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UDISHA CLUB

Campus Activity Report of August- 2014

(Om Engineering College, Junagadh)

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UDISHA Club Co-ordinator,  
OM Engineering college, Junagadh

Dr. H.M. Nimbark  
Director/Principal,  
OMEngineeringcollege, Junagadh  
Co-chair, Junagadh Sankul.
<table>
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<tr>
<th>SR NO.</th>
<th>ACTIVITY INFORMATION</th>
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| 1      | Activity: Industrial Visit at Adani Foundation, Mundra Port.  
       Type: Industrial Visit  
       Date: 3rd August, 2014  
       Venue: Mundra Port, Kutch. |

OM Engineering College visited Adani Foundation, Mundra Port on 3rd August 2014. We are especially thankful to respected Manager, Adani Foundation, Mundra Port. Because he granted us permission for taking visit at Mundra Port and give the proper guidance to students and allow to visit the Port for the practical based approach learning to students.

**Adani Port and Special Economic Zone Limited (APSEZ)** is located in the Gulf of Kutch on the west coast of India situated 60 km west of Gandhidham in Kutch district of Gujarat.

APSEZ is ideal for global trade due to multiple benefits. It is situated enrooted most international shipping destinations. The gulf acts as a natural shelter for the port, facilitating 24x7 safe berthing, unberthing and vessel operations. The port also provides a distance advantage to the northern and western hinterland of India vis-a-vis other ports. This makes it the natural gateway for the cargo hubs functioning in the northern and western states of India as well as the NCR.

Our main purpose for this visit is to make students familiar with industrial environment and to apply their practical knowledge about Docks.
8th semester subject Dock, Harbour and Airport Engineering is also required to adopt the knowledge about dock and different ports, so it is very convenient to visit all the practical and design data in real time work environment.

We reached at 1:00 p.m. on 4th August, 2014 (Sunday) at Adani Ports and Special Economic Zone. We got entry at 1:30 p.m. And the visit started by distributing the cap to each student by Adani Foundation authorities.

We began the visit from South-port at 3 pm. One of the guide from South-port has guided the students about working of South-port. Students were guided about working of jetty, tug, coal, types of crane, container.

They also explained about the loading and unloading the ship. At South-port about 16 number of jetty are available and future planning is to increase number up to 55 jetty. They export the variety of materials like car, fertilizer, seeds, coal etc. From south-port we moved to fortune refinery at 5:00 p.m. The chief officer, Mahipalsinh Gohil guided the students about the working at Oil Refinery. It was an amazing experience to visit the oil refinery. The chief officer guided the students about production of oil from raw material. He also showed the process of packing and distributing.

As a complimentary return each students were gifted a bottle of oil with lots of good wishes.

On 5th August 2014 at 6:00 am, the day started with the aesthetic pleasure of yoga and meditation. The dormitories have also arranged laughing club for students. The tiredness of the...
previous day just flew away and students had a feeling of freshness.

Now the march began towards the west port around 35 km from shanti-vihar around 9:30 am. There the chief engineer guided the students about the working of belt-conveyor and loading and unloading of coal and other significant materials. The transfer rate of coal from one place to another through belt conveyor was within seconds.
From there the students moved towards last part of visit, power plant. There the work executive guided the students about process and design of chimney and boiler.
From this visit, our students gathered the information and learned to utilize practical knowledge like design of docks and shipyard. Students learned clear idea about theoretical and practical design parameter. 74 students were benefited with such International Industry Visit.
<table>
<thead>
<tr>
<th>SR NO.</th>
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<tbody>
<tr>
<td>1</td>
<td><strong>Activity:</strong> Industrial Visit at Synergy Transformer Pvt. Ltd.</td>
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<tr>
<td></td>
<td><strong>Type:</strong> Industrial Visit</td>
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<tr>
<td></td>
<td><strong>Date:</strong> 30th July 2014</td>
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<tr>
<td></td>
<td><strong>Venue:</strong> Synergy Transformer Pvt. Ltd., Keshod.</td>
</tr>
</tbody>
</table>

We are gladly & thankful to Director as well as Principal, Dr. H. M. Nimark and Head of the Departments Prof. M. M. Baraiya and our faculties who give us a great guidance regarding training and instruct us the importance of training in electrical field. So we decided to take visit in Synergy Transformer Pvt. Ltd., Keshod.

We are especially thankful to respected chief engineer, Synergy Transformer Pvt. Ltd, Keshod because he granted us permission for taking visit in his company and give the proper guidance to students and allow to visit his company for the practical based approach learning to students.

Since its inception in 2004, Synergy transformer is growing continuously in Indian transformer industry without making any compromise on international quality standards. Our assorted range of transformers is widely accepted across various industrial sectors by domestic and international clients as well. Our experts have completed several successful projects for developed countries all around the world.

As leading Transformers manufactures in India, they have outstanding power of developing power transformers, low loss transformers, efficient transformers, electrical transformers and furnace transformers as per customer specifications. We also offer customized solutions to our clients according to their industry demand.

Our main purpose for this visit is to be familiar with **industrial environment** and to get practical knowledge of transformer.

Also in 5th semester subject Element of Electrical Design and Electrical Machine-II require to knowledge about transformer design and different testing, so it is very much convenience to see all the practical and design data in real time work environment.

At the beginning, with industrial expert gives introduction about the manufacturing material with real design parameter. By this information students get real practical knowledge for design of transformer which would be studied in 5th semester.

Some key points were discussed in visit:

- The type of materials to be used for minimum core loss of transformer.
- Where we use buchholz relay.
- Different types of testing in transformers.

In this visit students learn and see the design, material to be used for transformer and differing testing.

At the end we visit the work shop, at which all the part of transformer is being ready for inner construction of transformer.
From this visit, we get the information and practical knowledge about design and testing of transformer. Students got very clear idea about theoretical and practical design parameter. Some test should be performing for getting real practical data of Transformer with general discussion with experts in the industry. About 31 students were benefited. We also visit the workshop at which all the basic part should be prepared and mostly observe the buchholz relay arrangement.
Activity: Industrial Visit Thermal Power Station, Sikka
Type: Industrial Visit
Date: 30\textsuperscript{th} July 2014
Venue: Thermal Power Station, Sikka

We are gladly & thankful to Director as well as Principal, Dr. H. M. Nimbark and Head of the Department Prof. M. M. Baraiya and our faculties who give us a great guidance regarding training and instruct us the importance of training in electrical field. So we decided to take visit in TPS (Thermal Power Station) situated at Sikka(Jamnagar, Gujarat, India).

We are especially thankful to respected chief engineer of Thermal Power Station (Sikka) because he granted us permission for taking visit in his company.

Our main purpose for this visit is familiar with industrial environment and to get practical knowledge and learn where & how we apply our theoretical knowledge in real application. We could also get knowledge about the final year projects based on Industries.

In this visit we learn mainly three measure part of power plant

- Generation Process
- Transmission Process
- Control Process

- **Generation Process:**
  - They start with Generation Process in power plant
  - Some key points were discussed in Generation department,
    - What is Generation Process?
    - As a Electrical Engineer what are the prime duties in this department
Which types of equipment are used in generation process & its functions?

- **Transmission Process:**
  Some key points were discussed in Transmission department means switchyard.
  - What is Transmission System?
  - How it is Work?
  - Which types of equipment are used in transmission process & its functions?

- **Control Process:**
  In control process we use SCADA system for making the plant Automatic & we control plant as well as observe & calibrate the plant & its equipments.
  Some key points were discussed in Control Room
  - What is the function of control Room?
  - How it is work?
  - What is the important of Automatic Control plant?

From this visit, students get the information about the electricity generation process. We also learn practical implementation of subjective knowledge in industrial application & also its requirement in industry. About 32 students of 5th semester were benefited. We also get information about the different types of equipment knowledge like boiler, FD, ID Control room function etc.
Gujarat Energy Transmission Corporation Limited (GETCO) was set up in May 1999 and is registered under the Companies Act, 1956. The Company was promoted by erstwhile Gujarat Electricity Board (GEB) as its wholly owned subsidiary in the context of liberalization and as a part of efforts towards restructuring of the Power Sector. The company is now a subsidiary of Gujarat Urja Vikas Nigam, the successor company to the GEB.

An electrical substation is a subsidiary station of an electricity generation, transmission and distribution system where voltage is transformed from high to low or the reverse using transformers. Electric power may flow through several substations between generating plant and consumer, and may be changed in voltage in several steps.

A substation that has a step-up transformer increases the voltage while decreasing the current, while a step-down transformer decreases the voltage while increasing the current for domestic and commercial distribution. Our main purpose for this visit is to be familiar with industrial environment and to get practical knowledge of electrical power transmission and distribution.

Students of 3rd semester will get the idea of electrical power transmission and distribution. Students will also get familiar with Transformer maintenance, circuit breaker, Transformer isolator, bus bar, Protective relays, Lightning arresters, Load break switches.

At the beginning, one of the assistant engineers explained all the essential component of the 220KV substation and explained one line diagram of Shapur Substation. In addition they explained about SCADA (Supervisory Control and Data Acquisition) and various programming done in control room.
Key Points:-

1. Different Protection Equipment:
   - Circuit breakers, Transformers, Protective relays, Lightening arresters, Load break switches,
2. **SF6-Circuit Breakers**: Due to the unique properties of SF6, it is used for 132KV & 220KV lines protection. Some of the outstanding properties of SF6 making it desirable to using power applications are:
   - High dielectric strength
   - Unique arc-quenching ability
   - Excellent thermal stability
   - Good thermal conductivity
3. **Lightening arresters**: Lightening arresters are provided in order to discharge the high voltages. It acts as main protective device for feeder.
4. **Capacitance Voltage Transformer**: After the Lightening arresters “Capacitance Voltage Transformer – CVT” which together with the Wave trapper acts as LC circuit follows it. In this substation, we used CVT’s in the place of PT’s because it easily passes high frequency signals
5. In this substation the three pole isolators are provided for minimum ground clearance.
6. “Step down Transformer” is used to step-down the voltage level from 220KV to 132KV by using
7. **Battery Room**: There are three panel of battery source one is for PLCC, it is 48v, two panels are 220v, and it is for relay operation and many more application. These batteries are charged when AC supply is ON.

From this visit, we got the information and practical knowledge about Power Distribution and Transmission. Student got the knowledge about different protection devices used in substation. They got the idea how to read the one line diagram of power substation using different symbols used in diagram. Student cleared out practical knowledge of transformer as how it step down voltage 220 KV to 132 KV. They also got knowledge about new SCADA based system as you can operate substation by manually or by command from computer using SCADA system and PLC programming. About 43 students were benefited from this visit as they got chance to discussion with assistant engineers working at Substation.
LaTeX is a document preparation system and document markup language. It is widely used for the communication and publication of scientific documents in many fields, including mathematics, physics, computer science, economics, and political science. It also has a prominent role in the preparation and publication of books and articles that contain complex multilingual materials, such as Sanskrit and Arabic, including critical editions. LaTeX uses the TeX type setting program for formatting its output, and is itself written in the TeX macro language. LaTeX is not the name of a particular editing program, but refers to the encoding or tagging conventions that are used in LaTeX documents.

LaTeX is typically distributed along with plain TeX. It is distributed under a free software license, the LaTeX Project Public License (LPPL). The LPPL is not compatible with the GNU General Public License, as it requires that modified files must be clearly differentiable from their originals (usually by changing the filename); this was done to ensure that files that depend on other files will produce the expected behavior and avoid dependency cell.

Our main purpose for this Seminar is to be familiar with LaTeX software. So that our final year students can make their project report more effective.

In Microsoft word or Microsoft Power Presentation we have to do many adjustments to make a any kind of document. However, It is not that much effective. This seminar was conducted to give brief introduction regarding how to make a effective thesis, paper or presentation in LaTex software.

Some key points discussed during LaTex seminar:

- What is LaTex?
- How it is useful to students?
- Advantages over microsoft office
Practical session on LaTex
Report writing
Mathematical Equation
Table, Image and related packages
Bibliography & References

By conducting this Workshop, students have got some brief idea regarding how to make effective report or presentation in LaTex Software. This will be beneficial to students as well as faculties. This workshop will be helpful to student for making the final year IDP/UDP report in good formats and making material like report. Around 45 students were benefited and the faculty members of electrical department has attended this workshop and got the knowledge about the LaTex.
Activity: Pedagogy Session
Type: Seminar
Date: 13th August 2014
Venue: OM Engineering College, Junagadh.

For the departmental continues growth we want to require some extra effort rather than routine works, so we always support extra activities which are helpful to develop are self as well as making more effective our department & institute.

Our main purposes for this pedagogy session are to developed faculties skill and improve the topic knowledge.

At the beginning, with Prof. M. M. Makada gives introduction about the DC Machine. They mainly focus the fundamental part of this topic & also share his valuable industrial experience with us. After the completion of session given by Prof. M. M. Makada, we discussed with him to solve our doubt in this topics.

Prof. C. H. Savaliya gives introduction about the Induction Motor. They mainly focus the fundamental part of this topic & also share with us circle diagram knowledge which is very useful for finding the motor efficiency. From this pedagogy session we solved our doubt related to “DC Machine” as well as “Induction Motor” and also we learn industrial application as well as recent emerging topic in this field.
# Activity Information

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<thead>
<tr>
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<th>Venue</th>
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<tbody>
<tr>
<td>1</td>
<td>Industrial Visit at Texspin Bearing Pvt. Ltd., Ranpur</td>
<td>Industrial Visit</td>
<td>11&lt;sup&gt;th&lt;/sup&gt; August 2014</td>
<td>Texspin Bearing Pvt. Ltd., Ranpur</td>
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</tbody>
</table>

Since its inception in 1961, Texspin Bearing is growing continuously in Indian bearing industry without making any compromise on international quality standards. Our assorted range of bearings is widely accepted across various industrial sectors by domestic and international clients as well. Our experts have completed several successful projects for developed countries all around the world.

As leading Bearing manufactures in India, they have outstanding power of developing Automotive bearings, Suspension bearings, Clutch bearings, Transmissions bearings, Wheel and taper bearings, Engine bearings and Steering bearings as per customer specifications. We also offer customized solutions to our clients according to their industry demand.

Our main purpose for this visit is to be familiar with industrial environment and to get practical knowledge of Bearings.

Also in 5<sup>th</sup> semester subject Machine Design-I require to knowledge about Bearing design and different testing, so it is very much convenience to see the entire practical and design data in real time work environment.

At the beginning, with industrial expert gives introduction about the manufacturing material with real design
parameter. By these information students get real practical knowledge for design of bearings which would be studied in 5th semester.

Some key points were discussed in visit:
1) The type of materials to be used for bearings.
2) Why we use Heat treatment process in bearing.
3) Different types of Heat treatment and grinding process.
4) How to assemble bearing parts.
5) How to check Bearing life.

In this visit we learn and see the design, material to be used for Bearings and differing testing. At the end we visited the work shop, at which all the part of transformer is being ready for inner construction of Bearings. From this visit, we get the information and practical knowledge about design and testing of Bearings. Students got very clear idea about theoretical and practical design parameter. Some test should be performing for getting real practical data of Bearing with general discussion with experts in the industry. About 30 students were benefited. We also visit the workshop at which all the basic part should be prepared and mostly observe.
Virtual Baja is the event organized by SAE each year which is related to automobile. It enhances in the students of engineering the knowledge regarding the design and the development in the automobile sector. It comprises of the design and analysis of the automobile based on the engine provided to the students.

In this year it has been organized in the campus of GTU on 1st and 2nd of August 2014. Around 320 teams were participated in this event from all over the India like from Indore, Jaipur, Delhi, Bhopal, Uttaranchal etc. The overall faculty coordinator for the Virtual Baja was professor. Sudhir Gupte, and Co ordinator for the event was Mr. Shan Verma.

For easy implementation & effective organization there had no. of committees formed in this event. Consequently GTU has invited no. of volunteers from various colleges. We have provided our students for the registration committee. On the first day 150 teams were participated and the second day 150 plus teams had their presentation. Our students had performed marvelous task with zero complains.

<table>
<thead>
<tr>
<th>SR NO</th>
<th>NAME OF STUDENT</th>
<th>SEMESTER</th>
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<tbody>
<tr>
<td>1</td>
<td>HIRAPARA VIRENDRA</td>
<td>7TH MECHANICAL</td>
</tr>
<tr>
<td>2</td>
<td>PATEL AMIT</td>
<td>5TH MECHANICAL</td>
</tr>
<tr>
<td>3</td>
<td>RATANPARA BRIJESH</td>
<td>7TH MECHANICAL</td>
</tr>
<tr>
<td>4</td>
<td>BAPODARA KASHYAP</td>
<td>7TH MECHANICAL</td>
</tr>
<tr>
<td>5</td>
<td>LAKHANI MAYUR</td>
<td>7TH MECHANICAL</td>
</tr>
<tr>
<td>6</td>
<td>JOSHI JAYAVIN</td>
<td>5TH MECHANICAL</td>
</tr>
<tr>
<td>7</td>
<td>SARDHARA KELVIN</td>
<td>5TH MECHANICAL</td>
</tr>
<tr>
<td>8</td>
<td>VORA ANKIT</td>
<td>5TH MECHANICAL</td>
</tr>
<tr>
<td>9</td>
<td>BHUVA MAYUR</td>
<td>3RD MECHANICAL</td>
</tr>
<tr>
<td>10</td>
<td>GAUDANI TEJAS</td>
<td>3RD MECHANICAL</td>
</tr>
</tbody>
</table>

The GTU and the organizing committee were very glad that teams like Om Engineering College came for the volunteering as we are very far from GTU Ahmadabad. They appreciated us by providing certificates and Pen drive to the all Student Volunteers. They were very happy that our students were so discipline that they had zero complain during the organizing.
As the event ends the students were very much excited and they are very much satisfied with knowledge they gain during this event. Now they are planning to enter into SAE group and to participate in the next event of Virtual Baja.
Activity: Placement and Training Activities
Type: Placement Drive
Date: August 2014
Venue: OM Engineering College, Junagadh.

Department of mechanical engineering is performing training and placement activities very nicely under guidance of principal and head of department. As a part of activity some of our students were got offer from companies in the month of august 2014.
List of companies and students are as follows.

Placement Companies: -
1. Silver Engineering Company, Rajkot:-
   As per latest communication with TPO, the assured us to recruit 3-4 student for Quality control department and will recruit even more in future.
2. Apex Extrusion Private Limited, Baroda:-
   Apex extrusion want only student from Baroda and they and if they place over there 1 year compulsory.
3. Sumangal Casting Pvt. Ltd., Rajkot:-
   They want student for quality and control department and will recruit only if they sign a bond for 1 year. Sumangal Casting are ready to recruit 2-3 student for QC department but they wont allow to student for 15-20 days leave for exam. So, no placement were done over there.
4. Toyota Infinium, Ahmedabad:-
   They want student for sales department and resumes are personally given by the TPO and when they assured that they will get in touch with Training and Placement cell once they will start the recruitment process.
5. IMTEX Mould Base, Rajkot:-
   Students went there for interview and the result is pending.

Training Companies: -
Now teaching schedule has started on regular basis so student is taking their training during Saturday and Sunday session.
1. Mangalam Steel Cast Private Limited, Baroda:-
   Student who have query in this IDP topic related to casting, they will be send for training session. This month 3 students will be going from 1st September.

MOU with Companies:-
1. AUSTIN Engineering Company Limited, Junagadh:-
   As per latest communication and MOU, the company will provide training and placement of our student. Also, they will provide IDP to our final year mechanical student.
2. GSEC, Ahmedabad:-
   They will provide to company consultancy and campus drive to our college. They will provide training too, if the students require.
3. Tribhuvan Spintexpvpt. Ltd., Rajkot:-
   MOU has been signed between the institution and company. Our mechanical students are already placed is BODA JAYESH and they have assured to recruit, provide training and IDP projects to our students in future too.
Prof. VC Thakar (departmental TPO), trying hard to provide more training and placement for our mechanical student and helping to get more opportunity to settle at higher level. Also, with relationship based or by our college best support he is getting more MOU with the companies.
Activity: Industrial Visit at RAVI METAL TREATMENT, RAJKOT
Type: Industrial Visit
Date: 11th August 2014
Venue: RAVI METAL TREATMENT, RAJKOT.

The purpose for this visit is to get familiar with industrial environment and to get practical knowledge of heat treatment. Also in 3rd semester subject Material Science & Metallurgy require to knowledge about heat treatment of metal, so it is very much convenience to see all the practical and data in real time work environment.

Ravi Metal Treatment is offering process of Heat Treatment, Gas Carburizing, carbo Nitriding through Harding, Tempering and Street Reliving, Process control and other Heat Treatment Processes.

“RAVI METAL TREATMENT” a leading name in heat treatment service providers in Western India, started their journey in 1977 as “RAJESH HEAT TREATMENT” with only 3 person & limited working space & equipments. Nowadays, they are capable to heat treat about 40 tons / day of ferrous material with work force of 200 persons at 6 different sites of company, all of them are certified ISO 9001:2000 Quality Management System. They have gained strengths & reputation in engineering field due to high quality of Heat Treatment services, accurate & precision processing, and timely delivery. Their next milestones in the journey of excellence are.

Infrastructure:
They have established 6 sites for various types of Heat Treatment Process for.
All of them are well equipped with various type of furnaces. High precision instruments like O2 Probes, PID controllers, Digital Temperature Controller, Data Logger, etc. Their heat treatment setup includes- Pit type Gas Carburizing Furnaces – 12 nos.

**UNITS OF COMPANY :**

**UNIT- 1, UNIT -1A & UNIT- 2**
C1/227, GIDC, Aji Industrial Estate, Aji Vasahat, Rajkot 360003
Facilities:
Gas Carburizing, Hardening & Tempering, Stress Relieving, Only Carburizing & Only Tempering, Carbonitriding.

**UNIT- 3**
C1/225, GIDC, Aji Industrial Estate, Aji Vasahat, Rajkot 360003
Facilities:
Through Hardening & tempering in neutral salt bath & Modified mar quenching.

**UNIT- 4**
21/W, GIDC, Bhaktinagar Industrial Estate, Rajkot-360002
Facilities:
Gas Carburizing, Hardening & Tempering, Stress Relieving, Only Carburizing & Only Tempering.

**UNIT- 5**
Godown Road, Near Ambika Way Bridge, Bhaktinagar, Rajkot-360002  
Facilities:  
Through Hardening & Tempering.  
UNIT- 6  
C1/226, GIDC, Aji Industrial Estate, Aji Vasahat, Rajkot-360003  

**Introduction About different material to be used for manufacturing of Heat Treatment:**  
At the beginning, industrial expert gave introduction about the manufacturing material with real metal heat treatment. This helped students get real practical knowledge about metal structure which we are studying in 3rd semester.

<table>
<thead>
<tr>
<th>Some key points discussed in visit:</th>
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<tbody>
<tr>
<td>1) There are capacity of hammering furnace is 600 kg of heating for metal.</td>
</tr>
<tr>
<td>2) Chemicals used (nitric acid + methanol) for cooling process.</td>
</tr>
<tr>
<td>3) Different types of testing methods for studying microscopic structure of metal.</td>
</tr>
</tbody>
</table>

In this visit we learnt and saw the performing operation like material invert as per requirement, specification, picturing, free heating, hardening, washing, checking, tempering, checking, packing, dispatching. There are mold machine for checking the structures of material. It is checking the small part of the metal. It is take a maximum of 20 minute for checking the material & 15 minute heating & 5 minute cooling.  
From this visit, we got information and practical knowledge about the Metal heat treatment. Students got very clear idea about theoretical and practical of metal heat treatment. Some test should be performed for getting real practical data on heat treatment of the material. About 60 students were benefited. We visited the 3 unit where metal heat treatment is performed.
Activity: Spoken Tutorial Workshop on Libre Office under OSTC
Type: Workshop
Date: 25th August 2014
Venue: At OM Engineering College, Junagadh.

OM Engineering College has established **Open Source Technologies Club (OSTC)** for providing as well as utilizing benefits of latest free and open source technologies under guideline of Gujarat Technological University.

OM Engineering College also initiates “open source movement” to establish fully open source environment in college. As a part of movement Computer Engineering Department of OM Engineering College prepare a calendar of FOSS workshop.

**OM Engineering College, Junagadh** has organized Workshop on “LibreOffice” for faculties and admin staff. The workshop was conducted with the help of IIT Bombay Spoken Tutorial.

More than 20 faculties participants have participated in this workshop enthusiastically. Some key points were discussed in workshop are:-

- Introduction to LibreOffice Calc
  - Working with Cells
  - Working with sheets
  - Formatting Data
  - Basic Data Manipulation
  - Using Charts and Graphs
  - Images and Graphics
  - Advanced Formatting and Protection
  - Formulas and Functions and More.

**Some Glimpse of the Workshops:**

![Image 1](image1.png)

![Image 2](image2.png)
Special thanks to GTU, IITB Spoken tutorial team, Prof. Himanshu Gajera (HOD-Comp) and faculty members of computer department for their kind support during the workshop.

Website: [https://sites.google.com/a/omeducation.edu.in/oec-ostc/](https://sites.google.com/a/omeducation.edu.in/oec-ostc/)
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<thead>
<tr>
<th>Activity : Workshop on INTERNET SKILL DEVELOPMENT PROGRAM</th>
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<tbody>
<tr>
<td>Type : Work Shop</td>
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<tr>
<td>Date: 28th August 2014</td>
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<tr>
<td>Venue: At OM Engineering College, Junagadh.</td>
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</tbody>
</table>

We show gratitude towards our Principal Dr. H. M. Nimbark and H.O.D Prof. H.K. Gajera who encourage us to take seminar on Internet Skill Development Program.

We are heartily thankful to Mr. Shivam Patoliya for sharing his valuable knowledge about Secure use of Internet in our day to day life.

**GENERAL INFORMATION ON Internet Skill:**
The Introduction to the Internet skill development program will familiarize students with general Internet concepts and technology. The seminar is intended to teach students how to use and customize a Web browser. Students are given an orientation to common procedures they can use to maximize successful secure use of the Internet and all its features.

Computer crime, or Cybercrime, refers to any crime that involves a computer and a network. The computer may have been used in the commission of a crime, or it may be the target. Netcrime is criminal exploitation of the Internet. Dr. Debarati Halder and Dr. K. Jaishankar (2011) define Cybercrimes as: "Offences that are committed against individuals or groups of individuals with a criminal motive to intentionally harm the reputation of the victim or cause physical or mental harm to the victim directly or indirectly, using modern telecommunication networks such as Internet (Chat rooms, emails, notice boards and groups) and mobile phones (SMS/MMS)" Such crimes may threaten a nation’s security and financial health. Issues surrounding these types of crimes have become high-profile, particularly those surrounding cracking, copyright infringement, child pornography, and child grooming. There are also problems of privacy when confidential information is lost or intercepted, lawfully or otherwise.

Our main purpose for this Seminar is to be aware of Cyber Crime and Efficient use of Internet.

**WHAT WE HAVE LEART?**

1. Awareness about Search Engines
2. Make secure your mail Accounts
3. Be aware when use of Anti virus
4. Assure while using Internet
5. Video about “Education opens door”
6. Cyber Crime Awareness Program
   6.1 Hack IN
   6.2 Video “Intelligence” - Difference between Humans and Computer
7. Internet Facts
   7.1 IP Address
8. Aspect for being Security Expert
   8.1 Programming Language
   8.2 Knowledge of Networking
   8.3 Basics of UNIX
   8.4 Ability to think like Criminal
9. Cyber Crime Attacks
   9.1 Phishing Attacks
   9.2 Cross Site Scripting
   9.3 Email Forgery
   9.4 Trojan
   9.5 Brute Force
10. Cyber Laws in INDIA
11. Unblocking Stuffs on Internet
    11.1 Archive Pages
    11.2 Url Shortning
11.3 Who is Look up
(www.whois.com)

11.4 Unlock Speed
(gpedit.msc)

12. Easy way to Download Youtube Video
https://www.youtube.com/

13 Counter Measures

13.1 Ip Address
- Whatismyipadress.com
- hola.org
- Advance IP Scanner(v 1.5)

13.2 Cookies

13.3 Remove History of Surfing
13.4 Password in offline
13.5 Proxy
- Live Demonstration video
By conducting this Seminar, students have got some brief idea regarding how to use INTERNET Securely. This will be beneficial to students as well as faculties. This seminar will be helpful to student for Life time usage. Around 150 students were benefited and the faculty members of Computer department has attended this Seminar and got the knowledge about the Internet Skills.
### College level Activity

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<th>SR. NO</th>
<th>ACTIVITY INFORMATION</th>
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| 1      | **Activity:** Industrial Visit at Willingdon Dam and Science Museum  
**Type:** Industrial Visit  
**Date:** 28\(^{th}\) July 2014  
**Venue:** Junagadh. |

We have arranged technical visit in first semester students for basic idea generate about technical and they encourage and take interest in technical field.  
Sometimes student get more idea generate when they have seen practical approach in technical field so we arranged such kind of technical visit for boost to the students.

The dam is built on the river Kalwa at the foot of the hill from where it originates. It was built as a reservoir for drinking water for the people of Junagadh. It was named after Lord Willingdon, the then Governor of India. Near the dam, the steps go up to 2,779 feet (847 m) high to the famous shrine of Jamiyalshah Datar, where both Hindu and Muslim devotees share their faith.

The Science Museum at Junagadh is the first and sole science museum privately owned in Gujarat. There are over 60 science projects in this museum, which are related to science facts and can be managed visitors.
We have started our journey towards Willingdon Dam from the college at 8 am. Bhimajiyanri sir has come with us for explaining the concept of the dam because he is from the civil department so he can very well understand the concept of the dam. He gave brief technical ideas about dam and how we can build the dam? And related all technical terms he has explained to students so they have interested in that site. He has explained that dam is not a picnic place as engineers but it is a technical point of you explaining all advantage of dam and built up area he has explained.
Bhimajiyan sir explain every concept in technical terms so student can understand easily. In this visit all branch students participated because today we know that if you want to become best engineers that time required all kind of knowledge is necessary.

This is catchment area of the dam which decided first and then site selection for built up the dam so we have taken one snap of the catchment area for more knowledge about students and after that we arranged some session for the question answering related to site for student benefits.

We have reached at science museum at 12:30 pm after completed visit of dam. Science museum is particular for exploring basic idea and principal applied for making project. Student learned and enjoy the every model with full of interest which is boost them for create logically idea and applied in technical field for initialization in new development.

There are many models shown in above snaps for student improvement in practical approach in scientist laws and enjoy with the different models. Every models of the museum which made with logical and applied different principal of the science so student was too much interest in it. Form this visit student can think differently or they may be created new ideas form this visit.

We arranged this technical visit particular for 1st semester students because in initial stage of the engineering
student can not understand theoretical concept very well and they do not interest in engineering field so for boosting the student and get some new idea and understand technical terms in practically that’s why this kind of technical visit is necessary.
Activity: Industrial Visit at SILVER ENGINEERING CO., RAJKOT
Type: Industrial Visit
Date: 3rd August 2014
Venue: SILVER ENGINEERING CO., RAJKOT.

Silver is established in 1981 as a supplier of Self priming pumps, Centrifugal Pumps, Openwell submersible Pumps, Bore well submersible Pumps and Mud/Sewage Pumps. Our goal is provide best qualitative Pumps and win their feedback as lifelong business relation. Our customer satisfaction is always on our priority list. We Have Our Own In House Manufacturing, Sourcing and Quality Control Facility with World Class Equipments, Gadgets And Instruments.

Today, under the creative instincts, aggressive marketing techniques, visionary approach and ambitious nature of our director, we have made rapid strides and have acquired a respectable status. A team of dynamic professionals continues to innovate in ways that best serve our customer's interest. We look forward to adding you to our family of customers.

As leading pump and motors manufactures in India, they have outstanding pump and motor to developing water technology, liquid trance formation, and their product priming pumps, Centrifugal Pumps, Openwell submersible Pumps, Bore well submersible Pumps and Mud/Sewage Pumps as per customer specifications. We also offer customized solutions to our clients according to their industry demand.

Our main purpose for this visit is to be familiar with industrial environment and to get practical knowledge of industrial technology.

In the first semester of student of engineering, they have to develop the skill and technical knowledge of
industrial management, industrial environment and their technology, which is very helpful to growth of engineers.

**Introduction About different materials to be used for assemble and design of pump and motors:**
At the beginning, with industrial expert Anand Savaliya gives introduction about the manufacturing material with real design parameter. By this information students get real practical knowledge for industrial technology and for design of pump and motors.

**PRODUCTS OF SILVER ENGINEERING:**
1. Self-priming Monoblock Pump sets
2. Centrifugal pumps
3. Open well Submersible Pumps
4. V-3 Bore well Submersible Pumps
5. V-4 Bore well Submersible Pumps
6. V-6 Borewell Submersible Pumps
7. V-8 Bore well Submersible Pumps
8. V-6 Motor V-7 Pump (Janta model)
9. Self-Priming Mud/Sewage Pumps
10. Induction Motor

In this visit we learn and see the design, material to be used for assemble of pump and motors and differential methods testing of pump and motors for their perfection.
From this visit, we get the information and practical knowledge about design and assemble of motors and pumps. Students got very clear idea about theoretical and practical design parameter. They got some information and discussed with respective authority of company experts in the industry. About 98 students were benefited. We also visited the workshop at which all the basic parts to be prepared and assemble.