# Round the Year Activity Details of Mechanical Department

Session: 2016-2017

### 1) Workshop:

Special workshop on Solar Power designing & O&M of panel was conducted from dated 22/03/17-24/03/17 under the guidance of Dr. Rohit Verma Deputy Director of National Power Training Institute Faridabad. After attending the Seminar students had a clear views about the future in particular field ,it also benefits the student as it provided the direction to become an enterprenuer by starting their own buisness. More than 100 students successfully completed their workshop and recieved certificate from the institute. Special training was also provided to the Faculty of the department.

#### 2) Industrial Visits

#### (i) In Victora Tools Pvt. Ltd.on 14/Jan/17:

Mechanical 1<sup>st</sup> year students visited Victora Tools Pvt. Ltd Faridabad under the guidance of Mr. G.C.Mishra. Full day visit includes training in production shop and machining shop. Visit provide the oppurtunitu to observe different type of machining operation practically. Students also recieved Brunch as a token of appreciation from the Indusry.

#### (ii) InStar Wire Pvt. Ltd Plant Visit on 02/feb/17:

For developing the practical knowledge of stundts of Mechanical Students on their course visit in Star wire Pvt Ltd conducted for the students of Mechanical 3<sup>rd</sup> Year students. Basic purpose of visit is to enhance the knowledge of students of different manufacturing process. Students observed Casting shop, Extrusion Shop, Wire Making Process and the Ordinance Shop as a part of visit.

## 3) Value Added Course in Mechanical Department:

Apart from the courses in curriculam provided by the MDU college conduct some special courses under the various department for the benefit o the student. Under same process Value Addition classes are provided Mechanical  $2^{nd}$  and  $3^{rd}$  year students.

## (i) Courses for 2<sup>nd</sup> year students:

Students are provided training in:-

- (a) **Designing :** Under the guidance of Mr. G.C.Mishra who is expert in CAD,PRO-E, and Solid works students are given training to work in design software which is the prime requirement in various Industries. Students are trained from the basics of design to the all industrial software and groomed as a Design Engineer. In first batch 25 students are given training.
- **(b) Manufacturing :** Under the guidance of Mr.Sanoj Shakya who is expert in Lathe, Machining , Measurement and Instrumentation and CNC provided trianing to the students of Mechanical  $2^{nd}$  year . Students worked on lathe ,Milling Machine and Grinding Machine. Batch of 35 students completed their training and manufactured various tools and pieces using their knowledge.

# (ii) Courses For 3<sup>rd</sup> year students:

Students are provided training in:-

(a) **Manufacturing**: As a advancement of manufacturing Process students of 3<sup>rd</sup> year are provided training on CNC Lathe apart from their Curriculum. With the existing knowledge as a result of previous training in college students are now in Advance stage of their manufacturing Training and expertising themself for the field of Automation.

**(b) Refrigeration And Conditioning**: Special training on Refrigeration And Conditioning is provided by our faculty Mr Sachin Sharma who has sound knowledge of various refrigeration cycle and coditioning process. Student worked on Carnot , Reversed Carnot , Vapour compression cycle and psychometric chartsand design of capillary tube in our well furnished labs.

## 5) Special Back Paper Classes:

Betterment and Growth of students as a motto, of group students are given extra classes to qualify their backlogs. Extra classes are provided by the faculties:

# (i) 3<sup>rd</sup> year Mechanical:

KOM: Special classes on KOM is provide by Mr.Dheeraj Sachan.

FM: Special clases on FM is provided by Mrs Shweta.

## (ii) 2<sup>nd</sup> year Mechanical:

Maths III taken by Ms Kajal.

#### 6)Seminar:

(i) Seminar on Refrigeration and Conditioning by the Dr. A.K.Saluja Managing Director in Building Services Design & Energy Institute who also take doubt classes on Made Easy. Seminar on various refrigeration cycle.Students given thorough knowledge of the cycle and given practical problems to calculate.

## 7)Project:

### (i) Innovative trolley which can be folded into chair, bench, etc.(Patent Filed)

Under the guidance of our expert faculty Mr Bipin Bhaskar Nair and Sanoj Shakya our students worked on project which is motivated by ergonomic issues faced by the labourers aswell as passangers in Railways.Pushpendra kumar,Kapil Rawat and Vikas students of Final year mechanical department worked on the project. It consist of designing an innovative trolley that passanger as well as laboures can use to transport luggage to platform. Unique feature of this design is that the links fold open and the trolley can be modified as a chair such that passanger can sit till the train arrives.It has the sitting capacity of 4 normal adults.It can also be used as strecher in case of emmergency.

### (ii) Suspension System Test Rig

Under the guidance of Mr Bipin Bhaskar Nair students of 6<sup>th</sup> sem Automobile engg. Involved in overhauling of Maruti Suzuki Esteem. The project involved removing the entire outerframe, followed by the engine overhauling. The auxillary components of engine was removed including gear box, suspension system, exhaust system, steering system, control system, etc. The whole car was again assembled by the students and the system was arranged for the study of other interested students.

## (iii) 4-stoke Engine assembly unit

Students of automobile department dismantle 4 stroke petrol engine down to its smallest parts. The students also analysed each components including their construction and working principles. The entire work bench is now assembled in automobile workshop to enable other students to get deeper knowledge of 4 stroke petrol engine.

## (8) Faculty Development:

- (i)Faculty member Mr.G.C.Mishraattended 5 days FDP in IIT Kharagpur on Advance Simulation
- (ii) Faculty member Mr.G.C.Mishra **obtained** 6 Months certificate from AUTODESK ACADMY in advance AUTOCAD and GD&T
- (iii) Faculty member Mr.G.C. Mishraattended 5 days GD&T Training from German Expert.

# (9) Industrial Consultancy:

Our two Faculty members Mr.G.C.Mishra and Mr.Dhiraj Sachan provided 180 hrs training consultancy on **Design**, **Welding**, **Industrial Engg. And soft skills for Victora Tools Pvt.Ltd. Faridabad.** 

## (10) Training and Placement:

| S.No | No.Of Students | Company/Institute                    | Package/Stipend               | Remark                                       |
|------|----------------|--------------------------------------|-------------------------------|--|
| 1    | 10             | BSD & Energy<br>Institute,Delhi      | 2-5 lakh                      | After successfully completing their training |
| 2    | 10             | Victora Tools Pvt.<br>Ltd. Faridabad | 1.6 Lakh                      | After successfully completing their training |
| 3    | 6              | Bosch ,Delhi                         |                               | Training                                     |
| 4    | 2              | Star Wire Pvt.Ltd.                   | 2.2 Lakh                      | After successfully completing their training |
| 5    | 1              | Yamaha Pvt.Ltd<br>Faridabad          | 8500/- per month stipend      |  |
| 6    | 2              | Bajaj Auto Ltd .<br>Okhla            | 10,000/-per month stipend     |  |
| 7    | 1              | Maharastra<br>Rolling Mills          | 1.8 Lakh                      |  |
| 8    | 1              | Neelkamal<br>Industry<br>Faridabad   | 10,000/- per<br>month stipend |  |
| 9    | 3              | L&T Pvt Ltd.<br>Delhi                |                               | Training                                     |