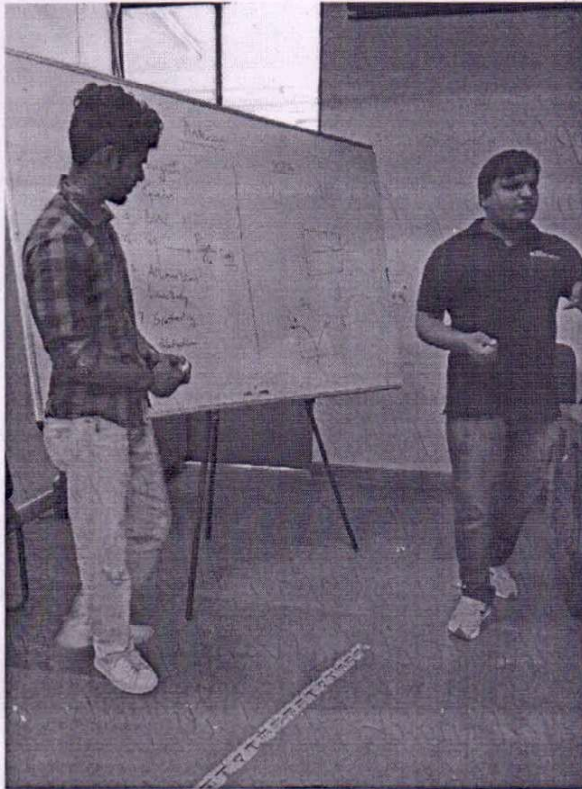
The six hour long session started from a detailed introduction of the antenna, why we use it and what are its advantages. Use of Patch antenna in everyday life and how to design a patch antenna. The attendees were provided by the ADS software which was installed in the laptops of all the students.

During the workshop students were taught how to use the software for their needs, calculations for their antenna design and how to check the bandwidth of the array antenna



and check the radiation patterns, modifications required for the betterment of their design. Along with it Students were shown a demo of how to get their Antenna printed using the photo-resist sheets, Besides this they were shown and taught how to use VNA (Vector

Network Analyser) and test their antenna on it.



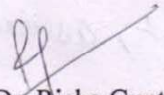
Refreshment was provided to all the attendees along with the certificate to those who printed their antenna.

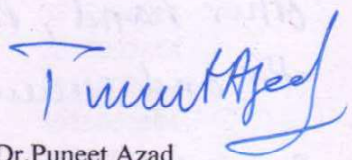
Queries were cleared and trainers encouraged students for queries and satisfied them with relevant answers. Various conceptual doubts of students were cleared. Before moving to the session on how to publish your research and gave them important tips in making their work published.

Each one present there got personal attention from the host so that no one

feel neglected not there is an instance where there is mismanagement or someone damages his MAC Address

The overall feedback of the students was positive as they learnt a lot and were wanting to organise more of such workshops in the college

  
Dr. Richa Gupta  
(Incharge)

  
Dr. Puneet Azad  
(HOD, ECE)



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Name	Branch	Year	Enrollment number
Faraz Aatif	ECE-1	3	315007316
Simon Bakshi	ECE-1	3	815007316
Pankaj	ECE eve	2	2196302816
Aashish Kumar Meena	ECE eve	2	396302816
Yash Dubey	ECE eve	2	3696302816
Kartik Madan	ECE eve	2	1596302816
Joyendra Roy Biswas	ECE eve	2	1496302816
Gaurav Garg	ECE eve	2	1096302816
Mayank Kapur	ECE-1	2	43515002816
Piyush Bansal	ECE-1	2	40515002816
Mansi Gupta	ECE eve	2	1996302816
Sonam Kumari	ECE eve	2	3096302816
Vaibhav Jain	ECE eve	2	3296302816
Vishal Jain	ECE eve	2	40896302816
Parth Chopra	ECE eve	2	2296302816
Yashraj Garg	ECE-1	2	42515002816
Pushkar Malhotra	ECE-1	2	41915002816
Arun Kumar	ECE-1	2	41315002816
Shivangi Guleria	ECE-1	2	41115002816
Kushagra Tyagi	ECE-1	2	40915002816
Kashish Mittal	ECE-1	2	42115002816
Ujjwal Bhat	ECE-1	3	7915002815
Parth Pancholi	ECE-1	3	5115002815
Pinaki Bandyopadhyay	ECE-1	3	5315002815
Rajat Sharma	ECE-1	3	5915002815
Abhishek Kumar	ECE-2	3	415002815
Aakriti Gupta	ECE-2	3	41815002815
Nishtha Kathuria	ECE-2	3	41215002815
Ira Bhardwaj	ECE-2	3	3015002815
Keshav Narayan	ECE-2	4	1815002814
Rohit Verma	ECE-2	4	6815002814
Deepak Parkash Sharma	ECE-2	4	8215002814
Avadhoot Khairnar	ECE-2	4	1615002814
Ahsas Wadhwa	ECE-1	4	5515002814
Yash Gupta	ECE-2	4	7615002814
Mohit Chauhan	ECE-1	4	6915002814
Chahar Garg	ECE-1	4	3915002814
Apoorv Arora	ECE-1	3	1515002815
Utkarsh Kumar Singh	ECE-2	3	8015002815
Aashish Kumar	ECE-2	4	415007315
Nitesh	ECE-2	4	40115007315
Nikhil Kumar	ECE-2	4	60115002814
Kshitij Tomar	ECE-2	4	
Anjali	ECE-2	4	
Devansh Sehwat	ECE-2	3	
Vamika Rastogi	ECE-2	3	



Yamini Bansal  
 Shreya Gupta  
 Akshita Saxena  
 Nakul Adhikari  
 Shivam Sehgal  
 Rakhi

ECE-2 3  
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 ECE-1 4  
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Report

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## Seminar for students on "Overview of PSU's

### And How to prepare for PSU"

#### Event Report

Expert: Mr.Sushil Kumar

Aug 30,2017

The purpose of the seminars was multifaceted, the core idea being to address the burning issues in the student community with utmost proficiency.

The issues addressed are as follows:

- Indian Engineering services- A boon to Indian Economy,, All about ESE: The opportunities involved, Change in the EXAM pattern.
- PSU & GATE- An informative session on the job offerings from Public Sector undertakings and their subsequent opportunities.
- The importance of Core subjects in GATE& ESE careers opportunities after B.Tech.
- Career opportunities after B.tech- A Session on the wide gamut of opportunities that can be tapped by an engineering graduate.
- How to crack GATE/ESE/PSU- A roadmap presentation to be given on the same enlightening students with the small nuances behind clearing such competitive examinations.

The session was taken by Mr. Sushil Kumar, the seminar was an interactive session. He started off with a personal story, of being drop year student and how he got into IIT Bihar.

For second year students, he recommended to focus on your academics and CGPA. For third year students focus on both CGPA and core knowledge is required.

He talked about how to figure out correct stream for you, in terms on Technical or Non-Technical jobs.

Government Jobs vs Non-Governments Jobs.

He described and explained each of the related examinations and their advantages and disadvantages to the students.

Students raised questions, that were answered satisfactorily by the speaker.

At the end, he talked about how to build a good Resume.


and talked about the differences between Resume and CV and advised to make a job oriented Resume and he concluded the session.

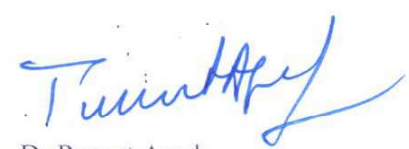


2013



The overall feedback of the students was positive as they learnt a lot and were wanting to organise more of such workshops in the college

  
Richa Gupta  
(Incharge)

  
Dr. Puneet Azad  
(HOD, ECE)

## Workshop for ECE Students on Antenna Designing through ADS

### Event Report

**Richa Gupts, Aakash Bansal and Navneet Jha**

**March 29,2017**

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A free workshop and a hands on session on ADS(Antenna Design Suite) was organised by the Electronics and Communication Engineering Department of Maharaja Surajmal Institute of Technology, Delhi

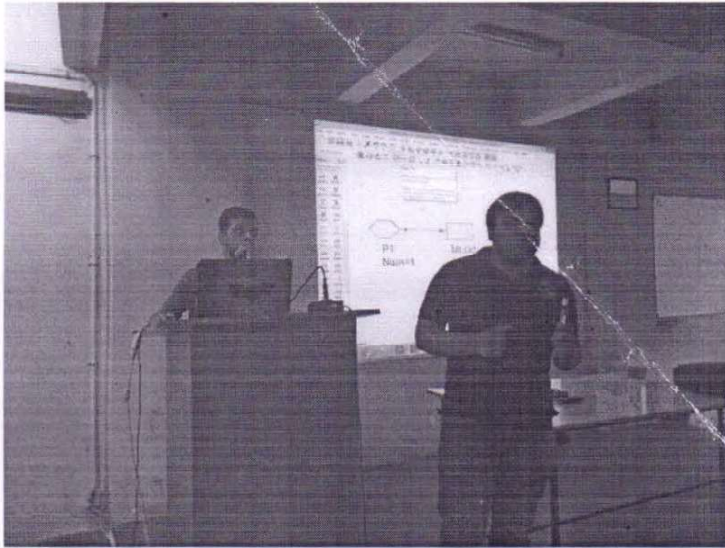
The session was for interested students in antenna designing of ECE department, and was organised on 29<sup>th</sup> March 2017 at Seminar Hall 206. The session was 4 hours long from 10 AM to 2 PM. The session was taken by Richa Gupta, Aakash Bansal and Navneet Jha. It was attended by 50 students



The three hour long session started from a detailed introduction of the antenna, why we use it and what are its advantages. Use of Patch antenna in everyday life and how to design a patch antenna. The attendees were provided by the ADS software which was installed in the laptops of all the students.

During the workshop students were taught how to use the software for their needs, calculations for their antenna design and how to check the bandwidth of the array antenna and check the radiation patterns, modifications required for the betterment of their design.





Queries were cleared and Aakash Bansal and Navneet Jha encouraged students for queries and satisfied them with relevant answers. Various conceptual doubts of students were cleared.

Each one present there got personal attention from the host so that no one feel neglected not there is an

instance where there is mismanagement or someone damages his MAC Address

Certificates were provided to all the attendees as everyone was able to design the antenna.

The overall feedback of the students was positive as they learnt a lot

Richa Gupta  
(Incharge)

Dr. Puneet Azad  
(HOD,ECE)

**Workshop on PCB Designing and Fabrication by Aprton**

**Event Report**

**Talk by Miss. Priyanka Chawla, Aprton Noida**

**February 13, 2017**

A workshop and interactive session on Printed Circuit Board (PCB) Designing and Fabrication was organised by the Electronics and Communication Engineering Department of Maharaja Surajmal Institute of Technology, Delhi in collaboration with Aprton solutions Private Limited.



The session was taken by the industry expert, who created a very interactive environment for the students, Miss. Priyanka Chawla introduced herself and her firm and interacted with students as she basically introduced Printed Circuit Board and their advantages and applications, and commenced the workshop.

The session was for Fourth semester and Fifth semester students from ECE. The session was an hour long from 11:30 AM to 12:30 PM.

A brief introduction was given on the following:

- PCB and Types of PBCs
- Integrated Circuits
- Embedded Systems
- Need of PBC designing and Fabrication

Questions were raised by the students and were satisfactorily answered by the speaker.

The working was divided into following modules:

- Circuit Designing
- PCB designing on Eagle CAD
- Printing
- Tonner Transfer on CCB
- Etching
- Holes/Pads Drilling






- Component mounting


A small introduction on DC circuits was given,

And how to make circuits on Eagle CAD and debug them, how to make Schematic and finalise the PCB design.

Queries were cleared and Apron personals was very friendly and cooperative. She encouraged students for queries and satisfied them with relevant answers. Various conceptual doubts of students were cleared. His way of relating embedded systems, circuits and PCBs with simple real life examples gave a new outlook to students towards understanding electronics field and the applications of PCB is limitless.

The overall feedback of the students was positive as they learnt a lot.

  
 Richa Gupta  
 (Incharge)

  
 Dr. Puneet Azad 16-2-17  
 (HOD, ECE)

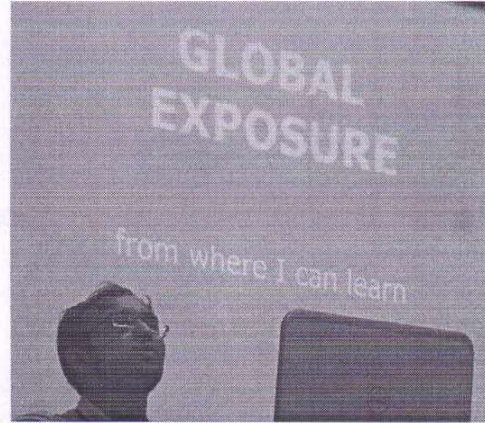
**Event Report**

**Talk on scholarship opportunities**

**Talk by Mr. Vishal Sharma**

**Oct 05, 2016**

A Seminar and interactive session on Scholarship Opportunities for students going to abroad for further studies was organised by the Electronics and Communication Engineering Department of Maharaja Surajmal Institute of Technology, Delhi in collaboration with IEEE MSIT.



The session was for third year students from ECE branch, and was organised on 5th October 2016 at Seminar Hall 406. The one hour long session long from 10 AM to 11 AM. The session was taken by the experts from HDFC Credila, who created a very interactive environment for the students. The session was attended by Ms. Richa Gupta, and students of fifth semester ECE along with the interested students from other departments.

The Session aimed on guiding students who are interested in in going abroad for higher studies. Mr. Vishal guided the students about the main advantages of studying in Foreign Universities rather than studying in the Indian Universities also The main differences that came forward were that of studying techniques. In India, education is mainly theoretical rather than practical, which is actually done in Foreign Education.

The instructor also taught some techniques of teaching the vocabulary through videos and slides by linking the words like Pedant, Dichotomy and Euphony with the events happening in the videos, which was really fun technique to learn new words.

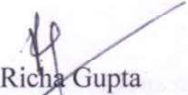


They guided the students about the capital needed when going abroad and the expenses which comes up and also guided about financial assistance that they will provide to the willing students and how they can secure admissions more firmly and get their proper dues and having less financial pressure on themselves and their families



Queries were cleared and Mr. Vishal was very friendly and cooperative. He encouraged students for queries and satisfied them with relevant answers. Various doubts of students were cleared. He gave a new outlook to students towards education field in foreign universities.

The overall feedback of the students was positive as they learnt a lot and helped themselves in deciding their further carrier

  
Richa Gupta  
(Incharge)

Dr.Puneet Azad  
(HOD,ECE)



**Workshop for II&III Year Students on" IOT using Arduino"**

**by APTRON solutions Pvt. Ltd.**

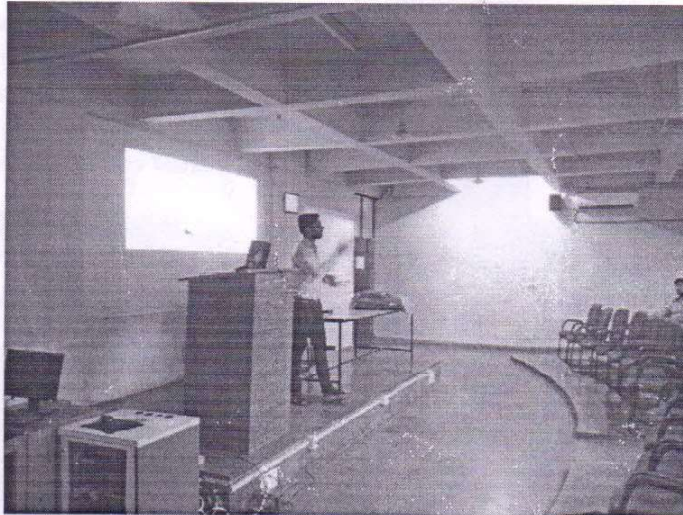
**Event Report**

**Workshop on embedded systems**

**Session by Mr. Gaaurav, APTRON solutions Pvt. Ltd.**

**August 31,2016,Wednesday**

On 31<sup>st</sup> August 2016, a workshop was organised by ECE department of MSIT in collaboration with APTRON solutions Private Limited. The session was taken by the industry expert, who created a very interactive environment for the students, Mr. Gaurav introduced himself and his firm and interacted with students as he basically introduced embedded systems and what is IOT, and commenced the workshop.



The session was for third semester and fifth semester students from ECE. The session was 2 hours long from 10:00 AM to 12:00 PM.

During the first half of the workshop, the students were told about what is the need of IOT, What all is the hype about it. The internet of things (IOT) is the internetworking of physical devices, vehicles, buildings and other items—embedded with electronics, software, sensors, actuators, and network connectivity that enable these objects to collect and exchange data.





Questions like "IOT is basically implemented 2.5Ghz WIFI band, wont so many networks cause interference in communications" and "Isn't IOT will going to make each and every device connected vulnerable to Crackers and DDOS attacks ", were raised by the students and were answered satisfactorily .

Next part of the workshop was about implantations of IOT on hardware. ARM chipset was used to demonstrate the projects. Students were introduced to ARM chips architecture and were introduced to Embedded C. Basic LED blinking and application of GSM module were covered, then they were implemented By IOT.

Students were inspired as they were also able to control the LEDs via their own phone connected to WIFI. Queries were cleared and Aptron personals was very friendly and cooperative. He encouraged students for queries and satisfied them with relevant answers. Various conceptual doubts of students were cleared. His way of relating embedded systems with simple real life examples gave a new outlook to students towards understanding electronics field and the applications of IOT is limitless. The overall feedback of the students was positive as they learnt a lot.



  
Richa Gupta  
(Incharge)

Dr.Puneet Azad  
(HOD,ECE)

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richa gupta <richaguptamsit@gmail.com>

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## Course Content of lot ( Internet of Things )

2 messages

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**gauravsahay@aptronindia.com** <gauravsahay@aptronindia.com>  
To: richaguptamsit@gmail.com

Wed, Aug 24, 2016 at 2:06 PM


Dear Richa Mam,

As per our telephonic conversation i have attached the Course content of IoT (Internet of Things) for the workshop .

Gaurav

Aptron Solutions Pvt. Ltd.

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 **IOT Workshop.docx**  
69K

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**richa gupta** <richaguptamsit@gmail.com>  
To: gauravsahay@aptronindia.com

Mon, Aug 29, 2016 at 2:36 PM

Dear Richa Mam,

As per our telephonic conversation for workshop .

The confirmation date from our side is 31/8/2016

Time: 10:12

[Quoted text hidden]

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Thanks and Regards

Richa Gupta

Asst Prof

ECE Department

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**Seminar for III Year Students on E3P Program and career in VLSI Sector by Dkop Labs**

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**Event Report**

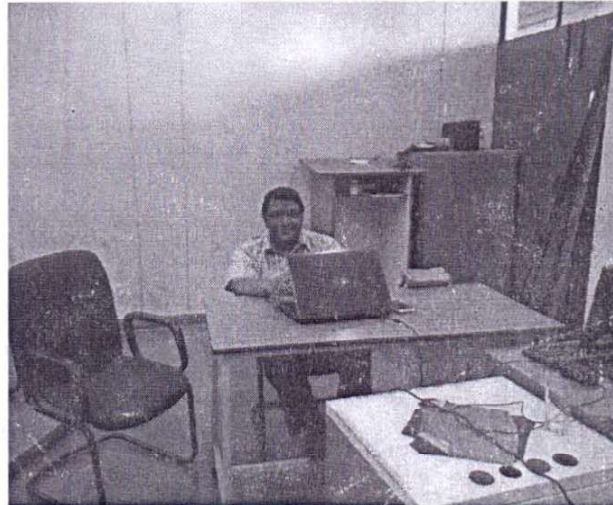
**Session on E3P Program and career in VLSI Sector**

**Session by Mr. Devenderkhatri and Mr. Bharat**

**Aug 17,2016**

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An interactive session on Verilog, VLSI and career in VLSI domain was organised by the Electronics and Communication Engineering Department of Maharaja Surajmal Institute of Technology, Delhi in collaboration with DKOP Labs



The session was for third year students from ECE branch, and was organised on 17<sup>th</sup> August 2016 at Seminar Hall 206. The one hour long session was taken by

the two experts from DKOP Labs, who created a very interactive environment for the students.

The session started from brief introduction of what students need to do after completion of their engineering. The session also included information about the Jobs of the electronic engineers and what all they should plan to get there carrier set in the Core electronic Also the students were informed

about the skills required to be on the top most and key industry demands. Through this highly enlightening session, students were introduced to the placements in electronic sector, key companies of electronic




domain like Cadence, Synopsis, Siemens, Freescale etc.

More similar topics were enlightened by the speakers, and students were inspired to get into core electronics field and were told the prerequisites of the same. They told students about their 2year E3P program for placement in semiconductor industry and skill in VLSI, LINUX, and Shell Scripting which they would be teaching during the program.

The session ended by Mr, Bharat ,who talk about the DKOP Labs and there past experience in getting students placed at various companies and how are they helping students. All the queries of the students were cleared by Mr. Devenderkhatri and Mr. Bharat



The overall feedback of the students was positive as they got to know the placement scenarios

  
Richa Gupta  
(Incharge)

Dr.Puneet Azad  
(HOD,ECE)



**NOTICE**

ECE department is organizing a seminar for ECE 3rd year students on "E3P Program" on Aug 17, 2016 ( Wednesday) between 11-12 am in Room No.206. Attendance is compulsory for all students.

Dr.Puneet Azad

(HOD,ECE)



Richa Gupta

Assistant Professor

ECE Department

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richa gupta <richaguptamsit@gmail.com>

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## Seminar on Wednesday by DKOP Labs

1 message

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**puneet azad** <puneet\_azad@yahoo.com>  
Reply-To: puneet azad <puneet\_azad@yahoo.com>  
To: Bharat Chaudhary <bharat@dkoplabs.com>  
Cc: Ms Richa Gupta <richaguptamsit@gmail.com>

Thu, Aug 11, 2016 at 11:08 PM

Dear Bharat Ji,

We invite you to conduct a session on E3P Program between 11-12 am for 3rd year students

Ms. Richa,  
Pls coordinate and inform concerned faculty and students

Regards  
Dr. Puneet Azad



MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY  
(IP UNIVERSITY)

Presents a Webinar on :-

**\*\*\*How to do well in GD/PI\*\*\***

Date: 12th November 2020

Day: Thursday

Time: 11AM - 12.30PM

\*Guest Speaker \*

**\*Mr. Sunil Dua\***

Senior Regional Head in T.I.M.E. Education

\*Register Now\*

[https://docs.google.com/forms/d/e/1FAIpQLSdAhy1UPToaFtOkfHnuvr8UsJl3kK09gXek-aa0i82lxoqlsDq/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSdAhy1UPToaFtOkfHnuvr8UsJl3kK09gXek-aa0i82lxoqlsDq/viewform?usp=sf_link)



\*Join us on Gotomeeting\*

<https://global.gotomeeting.com/join/244423221>

**Faculty: Sunil Dua**

**Qualification:** Done English(Hons.) from Hansraj College, Delhi University.

**Experience:**

- a) More than 30 years experience in teaching industry & working as a Senior Regional Head in T.I.M.E.
- b) Teaching Verbal section in Aptitude based exams
- c) Expertise in preparing students, those who get their calls from different IIMs for GD/PI.
- d) Soft skill training provider.
- e) Guided students in different colleges for their campus recruitment.





# MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY

CSE 2<sup>nd</sup> Shift

## Report

An expert lecture on “Mobile Learning Technology Impact and Inside Stories” was conducted by Department of CSE, 2<sup>nd</sup> Shift on 7<sup>th</sup> September 2019. The lecture was held in room no. #406 at 12 p.m. The lecture was delivered by Prof. Joan Lu.

She is a professor in Informatics at the University of Huddersfield, United Kingdom. Her extensive research covers information access, retrieval and visualization, XML technology, object oriented technologies, agent technology, data management systems, security issues and Internet computing. She has been an invited speaker for industrial-oriented events and published 5 academic books and more than 160 papers. Professor Lu serves as a member of the British Computer Society (BCS), BCS examiner of Advanced Database Management Systems, and fellow of the Higher Education Academy (UK). She is a founder and Editor-in-Chief for the *International Journal of Information Retrieval Research*.



The lecture started with a welcome note and bouquet presentation by Director MSIT. There on the expert was invited for the expert talk. The lecture was attended by the students of 2<sup>nd</sup> and 3<sup>rd</sup> year of CSE & IT along with faculty members. The lecture was practical, informative and interesting. Prof. Joan Lu demonstrated the methodologies and usage of the mobile and technology in the conventional teaching. The main focus of the lecture was on the centralized learning for students to visualize the things they are studying.

The lecture was followed by a questionnaire session, which was very interactive. Then the Speaker was facilitated by the Director MSIT by way of memento presentation. The lecture was concluded by a vote of thanks by Dr. Naveen Dahiya (HoD, Department of CSE).





### Skill Sertifika (Entrepreneurship)



In order to provide an interaction and platform to the students of IT and CSE, a seminar was organized on 3<sup>rd</sup> September 2019 in 406 (seminar hall) from 12 to 2 pm. This was conducted by Skill Sertifika.

The expert was from IIM named Mr. Tarachand Dhoundiyal. The topics of discussion was entrepreneurship, identification of idea and its assessment, legal foundation, financial management and business planning. Speakers guided and motivate the students with his enterprise and experience.





The spurt of adrenalin flows down the snaps is of all the students as this session was very interactive, energetic and needy. There was a plethora of things that were taught to us and that were indeed needful

**Report for the seminar conducted on 16th September, 2019 on PI and GD.**



In order to provide an interaction and platform to the students of IT and CSE, a seminar was organized on September, 16 in 406 (seminar hall) from 12 noon to 1 pm. This was conducted by T.I.M.E group. The spectacular seminar commenced by **Mr. Ramachandra, an IIM alumnus of batch 1983**. He guided the students with his enterprise and experience. He emphasized on PI, considering the general awareness. He taught us about the major questions for PI, he took the seminar in an entertaining way. It was indeed amazing, how he shared the aspects on which we must focus. He told to improve the general knowledge, subject awareness. The main part to express yourself anywhere is Communication skills. No one has perfectly learnt communication skills, there is a lot to improvise in communication skills. The spurt of adrenalin flows down the snaps is of all the students as this session was very interactive, energetic and needy. There was a plethora of things that were taught to us and that were indeed needful.

#### **Report for the BlockChain Seminar**

The seminar that was held on 21st October, 2019 in Maharaja Surajmal Institute of technology was on Blockchain. Vardhan group contacted government of India to work on blockchain. 360ht (Institute that teaches Python, Blockchain, Crypto, ML) is currently helping Vardhan on that. They told us that Blockchain is a growing list of records, called blocks, that are linked using

cryptography. Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data. By design, a blockchain is resistant to modification of the data. The session was very interactive and helpful as it covered the major stuff on blockchain. Overall reaction from students was amazing.



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## Report of the Seminar - Golden Rules for an Interview

10/9/18

A seminar was conducted by **Hriday G.S., Director (Academics) AnkGanit** on **10<sup>th</sup> September 2018, Monday**. Mr. Hriday has done his MBA from FMS, New Delhi and had come to share his experience and **guide 3<sup>rd</sup> year students** on the subject "Golden Rules for an interview". He took upon various scenarios and trick questions that the students might face during the HR interview in the placements. Students were asked various questions like -why are they asked to introduce themselves at first to which the answer was to know the student's USP i.e. Unique Selling Proposition. Various scenarios were discussed that could be asked in the interview.



He stressed and focused upon the following Golden Rules of Interviews which all students should remember.

**Rule 1.** Integrity is the highest virtue, except when human life is at immediate threat.

**Rule 2.** Know your own institutions

**Rule 3.** Do not compare institutions. Defend your institute. Remove the words better, nicer, more from your dictionary

**Rule 4.** Remove the words I could not, may not, will not, shall not from your dictionary. Substitute them with preferred it with

**Rule 5.** Do not reveal any weakness unless you can overcompensate it.

**Rule 6.** Be assertive and humble in your answers and not aggressive or defensive

The seminar was held in two sessions and attended by 3<sup>rd</sup> year students from all the branches. The students also asked various questions to Mr. Hriday. All in all, it was an informative session

where students could get some clarity regarding the type of questions they may face during an interview round and the way they should handle it.



Placement Coordination Team



## Session conducted by GATEFORUM

Topic: Importance of GATE and how to prepare for IES



Speaker 1: Mr. Saurav Mahajan (IIT-Delhi)

Speaker 2: Mr. Rajeev Kr. Ranjan (IIT-Patna)

Date: 12<sup>th</sup> Oct. 2018

Time: 1:00-2:00 PM

Venue: Room No. 206

Conducted for: 2<sup>nd</sup> and 3<sup>rd</sup> Year Students CSE/IT-2<sup>nd</sup> Shift

The main objective of the session was to make students familiar about GATE and its pattern. Mr. Saurav ATE. He also told students that hoe they how to prepare and what is the exam patterns. He shared his experiences and motivated the students by giving examples of people who has cleared GATE with good score and where they are placed.







## Report on Session on "Interview hacks"

Date: 28/03/2017

Venue: 406

Time: 10.30 AM- 12.00 noon

Interview hacks was the speaker session dated 28<sup>th</sup> march 2017 held at seminar hall 406, conducted for 3<sup>rd</sup> year MSIT and 2<sup>nd</sup> year MSI students

Interview hacks was a placement guidance session hosted by Mr. Absheak Vyas who did his MBA from MDI, Gurgaon and had more than 8 years of experience in training and education industry. Currently being associated with TIME, he trains students for GD/PI round who get calls from various IIMs

The event witnessed a huge crowd of enthusiastic and dedicated students who came to take the most out of the session

Along with sharing some very essential but usually looked over elements of a placement interview, Mr. Vyas also gave really effective confidence and interview tips and discussed various "do's and don'ts" while sitting for an interview

Students got a good idea of how to do the pre-placement preparations as well as how to present oneself in an impressive manner at the very day of the interview

As a token of respect Mr. Vyas was presented with a small sapling by the team. The sapling is a symbol of growth and ever expanding potential, an ideology in which the team firmly believes.

The concept of orientation was well defined and well structured by the Team and the team got a lot of appreciation for an organised and planned execution





## Session on "Placement support" by TIME

Date : 15<sup>th</sup> - 17<sup>th</sup> February 2017

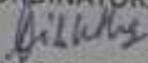
Venue : Seminar Hall, MSIT

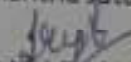
Time : 3.30-5.30 PM

Topic : Things to keep in mind for GD and Mock GD

Target audience : CSE, IT and ECE students (3<sup>rd</sup> year , 2<sup>nd</sup> shift)

CO-ORDINATORS

  
Ms. Nishtha Jatana

  
Ms. Tripti Rathee

## Applied Science- 2019

MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY  
C-4 Janakpuri, New Delhi-110058

REPORT ON  
LECTURE ORGANISED BY  
DEPARTMENT OF APPLIED SCIENCES  
(Dated: 09-03-2019)

The Department of Applied Sciences organised a lecture on "Photonic Revolutions"- built on many breakthroughs in optics on Saturday, 9<sup>th</sup> March, 2019. The lecture was highly educative and interesting. The lecture was delivered by highly accomplished expert Dr Anurag Sharma, Bhatnagar awardee, Professor, Department of Physics, Indian Institute of Technology, New Delhi.

The aim of this lecture was to enhance awareness among students and the faculty members about photonics and its revolution. Photonics is the science of light. It is the technology of generating, controlling, and detecting light waves and photons, which are particles of light. The characteristics of the waves and photons can be used to explore the universe, cure diseases, and even to solve crimes. Scientists have been studying light for hundreds of years. The colors of the rainbow are only a small part of the entire light wave range, called the electromagnetic spectrum. Photonics explores a wider variety of wavelengths, from gamma rays to radio, including X-rays, UV and infrared light.

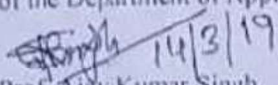
It was only in the 17th century that Sir Isaac Newton showed that white light is made of different colors of light. At the beginning of the 20th century, Max Planck and later Albert Einstein proposed that light was a wave as well as a particle, which was a very controversial theory at the time. How can light be two completely different things at the same time? Experimentation later confirmed this duality in the nature of light. The word *Photonics* appeared around 1960, when the laser was invented by The Theodore Maiman.

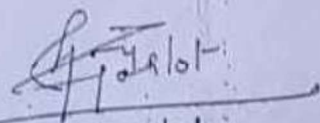
Even if we cannot see the entire electromagnetic spectrum, visible and invisible light waves are a part of our everyday life. Photonics is everywhere; in consumer electronics (barcode scanners, DVD players, remote TV control), telecommunications (internet), health (eye surgery, medical instruments), manufacturing industry (laser cutting and machining), defense and security (infrared camera, remote sensing), entertainment (holography, laser shows), etc.

All around the world, scientists, engineers and technicians perform cutting edge research surrounding the field of Photonics. The science of light is also actively taught in classrooms and museums where teachers and educators share their passion for this field to young people and the general public. Photonics opens a world of unknown and far-reaching possibilities limited only by lack of imagination.

Photonics is the science and technology of generating, controlling, and detecting photons, which are particles of light. Photonics underpins technologies of daily life from smart phones to laptops to the Internet to medical instruments to lighting technology. The 21st century will depend as much on photonics as the 20th century depended on electronics.

The lecture has enthused and enlightened the participants. The lecture ended with interactive session. The session was concluded with a thank you note by Dr. Ajay Gahlot, Associate Professor and Head of the Department of Applied Sciences.

  
Prof. Ajay Kumar Singh  
(Convener)

  
14/3/19





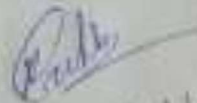
Aicte organised a workshop for the development of soft skills. The duration of this workshop was from 19 August to 20 September. The distribution of the course of the workshop was well spread covering the areas of communication, leadership, self confidence and change management. The workshop was driven by a series of online lectures containing detailed case studies and regular monitoring of every student's progress.

The workshop had different topics every week and within them there were different modules for every day. The first week was started with the topic "Communication Skills" under the guidance of Ashish sir. It covered all the aspects of communication and personal skills. It helped to develop confidence in public speaking and to know important key points while communicating. The topic for the second week was "Leadership". Under this, several methods to take initiative and gaining confidence in oneself were elaborated with different case studies. These were accompanied with interactive sessions and small debates on the overview of leadership conducted by Shivangi ma'am. The third week commenced with the topic of "Change Management". Students were explained the importance of change management and how they can apply it to their lives by Neha and Ayushi ma'am. Several attributes related to change management like requirement of change, acceptance of change and dissolving the resistance to change. On top of this, some projects were assigned to the students regarding the welfare of college. The last week's topic was "Self Awareness". It included several interactive and self assessment exercises to get an insight of oneself. Under the

guidance of Dr. Rashmi ma'am, students gained knowledge of self awareness and its importance. The sessions were an eye opener for students as they realised their own true self.

On the last day of the workshop, students presented their reports on the projects that were assigned to them. The report highlighted the use of the skills gained by the students during their time at workshop. After this, students were motivated with enlightening words from Director sir, Deputy director ma'am and Ashish sir. The proceedings ended with an inspiring speech by Rashmi ma'am.

Dr. Rashmi Gupta

  
(Dr. Rashmi Gupta)

  
18.12.19

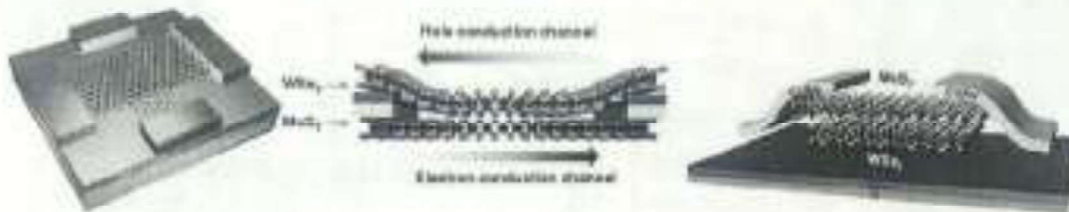


## REPORT OF EXPERT LECTURE

On

### **Single Atomic Layer based Semiconductor Devices and Research Opportunities in South Korea**

by Dr. Servin Rathi, Department of Electronic and Electrical Engineering, Sungkyunkwan University, Suwon, South Korea



The Department of Applied Science 2<sup>nd</sup> shift has organized an expert lecture of Dr. Rathi on 3<sup>rd</sup> Oct 2019 in room no 406 at 11:00 am. All the students of First year and Faculty members had attended it. The lecture was mainly focused on new class of materials, popularly known as 2D materials that have attracted a lot of attention this decade, showing a great potential for exploring and realization of advanced electronics and optoelectronics devices. He discussed these materials-based devices like diodes and transistors and discuss their advantages and challenges that lies ahead in the successful realization of these devices for next generation commercial applications. He explained current research interest includes fabrication and device engineering of diodes and FETs based on 2D materials (graphene, MoS<sub>2</sub>, WSe<sub>2</sub>, hBN, HfSe<sub>2</sub>, etc.). The talk was very beneficial for Physics, electronic and electrical engineering under-graduate, researchers and faculty members. The main interest is to generate good research spirit in the graduate students to have better researchers in the future. The talk was very effect, interesting and intellectual. Students were comfortable with Dr. Rathi and asked many questions, cleared their doubts.



## INTRODUCTION

The National Physical Laboratory was conceptualized in 1943 by the Governing Body of Council of Scientific and Industrial Research (CSIR), with a view to pave way for using science and technology as a means for industrial growth and development. Pandit Jawaharlal Nehru, the then Prime Minister of India, laid the foundation stone for the laboratory on January 4, 1947 and it was one of the first National Laboratory to be set-up under the CSIR. On January 21, 1950, Sardar Vallabhbhai Patel, the then Deputy Prime Minister of India, inaugurated the NPL building. Over the years, the Laboratory has more than realized its primary mandate as the keeper of Measurement Standards for the nation while also substantially expanding its research activities to emerge as a leading national institution for research in a whole gamut of areas in the Physical Sciences.

The main aim of the Laboratory is to strengthen and advance physics-based research and development for the overall development of science and technology in the country. In particular, its objectives are:

- To establish, maintain and improve continuously by research, for the benefit of the nation, the National Standards of Measurements and to realize the Units, based on the International System.
- To identify and conduct, after due consideration, research in areas of physics which are most appropriate to the needs of the nation and for advancement of the field.
- To assist industries, national and other agencies in their development tasks by precision measurements, calibration, development of devices, processes and other allied problems related to physics.





A team consisting of 66 students and 5 faculty members of MSIT were privileged to be a part of the visit made to Open House at National Physical Laboratory on the 30<sup>th</sup> of September 2019.

### X-RAY DIFFRACTION

It is one of the most important non-destructive tools to analyze all kinds of matter—ranging from fluids, to powders and crystals. From research to production and engineering, XRD is an indispensable method for materials characterization and quality control.



### LUX METER

The lux (symbol: lx) is the SI derived unit of illuminance and luminous emittance, measuring luminous flux per unit area. It is equal to one lumen per square metre. In photometry, this is used as a measure of the intensity, as perceived by the human eye, of light that hits or passes through a surface. It is analogous to the radiometric unit watt per square metre, but with the power at each wavelength weighted according to the luminosity function, a standardized

model of human visual brightness perception. In English, "lux" is used as both the singular and plural form.



### PORTABLE GENERATORS

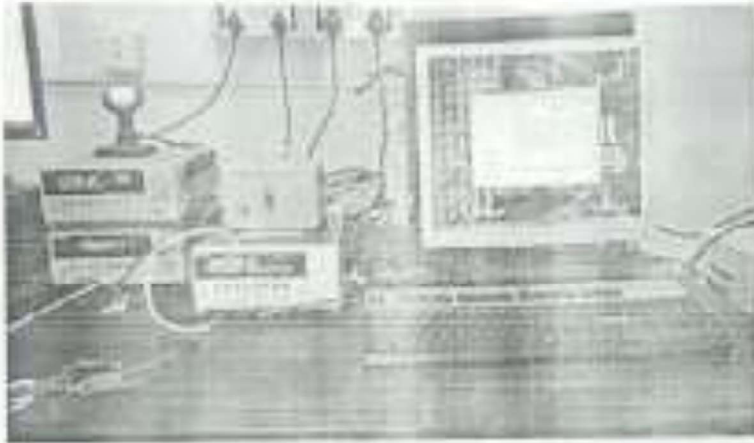
They provide electricity by running a gas-powered engine that turns an on-board alternator to generate electrical power. Power outlets on the unit allow you to plug extension cords, electric-powered tools and appliances into it. Portable generators provide electricity by running a gas-powered engine that turns an on-board alternator to generate electrical power. Power outlets on the unit allow you to plug extension cords, electric-powered tools and appliances into it. Portable generators provide electricity by running a gas-powered engine that turns an on-board alternator to generate electrical power.





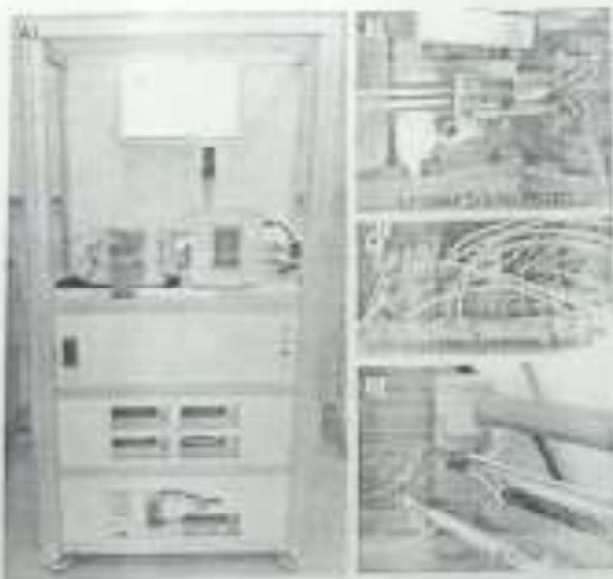
## ELECTRICAL RESISTIVITY MEASUREMENTS

Various models and methods have been suggested to measure the electrical resistance. Factors affecting the suitability of various methods and precision attainable include contact resistance and shape of the sample i.e. whether it's in the form of single crystal, thin film, powder pellet or small crystallite.



## THERMOELECTRIC EFFICIENCY MEASUREMENT SYSTEM

Conventionally, thermoelectric measurements are taken using a two-point technique where the heat is introduced through one of the electrodes, creating a temperature difference. The resulting signal from the small temperature gradients may be compensated for by the large number of very low power measurements.



## SAR AND ANTENNA EXPERIMENT

Specific Absorption Rate (SAR) is a measure of the amount of RF power deposited in the human head or body whenever a mobile phone or other wireless radio device transmits. It is the maximum SAR value (in units of Watt/kilogram) that is measured during SAR compliance testing.



Overall the visit to National Physical Laboratory had proved beneficial to the students as it supplemented as a clear vision to theoretical knowledge and exposed students to recent trends in research, challenges and development involved in various studies related to science.

This experience was of great value to the learning curve of the students

Swati  
4/10/19  
DR. SWATI CHAUDHARY



**2018**

MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY  
C-4 Janakpuri, New Delhi-110058  
REPORT ON  
LECTURES ORGANISED BY  
DEPARTMENT OF APPLIED SCIENCES  
(Dated: 10-02-2018)

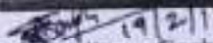
The Department of Applied Sciences organised the lecture on "Solar Cell- The future of Energy" on Saturday, 10<sup>th</sup> Feb, 2018. The lecture was highly educative and interesting. The lecture was delivered by highly accomplished expert - Dr Vinay Gupta, Bhatnagar awardee, Scientist at CSIR-NPL, New Delhi. Dr Gupta has made outstanding and impactful contributions in the area of organic solar cells. His lecture focused on "Recent Innovations in Solar Cell".


The sun is the largest energy source in the solar system. In fact, more energy from the sun hits the earth in one hour than the entire world uses in one year! And every living thing on earth, even microbes deep in the blackest reaches of the ocean, depend on the sun for life. Solar energy technology harnesses the power of the sun for human use, but we've only just begun to tap its full potential.

The aim of this lecture was to enhance awareness among students and the faculty members about resources and modalities of production of clean energy. The energy crisis climate change and environment pollution has led to promoting usage of alternative clean sources of energy. Several government, research organisations and companies are making efforts in this regard. The lecture focused on recent innovations in the solar cell. The solar energy is being used by solar cells which convert solar energy into electrical energy. It is utmost important for the humans to harness this ultimate, clean and eco-friendly energy by solar cells.

The faculty had series of questions and queries and the Q&A session with the participants was very interactive. The session was concluded with a thank you note by Dr. Ajay Gahlot, Associate Professor and Head of the Department of Applied Sciences.



  
19/2/18  
Prof. Ajay Kumar Singh  
(Convener)

  
19/2/18  
Dr. Ajay Gahlot  
HOD Applied Sciences  
Maharaja Surajmal Institute of Technology  
C-4 Janakpuri, New Delhi-110058

2017

MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY  
C-4 Janakpuri, New Delhi-110058  
REPORT ON  
LECTURES ORGANISED BY  
DEPARTMENT OF APPLIED SCIENCES  
(Dated: 11-02-2017)

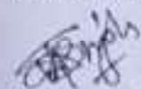
The Department of Applied Sciences organised two lectures on contemporary issues on Saturday, 11<sup>th</sup> Feb, 2017. The lectures were highly educative and interesting. The lectures were delivered by highly accomplished expert - Dr Suresh Chand, Emeritus Scientist, CSIR-NPL and formerly associated as Chief Scientist CSIR-NPL, New Delhi. His lecture focused on "Recent Innovations in Solar Cell". The other valuable esteemed guest was Prof. Amitabh Sen Gupta, distinguished Research Professor, North Cap University, Gurgaon, Formerly Outstanding Scientist / Acting Director CSIR-NPL. He delivered his lecture on "Basics and Introduction to Atomic Clock".

The aim of the first lecture was to enhance awareness among students and the faculty members about resources and modalities of production of clean energy. The energy crisis climate change and environment pollution has led to promoting usage of alternative clean sources of energy. Several government, research organisations and companies are making efforts in this regards. The lecture focused on recent innovations in the solar cell. The solar energy is being used by solar cells which convert solar energy into electrical energy. It is utmost important for the humans to harness this ultimate, clean and eco-friendly energy by solar cells.

The faculty had series of questions and queries and the Q&A session with the participants was very interactive. The session was concluded with a thank you note by Dr. Ajay Kumar Singh, Professor, Department Applied Sciences.

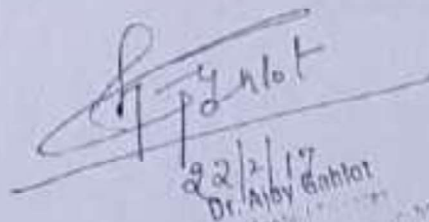
The second lecture was based on basic principles of an Atomic Clock. An Atomic Clock is a device that uses an electronic transition frequency in the micro wave, optical or ultra violet region and the electromagnetic spectrum of atoms as a frequency standard for its time keeping element. The Atomic Clocks are the most accurate time and frequency standard known and are used as primary standards for international time distribution services, to control the wave frequencies of television broadcasts, and in global satellite systems such as GPS.

The principle of operation of atomic clocks is not based on nuclear physics, but rather on atomic physics, it uses the microwave signal that electrons in atoms emit when they change energy levels. Early atomic clocks were based on masers at room temperature. Currently, the most accurate atomic clocks first cool the atoms to near absolute zero temperature by slowing them with lasers and probing them in atomic fountains in a microwave-filled cavity. These clocks works at the accuracy of  $10^{-9}$  seconds per day. The lecture has enthused and enlightened the participants. This lecture ended with interactive session ended with an open forum with the faculty. With vote of thanks by Dr Ajay Gahalot, HOD, Applied Sciences, the session was concluded. \*



Prof. Ajay Kumar Singh

-(Conver)



22/2/17  
Dr. Ajay Gahalot



## Seminar on Quantum Computer

The Department of Applied Sciences (Second shift), Maharaja Surajmal Institute of Technology, New Delhi has organized a Seminar on **Quantum Computers** on 17<sup>th</sup> March, 2017 from 2:30 PM in room no. 406. More than one hundred students of CSE, IT, ECE and faculties attended and acquired valuable information.

Dr. Rekha Tripathi, head of department of Applied Sciences, Maharaja Surajmal Institute of Technology, welcomed the Guest Prof. (Dr.) Avinash C. Sharma, University School of Basic and Applied Sciences, GGSIPU, Delhi.



Prof. (Dr.) Avinash C. Sharma, delivered a talk on "Quantum Computers" as a collective goal. Topic was relevant in context with syllabus of B.tech first Semester.



The Seminar culminated with a vote of thanks by Dr. Sobinder Singh, the department of Applied Sciences (Second Shift). It was an interactive and enriching lecture which saw full participation of everyone present.

  
Dr. REKHA TRIPATHI  
HOD (Applied Sci.) 2nd Shift  
Maharaja Surajmal Institute of Technology  
C-4, Jangal Puri, New Delhi, 110058

2016

MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY

REPORT

ON

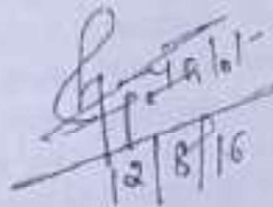
ORIENTATION PROGRAMME

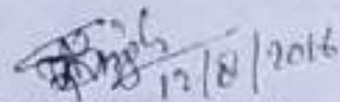
ORGANIZED BY

DEPARTMENT OF APPLIED SCIENCES

Dated: 12-08-2016

An 'Orientation Programme' organized by Department of Applied Sciences was held on August 2, 2016. Large number of newly admitted students of various B.Tech. courses (CSE, IT, ECE & EEE) along with their parents participated. Director MSIT, Prof. K. P. Chaudhary presided over the programme. Director Placement Sh Ashok Oberoi, Director MSI Dr. Rajesh Tyagi, Prof. Poonam Bansal and Prof. Jagvir Ahlawat also graced the occasion. Dr. K.P. Choudhary Director, MSIT welcomed all the students and their parents and congratulated them on getting admission in MSIT. He briefed them about the institute and the achievements of its students. Sh Ashok Oberoi Director, Placement gave information about the campus placement activities and the package being offered. Prof. Poonam Bansal stressed upon the importance of discipline in the Institute, HOD's of various Departments introduce themselves and also informed about labs and other departmental facilities. 'Vision' a Institute Magazine was released by the dignitaries on the dais. Librarian Ms Ritu Verma provided important information about facilities in the Central Library and the Book-bank. She also told about the availability of Books, Journal, Magazine etc. in the Central Library. The programme ended with the vote of thanks delivered by Dr. Jindagi Kumari, Applied Science Dept.

  
12/8/16

  
12/8/2016

Prof. (Dr.) Ajay K. Singh  
Convener,

'Orientation Programme, 2016'



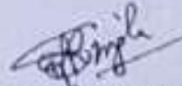
## Seminar Report

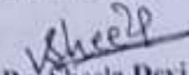
One day seminar was organized by department of Applied Sciences on 12<sup>th</sup> March 2016. It includes four speakers the first speaker Prof. Bhaskar Mitra, IIT Delhi, delivered his talk on MEMS devices for Internet of things. Micro-Electro-Mechanical Systems, or MEMS, is a technology that in its most general form can be defined as miniaturized mechanical and electro-mechanical elements (i.e., devices and structures) that are made using the techniques of microfabrication. While the electronics are fabricated using integrated circuit (IC) process sequences (e.g., CMOS, Bipolar, or BiCMOS processes), the micromechanical components are fabricated using compatible "micromachining" processes that selectively etch away parts of the silicon wafer or add new structural layers to form the mechanical and electromechanical devices. It is even more interesting if MEMS can be merged not only with microelectronics, but with other technologies such as photonics, nanotechnology, etc. This is sometimes called "heterogeneous integration." Clearly, these technologies are filled with numerous commercial market opportunities.

The series of talk contained 2<sup>nd</sup> lecture delivered by Prof. Kedar Singh IIT Delhi on the topic From Physics to Optical Engineering. He explain the importance of optical engineering in research and other fields of engineering. Prof. Kedar Singh compares the research data of India w.r.t china and other countries. The important feature of a diffraction grating is that the interference maxima will not be in the form of broad bands but rather very thin, bright lines. We can show this by calculating the halfwidth of the central maximum. (Figure 6.4 shows what we mean by half-width). The brightness of the line drops to zero in the direction in which the N slits have an interference minimum. As N is usually a very large number, the situation is very similar to diffraction by a single slit of width N d. The light emitted by a sample of a substance may be split up effectively by passing it through a diffraction grating, since the direction of each interference maximum depends on wavelength.

The third lecture was delivered by Dr. Rajender Singh, IIT Delhi, on the topic GaN Based Nanopillar Arrays for Nano Scale Device Applications. Dr. Rajender Singh emphasis on nanotechnology and material science. He compared different substrate temperatures and different chlorine-based etch chemistries to fabricate high quality GaN nanopillars. Room temperature photoluminescence and Raman scattering measurements were carried to study the presence of surface defect and strain relaxation on these nanostructures, respectively. Substantial strain relaxations were observed in these structures from room temperature Raman spectroscopy measurements. Room 2 temperature Photoluminescence spectroscopy shows the presence of whispering gallery modes from these the nano disks structures. Direct band-gap gallium nitride (GaN) nanopillar arrays have attracted tremendous research interest for potential device applications. Using topdown approach, uniform GaN nanopillar arrays have been fabricated through a combination of lithography and large area etching using inductively coupled plasma tools.

The fourth talk was delivered by Dr. Bharti Arora, The Northcap University, Gurgaon on the topic Insight into Structural Polymorphism of DNA.

  
DR. AJAY KUMAR SINGH  
HOD, Applied Sciences  
Kavitayya Dattajoshi Institute of Technology  
C-4, Janak Puri, New Delhi-110055

  
Dr. Sheela Devi  
(Coordinator)

**Electrical & Electronics Engineering Department**


**Report**


**Webinar on Energy Efficiency in Smart Buildings through IoT sensors  
integration on 20th June, 2020**

An international webinar was conducted by IEEE PES MSIT, and sponsored by IEEE PES IAS Delhi Chapter on 'Energy Efficiency in Smart Buildings through IoT sensors integration' on 20th June, 2020. Prof. Saifur Rahman, Director Virginia Tech Advanced Research Institute, USA; President IEEE PES 2018 & 2019 and Candidate for IEEE President Election 2021 was the speaker. The webinar was hosted on Cisco Webex Meetings with 150+ attendees from various backgrounds- students, faculties and researchers. The webinar witnessed enthusiastic discussion on recent trends and developments in Smart Buildings and Sensors deployment in building sustainable architectures.

The webinar was concentrated to the substantial power reduction, shifting the dependence from the grid to the renewable energy resource (solar) and integration of the home systems with the grid via open source, low cost, low power consumption platforms that monitors and controls of various loads and demands in a general commercial building. Various scenarios were discussed with a view to demarcate the different cases of loads like HVAC, lighting load, plugging load etc. from its timings and demand perspective. Along with this, the integration of the sensors and the system in more efficient and inclusive way along with the override mode for the user comfort were also included. The speaker also spread lights on recent contributions of various research groups and industrial associations such as Building Automation Systems (BYOBAS), WiseBldg and OpenADR with emphasis on various protocols and ICT technologies. It was clearly stated that for the efficient system, compromises were to be made between the system inputs through various and actual result that is to be achieved in order to make system more desirable and power efficient. The importance of the integration of the home systems with the renewable energy source for the basic requirement, switching between them when necessary and not only decrease the dependency on the supply grid but to reduce the cost itself which is charged by the power distributor were the points that seek the most responses.

The webinar doesn't only buoy up the audience with the new and innovative ideas which can help them develop new products but also help them to get an insight of the research activities going round in the related domain.

  
**Sonia Goel**  
**(Asst Prof EEE Dept.)**  
**(Incharge-Seminar/Expert Lecture/Industrial Visits)**

  
**Dr Meena Tushir**  
**(HOD, EEE Dept.)**



**Electrical & Electronics Engineering Department**

**Report**

**Webinar on Electrical Switchgear on 10th July 2020**

In the midst of the lockdown with all the students stuck inside their houses, to save them from the clutches of boredom IEEE PES MSIT organized a webinar on Electrical Switchgear and its Applications on 10<sup>th</sup> July 2020. The respected speaker of the webinar was Mr. Shivanand D.V. He is an entrepreneur having experience of 37 years in the field of manufacturing, design, production, project execution of various electrical control panels like Viz., motor control centers- MCC, power control centers-PCC, Synchronizing Panels, Automatic Power Factor Correction Panel- APFCP.

Mr. Shivanand D.V explained centralized collection of circuit breakers, fuses and switches that function to protect, control and isolate electrical equipment. The circuit protection devices are mounted in metal structures which are known as electrical switchgear.

The audience gained immense knowledge about the applications of the electrical switchgear system which included

- It houses protection devices against overload and short circuits
- Contains devices to distribute and control electric current
- Isolate electric circuits from the power supply
- connect and disconnect electric induction motors
- execute qualitative or quantitative measurements on the power supply



**Sonia Goel**  
(Asst Prof EEE Dept.)  
(Incharge-Seminar/Expert Lecture/Industrial Visits)



**Dr Meena Tushir**  
(HOD, EEE Dept.)

**Electrical & Electronics Engineering Department**

**Report**

**Webinar on Applications of AI in Power Grid on 31st July 2020**

IEEE PES MSIT in collaboration with Electrical and Electronics Engineering Department. MSIT organized a webinar on AI Application in Power Grid Systems to address the interlink between AI and Power grid systems by Pantech e-learning on 31st July 2020. Mr. Sreenivasalu Ala was the speaker for the webinar. The webinar was forecasted live on 'YouTube' Channel with 250+ participants.

Covering the very known fields of electrical engineering, the concept of Artificial Intelligence was slowly introduced and the crucial interlink between the two with essential practical applications were discussed. With AI being one of the hot topics, to maintain the stream with the webinar, the goal and domains of AI was explained. How machines can mimic human intelligence with rationality differences were well demonstrated with examples of recent developments in the worlds. Moving ahead towards the power grid systems, the speaker explained the various angles of electrical power generation, transmission, distribution and utilization and the idea of power grid systems was presented with elaborative examples. The speaker then moved to the theme of the talk, and talked about approaches used in AI with reference to electrical applications.

When comes to applications, and to stress on importance of AI in performance improvement of the established power systems and grids, systems like fuzzy systems which is popularly used to diagnose the fault, ANN to predict p and ensure proper functioning, expert systems and environmental sensor systems with integration of AI were discussed.

With an aim to bridge the gap between theoretical understanding and practical implementation, a live simulation-based project showing how one can simulate the power systems with appropriate and defined parameters and apply various methods and models to get a brief overview of how practically the power industry works, was also demonstrated. The webinar concluded with a demonstration of the live project and various resources were shared to gain knowledge in the related domain. Keeping up the curiosity and synchronization with the recent developments happening over the world, topics like electrical vehicles, deep learning, IoT etc. were also touched. A gesture to thank the entire team and all the stake holders involved was presented at the end.

  
Sonia Goel  
(Asst Prof EEE Dept.)  
(Incharge-Seminar/Expert Lecture/Industrial Visits)

  
Dr Meena Tushir  
(HOD, EEE Dept.)



**Electrical & Electronics Engineering Department**

**Report**


**Webinar on Design of Electrical Vehicle on 10th Aug. 2020.**

IEEE PES MSIT collaborated with the department of EEE, MSIT, and in association with Pantech, organized another webinar with PANTECH- E BYTES 2020- A webinar session on Design of Electric Vehicle on 10<sup>th</sup> Aug. 2020. The event was live on YouTube. The main aim of the webinar was to share the knowledge of the latest and trending skills and technologies to the students by industrial experts. The session was one hour long and the students were engrossed in gaining the knowledge the entire time. They received insights into the latest industrial standards and applications on the domain which was desired.

**Key points of the webinar were:**

1. EVs (also known as plug-in electric vehicles) derive all or part of their power from electricity supplied by the electric grid. They include AEVs and PHEVs.
2. AEVs (all-electric vehicles) are powered by one or more electric motors. They receive electricity by plugging into the grid and store it in batteries. They consume no petroleum-based fuel and produce no tailpipe emissions. AEVs include Battery Electric Vehicles (BEVs) and Fuel Cell Electric Vehicle.
3. PHEVs (plug-in hybrid electric vehicles) use batteries to power an electric motor, plug into the electric grid to charge, and use a petroleum-based or alternative fuel to power the internal combustion engine. Some types of PHEVs are also called extended-range electric vehicles (EREVs).

  
**Sonia Goel**  
(Asst Prof EEE Dept.)  
(Incharge-Seminar/Expert Lecture/Industrial Visits)

  
**Dr Meena Tushir**  
(HOD, EEE Dept.)

## Electrical & Electronics Engineering Department

### Report


#### **Webinar on Power Electronic Simulation – Simplified on 19th Aug 2020**


IEEE PES MSIT collaborated with the department of EEE, MSIT, and in association with Pantech, organized another webinar with PANTECH- E BYTES 2020- A webinar session on Power Electronic Simulation-Simplified on 19<sup>th</sup> Aug 2020. The event was live on YouTube and witnessed over 4100 viewers.

The main aim of the webinar was to share the knowledge of the latest and trending skills and technologies to the students by industrial experts. The session was one hour long and the students were engrossed in gaining the knowledge the entire time. They received insights into the latest industrial standards and applications on the domain which was desired.

The consideration of the power electronic simulation was given to the following

- Designing and validating new topologies and control strategies
- Optimizing system behavior using model libraries of energy sources, power semiconductors, passive circuit elements, and machines such as PMSM and induction motors
- Analyzing system response to faults and abnormal conditions
- Eliminating design problems found through simulation before moving to implementation
- Reusing models to speed up design iterations and next-generation projects.

  
**Sonia Goel**  
(Asst Prof EEE Dept.)  
(Incharge-Seminar/Expert Lecture/Industrial Visits)

  
**Dr Meena Tushir**  
(HOD, EEE Dept.)



Electrical & Electronics Engineering Department

Report


**Webinar on Career Options and Opportunities for Electronics Graduates on  
25th Sept, 2020**

Department of Electrical and Electronics Engineering (EEE) in association with Department of Electronics and Communication Engineering (ECE) organized a webinar on "Career Options and Opportunities for Electronics Graduates" on 25<sup>th</sup> Sept, 2020 for 3<sup>rd</sup> and final year students. Mr. Renjith CV, an Electrical Architect- Medical imaging at Philips Healthcare was the speaker. He holds 18+ years of experience in Electronics/Embedded hardware & product design/testing.

Key points of the lecture were

- Opportunities in the core Electronics field.
- Product Development and Industry.
- Opportunities after Engineering (Higher Study/Job etc).
- Enhancement of skill sets and the short term/online training in Embedded System, DSP, VLSI, AI/IoT etc.
- Overview about the expectation from industries.

During the webinar registered students shared their doubts about the placements process.

  
**Sonia Goel**  
(Asst Prof EEE Dept.)  
(Incharge-Seminar/Expert Lecture/Industrial Visits)

  
**Dr Sunil Gupta**  
(HOD, EEE Dept.)

**Electrical & Electronics Engineering Department**

**Report**


**Webinar on Career Guidance in field of Machine Learning on 7th Oct. 2020.**

IEEE PES MSIT in collaboration with EEE Department, MSIT with an aim of helping the undergraduate students in evaluating their career goals and polishing their technical skills organized a webinar on the topic 'Career Guidance for B.Tech Students and Machine Learning' on 7th Oct. 2020. The 90-minute webinar was concentrated on the guidance of building appropriate aptitude for developing Machine Learning skill sets and crucial career counseling. With the pre-final and final year students as the main targeted audience, the event proved to be a great success with sophomores and faculties also showing great interest.

The speaker set the motion with a simple yet perplexing question of 'why does machine learning has been such a hot topic over the past decade and what how it can be the game changer in your career?' The audience was enlightened with the true definition of machine learning, its principles and algorithms and the various associated scopes. Steadily the attention was shifted towards the recent advances in the field and the vast horizon of opportunities the field offers. It was with the various case studies and examples that the idea of 'There is a dire need of skilled Machine Learning Engineer' was put forward. Students were guided on how to grab any opportunity to hone their skills, build their network and how to be competent in this ever-evolving industry.

With rich experience of industrial collaboration with various firms, the speaker then discusses the tips and tricks to multiply their knowledge and get into the academia/industry. A detailed roadmap discussing the way to expose one to various scopes and roles were discussed. Further, to convey the significance and interrelation with the various allied fields like mathematics, physics and chemistry, a healthy stretch was witnessed which motivated the audience to inter-relate the various domains and bring wonders.

The interactive session was concluded with a round of appreciations from the audience and a Q&A session was conducted to help the students interact with the speaker and ask their relevant queries. As an outcome of the webinar, the formation of student groups is anticipated wherein they will learn and work over valuable projects.

  
**Sonia Goel**  
(Asst Prof EEE Dept.)  
(Incharge-Seminar/Expert Lecture/Industrial Visits)

  
**Dr Sunil Gupta**  
(HOD, EEE Dept.)



**Electrical & Electronics Engineering Department**


**Report**

**The Design Talk on 24<sup>th</sup> Oct. 2020.**


The desire to create is one of the deepest learnings of the human soul and creativity is what keeps the brain alive. We at IEEE PES MSIT believe that designing something can be highly challenging in every possible aspect and for a designer, coming up with a new idea every day is like an exercise to the brain, the enthusiasm the designers have within them is really inspirational which needs to be shared. With this thought, IEEE PES MSIT successfully conduct a panel discussion, The Design Talk on 24<sup>th</sup> Oct. 2020. 6 designers from various field, like UI/UX, textile, architecture, graphic, product and illustration, were invited to share their experiences and small anecdotes with the audience.

The event started with a warm welcome of all the panelists and the audiences. The speed escalated quickly after the brief introduction when the panelists were asked shared the details about their journey as a designer. They answered some heated questions like the definition of design through a designer's perspective and what being a designer means of a personal and professional level etc. Their answers provided the listeners with a lot of inspiration and self-confidence. The mood of the discussion shifted towards light nostalgia when the panelists shared their hardships and the various silly mistakes they made in their journey and advices the audience not to do the same.

The 60-minute-long event was concluded with a round of Q 'n' A where the audience got a chance to put forward their queries to the panelists and got them answered to satisfactory level. At the end each of the panelist said a witty one liner to sum up their points.

  
Sonia Goel

(Asst Prof EEE Dept.)  
(Incharge-Seminar/Expert Lecture/Industrial Visits)


  
Dr Sunil Gupta  
(HOD, EEE Dept.)

**Electrical & Electronics Engineering Department**  
**Report**

**Industrial visit to S/s-66/11kv Main Receiving Substation, IGI Airport on  
18<sup>th</sup> March, 2019**

A visit to S/s-66/11kv Main Receiving Substation, IGI Airport was organized for the students of EEE 2<sup>nd</sup> year and 3<sup>rd</sup> year on 18.03.19. In total there were 45 students which included 30 student of second year (4<sup>th</sup> semester) and 15 from third year (6<sup>th</sup> Semester). We reached the substation at around 10:30 am where we met the instructor in charge Mr Sinthil Kumaran (Senior Engineer) explained the students what a substation is and from where 66kV line this substation receives. Then the different component connected like the isolation, current and potential transformer, different circuit breaker and the material of the wire, ratings of the components and proper insulation used for the safety. He covered the importance of ground and showed a area covered with stones in order to have a common ground for all the working components. The students were allowed to the main control room where they were able to see the bus supplies which powers different section of terminal 3 Indira Gandhi International Airport. The trip ended by the reserve compartment where large scale induction motors were kept as backup to the transformer in an sound proof environment.

  
**Sonia Goel**  
**(Asst Prof EEE Dept.)**  
**(Incharge-Seminar/Expert Lecture/Industrial Visits)**

  
**Dr Meena Tushir**  
**(HOD, EEE Dept.)**



**Electrical & Electronics Engineering Department**


**Report**

**“Renewable Energy Integration” on 22<sup>nd</sup> August, 2019**

Department of Electrical and Electronics Engineering organized a lecture on the topic of “**Renewable Energy Integration**” for EEE faculty and students on 22<sup>nd</sup> August, 2019. Speaker of the session was Dr. R. C. Bansal (professor, Department of Electrical, Electronics and Computer Engineering, University of Pretoria, South Africa).

Renewable Energy Integration focuses on incorporating renewable energy, distributed generation, energy storage, thermally activated technologies, and demand response into the electric distribution and transmission system. A systems approach is being used to conduct integration development and demonstrations to address technical, economic, regulatory, and institutional barriers for using renewable and distributed systems. In addition to fully addressing operational issues, the integration also establishes viable business models for incorporating these technologies into capacity planning, grid operations, and demand-side management.

  
**Sonia Goel**  
**(Asst Prof EEE Dept.)**  
**(Incharge-Seminar/Expert Lecture/Industrial Visits)**

  
**Dr Meena Tushir**  
**(HOD, EEE Dept.)**

**Electrical & Electronics Engineering Department**

**Report**

**“Integrated Operation of Power System” on 7th September, 2019**

Department of Electrical & Electronics Engineering organized an expert lecture on “**Integrated Operation of Power System in Delhi**” on 7th September. The lecture was delivered by Sh. Naveen Kumar, Asstt Manager (T), State Load Dispatch Centre (SLDC), Delhi. The aim of the seminar was to provide the students an insight of roles and functions of SLDC. SLDC ensures the integrated operation of power system and is responsible for optimum scheduling and dispatch of electricity in Delhi. State Grid operations, real time monitoring and management of system are managed by SLDC.

The seminar enlightened the students on various topics including Power supply position, Demand in power, Electrical Grid, Power System, Important agencies in power sector, Electricity Act and regulations, Evolution of power systems.

The seminar was concluded by addressing the rising power demands and an inability to suffice these demands. On comparing the data on ‘Demand by Delhi’ over the years 1905 to 2019, it was evident that the requirement multiplies each year with the power generation systems remaining nearly the same, as a result there is a need for innovative ideas that will help to reach self sufficiency levels in terms of power generation.



**Sonia Goel**  
(Asst Prof EEE Dept.)  
(Incharge-Seminar/Expert Lecture/Industrial Visits)



**Dr Meera Tushir**  
(HOD, EEE Dept.)



Electrical & Electronics Engineering Department

Report

“DC-DC Converters” on 17<sup>th</sup> Oct, 2019

Electrical and Electronics Engineering Department, MSIT in association with IEEE PES Chapter organized an expert lecture on the topic of on ‘DC-DC Converter’. Dr G. Bhuvanewari, professor at IIT Delhi, Electrical Engineering Department, was invited as the expert for the lecture. With an aim of clearing the concepts of Power electronics which is a crucial field, the lecture witnessed curious minds holding a healthy discussion about recent trends and advances.

With a warm welcome, the lecture started with a brief introduction of Dr.G. Bhuvanewari. Holding a great research profile, a spark of interest and ideas was produced amongst the audience, following the insightful lecture. The concentration of the expert lecture can be summarized as:

- Non-Isolated DC-DC Converters
  - Buck
  - Boost
  - Buck-boost
  - Cuk
- Isolated DC-DC Converters
  - Flyback
  - Forward
  - Push-pull
  - Half Bridge
  - Full-bridge
- Power Supply Applications

Real life application of power supplies, with the industrial examples was discussed.

  
Sonia Goel

(Asst Prof EEE Dept.)

(Incharge-Seminar/Expert Lecture/Industrial Visits)

  
Dr Meena Tushir  
(HOD, EEE Dept.)


**Electrical & Electronics Engineering Department**  
**Report**

**Seminar on "PLC & SCADA" on 7<sup>th</sup> Feb 2018**

Department of Electrical & Electronics & IEEE PES chapter organised a workshop/seminar on PLC & SCADA for the 2<sup>nd</sup> & 3<sup>rd</sup> year EEE students on 7<sup>th</sup> Feb, 2018. Mr Gaurav from Softcon India Pvt Ltd, New Delhi was the speaker. The aim of the workshop was to familiarise students about SCADA which is a tool of vital importance for every Electrical engineer working in this field.

SCADA is a Supervisory control and data acquisition employed in a lot of industrial productions where room for human error is reduced and the entire system is monitored for any fault which occurs and desired control action is produced.

  
**Sonia Goel**  
**(Asst Prof EEE Dept.)**  
**(Incharge-Seminar/Expert Lecture/Industrial Visits)**

  
**Dr Meena Tushir**  
**(HOD, EEE Dept.)**





**Electrical & Electronics Engineering Department**  
**Report**

**Industrial visit to Receiving substation Subhash Nagar DMRC on 8<sup>th</sup> Feb 2018**

A visit to Receiving Substation(RSS) of DMRC Subhash Nagar, New Delhi was organized for the students of EEE second year on 8<sup>th</sup> Feb 2018. Students were accompanied by Mrs Jyoti Jain (Asstt. Prof EEE Deptt.). The visit started with a trip to control room wherein the students observed the DMRC metro construction via the SCADA system. A detailed discussion on various electrical components and materials took place. The students were made acquainted with the constructional and the architectural aspects of the metro followed by a brief conversation delving into its history. A trip to the Switch gear room followed wherein the students observed protection devices such as circuit breakers, temperature safety alarms.

A field visit followed in succession where the students were shown the transformers, CVT'S, lightning arrestors and the like used in the metro system. This served as a physical manifestation of the SCADA system shown earlier. The visit culminated with a Q/A session and a group photo with the co-operative DMRC officials at work. The experience was interesting, informational and educational serving as a breather for all the inquisitive minds.

  
**Sonia Goel**  
**(Asst Prof EEE Dept.)**  
**(Incharge-Seminar/Expert Lecture/Industrial Visits)**

  
**Dr Meena Tushir**  
**(HOD, EEE Dept.)**

**Electrical & Electronics Engineering Department**  
**Report**

**Visit to Open House at IIT Delhi on 21<sup>st</sup> April, 2018**

Department of Electrical & Electronics Engineering organised a visit to Open House at IIT Delhi on 21<sup>st</sup> April, 2018 for 2<sup>nd</sup> year students. Students who have been working on various projects and technical research for the past one year to showcase their outcomes. There was plethora of projects on display like wheelchairs which could get converted into a bed. Motorboat which could hover on water bodies and dive deep into it and collect real time data and indicate salinity , pressure, temperature and check pollution level of water etc.

Open House provided a platform for students to get inspire and gain technical knowledge and ideas which each one can implement and be a part of the fast-growing science and technology.



**Sonia Goel**  
(Asst Prof EEE Dept.)  
(Incharge-Seminar/Expert Lecture/Industrial Visits)




**Dr Meena Tushir**  
(HOD, EEE Dept.)




**Electrical & Electronics Engineering Department**  
**Report**

**Industrial Visit to National Physical Laboratory on 28<sup>th</sup> Sept 2018**

The students of MSIT from EEE , CSE and IT branches were privileged to be a part of the visit made to Open House at National Physical Laboratory on the 28<sup>th</sup> of September 2018. The objective of the visit was to provide students the exposure of recent trends in research, challenges and development involved in various studies related to science. The students have gone to various research labs such as Meteorology Lab, Cryogenics facility, Nanofabrication Lab and Nano Dimensional Metrology and nanodevice fabrication laboratory. Process and systems involved in Liquification of Nitrogen was explained very well and a practical experiment with Liquid Nitrogen such as dropping air filled balloon into the nitrogen tank was also demonstrated by the NPL team. Students also witnessed a Nano Hologram on a tiny sheet of aluminium through a microscope which is one application of Nanostructure fabrication of polarization tuned colour filters. Students also visited the HVDC where we were told about Josephson Voltage standard and Traceability of DC High voltage.

  
Sonia Goel  
(Asst Prof EEE Dept.)  
(Incharge-Seminar/Expert Lecture/Industrial Visits)

  
Dr Meena Tushir  
(HOD, EEE Dept.)

**Electrical & Electronics Engineering Department**  
**Report**

**Workshop/Seminar on PLC & SCADA on 1st Oct, 2018**

Department of Electrical & Electronics & IEEE PES chapter organised a workshop/seminar on PLC & SCADA for the 2<sup>nd</sup> & 3<sup>rd</sup> year EEE students on 1<sup>st</sup> Oct, 2018. Mr Gaurav from Softcon India Pvt Ltd, New Delhi was the speaker. The aim of the workshop was to familiarise students about SCADA which is a tool of vital importance for every Electrical engineer working in this field.

SCADA is a Supervisory control and data acquisition employed in a lot of industrial productions where room for human error is reduced and the entire system is monitored for any fault which occurs and desired control action is produced. The main components of SCADA includes: Sensors, RTU (Remote Terminal Unit), PLC (Programmable Logic Controllers), HMI (Human Machine Interface), Communication System

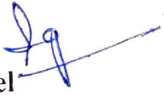
Students were also told about how a system like SCADA was different from microcontrollers


- Employing SCADA system allows collection of data in real time.
- Eliminates the need for field visits for inspection, adjustment and data collection.
- Immediate actions could be taken.

The technology is still evolving in terms of sophistication as well. SCADA systems as they are now can perform a large variety of tasks and some systems have artificial intelligence built into them. They are also more network-enabled, thus paving the way for voice-data-control data convergence. With proper planning and a custom-made installation, a SCADA system becomes a valuable asset.

A controlled action of a CD drive disk using a GUI was demonstrated to give students a practical insight as to how SCADA performs a multitude of task.

Overall the workshop proved beneficial as the students got updated with the ongoing technology in the field of electrical engineering.

  
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(Asst Prof EEE Dept.)  
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**Dr Meena Tushir**  
(HOD, EEE Dept.)



**Electrical & Electronics Engineering Department**  
**Report**

**Industrial Visit to Aryabhata Research Institute of Observational  
Sciences (ARIES) Nanital on 22<sup>nd</sup> Oct, 2018**

A industrial Visit to ARIES Nanital has been organized for 3rd year EEE Students on 22.10.18. ARIES is a research institute which specializes in Astronomy, Astrophysics and Atmospheric Sciences. Students got the chance to visit newly commissioned ARIES ST Radar station.

In India there exist two more Radar stations of such kind in Tirupati, Andhra Pradesh and Kochi, Kerala. Dr DV Phani Kumar , PhD Atmospheric Science , scientist D made complete efforts to introduce radar station facilities and interacted with the students explaining the technical knowledge with clarity and the need of such station in the foothills of Himalaya.



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**(Asst Prof EEE Dept.)**  
**(Incharge-Seminar/Expert Lecture/Industrial Visits)**





**Dr Meena Tushir**  
**(HOD, EEE Dept.)**

**Electrical & Electronics Engineering Department**  
**Report**

**Power System Optimization on 23<sup>rd</sup> Oct, 2018**

A guest lecture was conducted by EEE Deptt. for students and faculty of EEE on the topic of 'Power System Optimization' by Dr. D.P. Kothari (Former Director, IIT Delhi) on 23<sup>rd</sup> Oct, 2018. Power System Optimization is the trending topic which deals with the electronic design automation tools to optimize the power consumption of integrated circuits while preserving the functionality.

  
**Sonia Goel**  
**(Asst Prof EEE Dept.)**  
**(Incharge-Seminar/Expert Lecture/Industrial Visits)**

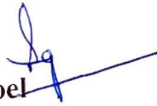
  
**Dr Meena Tushir**  
**(HOD, EEE Dept.)**




**Electrical & Electronics Engineering Department**  
**Report**

**Visit to Intellect 2017 Exhibition Noida on 24<sup>th</sup> Jan 2017**

A tour was organized to the INTELECT 2017 conference and exposition held at INDIA EXPOSITION MART, Greater Noida on 24th January , 2017. This tour was attended by 24 students of EEE 3rd year. INTELECT is the exhibition cum conference event, specially designed to demonstrate the new and intelligent digital solutions from Source to Socket to transform the energy value chain from analog to digital. INTELECT 2017 was jointly organized by IEEMA and IEEE. **INDIAN ELECTRICAL & ELECTRONICS MANUFACTURERS' ASSOCIATION (IEEMA)** is the first ISO certified industry association in India with 800+ member organizations encompassing the complete value chain in power generation, transmission and distribution equipment. IEEMA members have contributed to more than 90% of the power equipment installed in India. IEEE, joint organizer of INTELECT, is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

  
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(Incharge-Seminar/Expert Lecture/Industrial Visits)


  
**Dr Meena Tushir**  
(HOD, EEE Dept.)


**Electrical & Electronics Engineering Department**  
**Report**

**Receiving substation Subhash Nagar DMRC on 7th Feb, 2017**

A visit to Receiving Substation(RSS) of DMRC Subhash Nagar, New Delhi was organized for the students of EEE second year on 7<sup>th</sup> Feb 2017. Students were accompanied by Mrs Jyoti Jain (Asstt. Prof EEE Deptt.). The visit started with a trip to control room wherein the students observed the DMRC metro construction via the SCADA system. A detailed discussion on various electrical components and materials took place. The students were made acquainted with the constructional and the architectural aspects of the metro followed by a brief conversation delving into its history. A trip to the Switch gear room followed wherein the students observed protection devices such as circuit breakers, temperature safety alarms.

A field visit followed in succession where the students were shown the transformers, CVTS, lightning arrestors and the like used in the metro system. This served as a physical manifestation of the SCADA system shown earlier. The visit culminated with a Q/A session and a group photo with the co-operative DMRC officials at work. The experience was interesting, informational and educational serving as a breather for all the inquisitive minds.

  
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(Incharge-Seminar/Expert Lecture/Industrial Visits)

  
Dr Meena Tushir  
(HOD, EEE Dept.)



**Electrical & Electronics Engineering Department**

**Report**

**Seminar on "PCB Designing" on 18<sup>th</sup> Feb 2017**

EEE Department and IEEE PES organized a seminar on PCB designing on 18.02.17 for EEE & ECE 4<sup>th</sup> sem students. Mr. Anil Kumar Dogra (R&D Deptt, Impactro Pvt.Ltd) was the speaker. Students were taught how to design the PCB on EAGLE software. Designed PCBs were shown.

Sonia Goel   
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Dr Meena Tushir   
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**Electrical & Electronics Engineering Department**

**Report**

**Industrial Visit to NPL on 17<sup>th</sup> Mar 2017**

An educational trip was organized for 50 students of 6<sup>th</sup> sem ECE students to National Physical Laboratory, New Delhi. The objective of the visit was to provide students an insight into the antenna design in HF and regarding the standardization of different measuring instruments. Two faculty members (Dr. Shaifali Madan Arora & Mrs Poonam Dahiya) along with 53 students of ECE and EEE visited NPL on 17<sup>th</sup> of March 2017. The reporting time was 9:30 AM. The visit included a NPL Film Show followed by visit to 4 Research Laboratories.



**Sonia Goel**  
**(Asst Prof EEE Dept.)**  
**(Incharge-Seminar/Expert Lecture/Industrial Visits)**



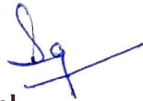
**Dr Meena Tushir**  
**(HOD, EEE Dept.)**



**Electrical & Electronics Engineering Department**  
**Report**

**Seminar on "Automation and Electrical Drive on 24<sup>th</sup> Aug 2017**

A technical seminar was organized for the students of Electrical and Electronics (3<sup>rd</sup> Year) of Maharaja Surajmal Institute Of Technology covering the in depth knowledge about Industrial Automation and Electrical Drives. Mr. Ajay Soni & Mr. Deepak, Seldom India, Delhi. From Seldom India, Delhi was the speakers. Students in a group of three were explained how to make and asked to make Miniature Circuit Breaker (MCB), contractor, NONC (Normally open and normally closed) using the complete kit that was provided by the organization. This really built up the moral and motivated the student's interest in the field of Electrical and Electronics. The students showed a great response towards the seminar and were thankful for this wonderful opportunity.



**Sonia Goel**  
**(Asst Prof EEE Dept.)**  
**(Incharge-Seminar/Expert Lecture/Industrial Visits)**



**Dr Meena Tushir**  
**(HOD, EEE Dept.)**

**Electrical & Electronics Engineering Department**  
**Report**

**Seminar on "How to prepare for higher studies" on 5<sup>th</sup> Sep 2017**

A seminar on 'How to Prepare for higher Studies' was conducted for the students of Electrical and Electronics Engineering pre- final year of Maharaja Surajmal Institute Of Technology, Janak Puri, on 5<sup>th</sup> Sept 2017. Dr. Naimar Reddy, Business Development & Operations Head (Ace Academy) was the speaker for the session. Important information related to the various competitive examinations like GMAT, GRE, GATE, IES were discussed. It was a massively interactive session. How to build up the profile, admission requirements, eligibility criteria were in depth discussed with the students brightening up their future goals to greater extend.



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**(Incharge-Seminar/Expert Lecture/Industrial Visits)**



**Dr Meena Tushir**  
**(HOD, EEE Dept.)**



Electrical & Electronics Engineering Department

Report

INDUSTRIAL VISIT TO 220 GIS Peeragarhi, New Delhi on 11th Feb 2016

The department of Electrical and Electronics Engineering, Maharaja Surajmal Institute of Technology, New Delhi organized a one day industrial visit to DTL (Delhi Transco Limited) 220 kv GIS (Gas Insulated Substation) on 11th Feb 2016 for Electrical and Electronics Engineering students.



On 11th we reached DTL GIS Peeragarhi plant at 11:00 am. After completing all necessary formalities on main gate we entered in plant at 11.30 am. Mr. Rajiv sir was allotted as a visit guide for us. He arranged a very informative lecture on history of that plant as it is started in May 2015 and the basic information related to it. This lecture was of about 01 hr. Then Rajiv sir guided us regarding safety and precautions that has to be taken by us during on-site visit. Firstly we visited the main control room of that substation. This room is controlled by expertise to make commands and to control the equipments automatically when any fault occurs or for any fault location finding. Here we saw how the actual power supply is distributed and connected to the different locals of that area. All this is done automatically using SCADA software (DCT & AMS).

  
**Sonia Goel**  
(Asst Prof EEE Dept.)  
(Incharge-Seminar/Expert Lecture/Industrial Visits)

  
**Dr Meena Tushir**  
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**Electrical & Electronics Engineering Department**

**Report**

**Seminar on Overview of Embedded Systems & New Technologies on 20<sup>th</sup> February, 2016**

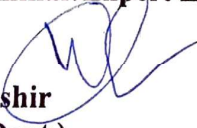
Department of Electrical and Electronics Engineering organized a seminar on the topic of Embedded Systems & New Technologies on **20<sup>th</sup> February, 2016** by TIMTS (Times Institute of Management & Technical Studies) for EEE Third Year students. A team of professionals and experts in the field gave an introduction about their institute and the various courses offered by them in collaboration with the All India Council for Robotics & Automation (AICRA) such as in Embedded Systems & Robotics.

A brief introduction about embedded systems followed with its definition, scope & applications explained to the students. The integration of software and hardware to form autonomous systems are used in everyday lives such as smart card readers, traffic light controllers and many others. The almost-infinite scope of such systems was emphasized and explained. A live demonstration of popular platforms used for realizing such systems such as AVR, Arduino, Raspberry Pi, etc. followed.

An interactive discussion on breakthrough technologies like Li-Fi (Light Fidelity) followed between the organizers and students which piqued their curiosity further. The overall session proved to be highly informative as well as inspiring with no dull-moments for the students. It was appreciated and

liked by one and all.

  
**Sonia Goel**  
(Asst Prof EEE Dept.)  
(Incharge-Seminar/Expert Lecture/Industrial Visits)

  
**Dr Meena Tushir**  
(HOD, EEE Dept.)



**Electrical & Electronics Engineering Department**

**Report**

**Seminar /hands on workshop on Arudino on 10th march 2016**

The Department of Electrical Engineering, organized a one day hands on workshop on Arudino on 10th Mar 2016 for 6th sem Electrical and Electronics Engineering students. The trainer from Radiance EduTech came to guide us. The trainer gave us a brief introduction about the real time applications where we are using the Arudino. He arranged a very informative lecture on history of Arudino boards and the basic information related to it. After this the trainer gave us Audino IDE the software used for programming the Arduino board. Firstly we installed the spftware and after that sir told us how to use an Arduino board .Details about all the input pins, output pins and other ports we can use for. Then sir gave us the ARDUINO Neno board to do some small projects Arduino NeNO is an Arduino board used for a small number of applications.

  
Sonia Goel

(Asst Prof EEE Dept.)

(Incharge-Seminar/Expert Lecture/Industrial Visits)

  
Dr Meena Tushir  
(HOD, EEE Dept.)

**Electrical & Electronics Engineering Department**

**Report**

**Workshop on PLC&SCADA on 23rd August 2016**

Department of Electrical and Electronics Engineering organized a workshop on PLC and SCADA for 2nd year of EEE, Maharaja Surajmal Institute Of Technology, Janak Puri, New Delhi where skilled professionals from APTRON, a unit of Netexperts Education Services were addressed the students about PLC and SCADA. It was indeed a very interactive and an informative session where every aspect of core companies and their expectations were discussed in brief. To enhance the taste of every student over the subject a working model of PLC was displayed and explained in front. Automation was widely discussed followed by the tools of automation, Advantages of PLC, major components of PLC and PLC and Scada as a whole were explained to the students. Relay, Industrial sensors, Analog sensors, digital sensors and their ranges were also explained. Scope of automation were told to students and in the end the students were asked to interact, ask questions about the same. Overall, it was an exuberant experience and an extremely knowledgeable session. The students left with a positive mindset and also showed a highly positive response about the workshop. Participation certificates were provided to the students after the event. Interested candidates have processed their registrations for further training and enhancement.



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**(Asst Prof EEE Dept.)**  
**(Incharge-Seminar/Expert Lecture/Industrial Visits)**



**Dr Meena Tushir**  
**(HOD, EEE Dept.)**



The Department of Electrical Engineering, organized a workshop on Matlab and Simulink on sept 7, 2016 for the students of EEE 3rd semester, Maharaja Surajmal Institute Of technology, Janak Puri, New Delhi. where highly skilled professionals were called to address the students on the topic Matlab and Simulink. It was indeed a very erudite session where the value of being EEE graduates were widely discussed and its importance and demands in Indian sector were explained which massively helped the students to develop a clearer vision of their future. Students were told about the various ways in which they could build up their profiles according to the expectations of the top notch companies. Necessity of having advance knowledge of PLC & SCADA, MATLAB, VLSI, Panel designing etc were discussed with the students and it was clearly told how important it is to have a perfect grip on these in order to be best suited for high posts in life with the best companies across the world. Students got trained with the basics of MATLAB and Simulink as a whole and their applications, as how they help in easing out our work was demonstrated with help of numerous examples before everyone. Also an interesting fact about the logo of MATLAB was talked about that how sir Cleve Moler the scientist who formerly began to develop the concept of MATLAB dreamed to having to acknowledge wave equations in 3-Dimension and this is the fact behind the logo of MATLAB it determines a 3-D wave equation. Functions of Simulink as used for modeling or representing layouts were discussed and students were certainly performing activities on the respective topics on their laptops as well. In fact when using MATLAB for circuit making was taught the students showed an exciting response and eagerly executed it personally and formulated a circuit of rectifier. It was an extremely informative and an interactive session. All the students left with a positive response and a mind set and were greatly thankful to the entire fraternity of department, Electrical and Electronics to provide them with such a wonderful opportunity to learn beyond the limits.

  
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## Electrical & Electronics Engineering Department

### Report

#### Industrial Visit to Kalinga Wires and Cables industries 29th December 2016

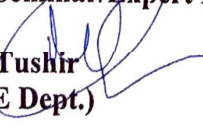
Department of EEE in association with IEEE PES had organized an industrial visit to the Kalinga Wires and Cables industries situated at Naraina Industrial area phase- I on the 29th December 2016.

Mr. Ram Chandran (Manager, Kalinga Wires and Cables industries) briefed about how the cables and wires are major equipment for transmission & distribution of electrical power in substations, distribution systems, house wiring, street lighting. The company envisages manufacturing of PVC Insulated single/multicore wires and cables of 4mm<sup>2</sup> and 6mm<sup>2</sup> dia copper conductors extensively used in house wiring service connections permanent & temporary connections of electrical power overhead lines. Their plant produced flame resistant and retardant wire cables to adhere to the safety norms and restrict the fire and toxic smoke generation.

Mr. Ram Chandran then demonstrated the live manufacturing of single core Cable wire that involved the Buncher which made cluster of copper wires by twisting and then twisted copper wire are fed in to the extruder. As wire passes through die in extruder uniform coating of PVC is obtained all around the wire by the process of extrusion. Then wire is passed through cold water for cooling. After this High Voltage testing is carried out by High Voltage spark tester equipment to check up the insulation strength. Name of manufacturer/Brand name is printed on cable after emergence from extruder and before cooling. The Multicore Cable Manufacturing Setup was also shown. Mr. Ram Chandran also mentioned about every quality check tests happening to adhere to the quality standards ascertained by IS 694. Then he made us visit the lab to acquaint us with quality checks that included Kelvin Bauble Bridge, Continuous Spark Tester Tensile Testing Machine calibrated in Newtons, the conditioning machine and the equipment to test the purity of copper and the presence of oxygen level in the wire pvc.

He also answered the queries of the students regarding quality certifications and manufacturing. The industrial visit to Kalinga wires and cables was an enriching experience for students in getting live exposure of manufacturing which can help them in their internships and further career enhancements.

  
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