

# **GEAR UP**

## **From the Chairman's Desk**

The Narasimha Reddy Engineering college has been established with the main motto of imparting. The quality technical education catering to the needs of Telangana state. The institution strives to have high standards in professional education and working accordingly for high class facilities to all the departments. It is an immense pleasure to me for the Department of Mechanical Engineering pacing towards endeavoring high standards and successfully bringing out bi-monthly news letter for disseminating the departmental activities in the various areas of Mechanical Engineering.



## **Department of Mechanical Engineering**

The Department of Mechanical Engineering NRCE is one of the strongest Department in imparting technical education while promoting professional ethics in Engineering education. It is endowed with sufficient number of faculty as per the AICTE norms and well established labs with advanced features. All faculty are holding M.Tech degrees and some of them are working for their ph.D. Many are active in publication of papers in reputed journals.



## Robotics Workshop In The Campus

A two days workshop on robotics was held on 27<sup>th</sup> & 28<sup>th</sup> August 2014 organized by the Department of Mechanical Engineering in association with Vorton Techno solutions pvt Ltd ([WWW.roboventures.in](http://WWW.roboventures.in)). 52 students belongs to II,III and IV B.Tech actively participated in this workshop. A few students from other nearby colleges also participated. All students gained good knowledge and hands on experience in building and operation of a mini robot . It essentially enhances their technical knowledge and interest over practical exposure in their future endeavours. All students have been issued with participation certificates upon successful completion of the program. Best presentation awards were also given to the top performers.



## Industry visit for the students

The Department of Mechanical Engineering organized an industrial visit for IV B.Tech students with the objective of gaining knowledge in Automobile Engineering and to get practical concept of Design of Machine Members. The students went on one day industry tour to Zonal workshop of TSRTC at UPPAL for having an industrial exposure enabling enhance their subject knowledge of operations and maintenance of automobile machines. About 45 students attended this program under the guidance of Mr.K.Rajendra who has rich experience in this area. All students visited all sections of the workshop i.e., engine shop , gears shop, lubrication shop, tire shop, body shop etc.



## Auto CAD Workshop for improving Design Skills

A two day work shop on Auto CAD & Auto CAD Inventor has been organized by the Department of Mechanical Engineering in association with S V Technologies & yadagiri Educational Services.

Total 55 students participated in the program. Students from III and

IV B.Tech participated and gained basic to advanced commands in the use of Auto CAD Software. They gained confidence for doing their mini or major project using the applications and special features of Auto CAD.



## Workshops attended by the Faculty

Mr.G.Stishkumar from the department attended one day National seminar cum Workshop on Effective presentation skills at Osmania University on 16<sup>TH</sup> September 2014 organized by university college of Engineering in association with INMAS, DRDO. He gained a good experience is very much useful to the department and college.

Mr.P.Praveen, Asst. Professor and Mr. M.Madhu, Asst Professor from the department attended one day workshop on Industrial Tribology on 24<sup>th</sup> October 2014 at Anurag group of institutions, Venkatapur, Ghatkesar, Hyderabad.



## Campus Training and Recruitment Program

The CRT training program for the students of II,III and IV B.Tech students were conducted for improving their technical, communication and other skills tuning to the demands of the present industry. Trainers: Mr.V.Ram Mohan and Ms. Vijayalaxmi.



## Faculty added to the Department

To strengthen the Department of Mechanical Engineering the following faculty have been added.

- Mr. G.N.S.Varaprasad M.Tech
- Ms. M.Madhu M.Tech
- Mr. J.Munikishan M.Tech
- Mr. Nalinikumar M.Tech
- Mr. Rohith kumar M.Tech
- Mr. K.Rajendra M.Tech

## Mid Examinations

II mid examinations were held in the October month very effectively under strict and supervision of the Principal, HODs and Faculty.

## Lab Examinations

The Lab internal Examinations were also conducted successfully after the completion of lab sessions very effectively. In all labs, the experiments were conducted in accordance with the syllabus of the University. Necessary preparations for conducting of lab external

examinations were already made for 1.Metallurgy and Mechanics of solids for II year, 1. Machine tools and Metrology and Surface engineering and 2.Thermal engineering lab for III year and 1. CAD/CAM and ICS & PDP for IV year will be held from 2<sup>nd</sup> November to 7<sup>th</sup> November. External Examiners will be appointed by the JNTUH University for assessment of practical knowledge of the student.

## Paper Publications

A paper on “Numerical analysis of heat transfer process croygaiccasines” has been published by Prof. G.Satishkumar in an International journal IERS in 2009 Faculty of Mechanical Engineering,

## Research

**Research** comprises "creative work undertaken on a systematic basis to increase the stock of [knowledge](#), including knowledge of humans, culture and society, and the use of this stock of knowledge to devise new applications."<sup>[1]</sup> It is used to establish or confirm facts, reaffirm the results of previous work, solve new or existing problems, support [theorems](#), or develop new [theories](#). A research project may also be an expansion on past work in the field. Research projects can be used to develop further knowledge on a topic, or in the example of a school research project, they can be used to further a student's research prowess to prepare them for future jobs or reports.

## Ethics

## Check list for students appearing university Examinations

Mr. J.Munikishan, Asst. Professor. He advices all to have the following checklist before going for examinations fo0r effective performance.

EVERY STUDENT MUST CARRY

- Hall Ticket
- Identity card
- Mini drafter
- Compass
- Protractor
- Divider
- Pencil & eraser
- Scale
- Data Book
- Non- programmable Calculator and not to have mobile and any subject matter in the pockets.
- Be present in the exam hall 15 minutes before the commencement of the exam.

## Guide lines for students for appearing lab External Examinations

- Students are to follow the guide lines strictly.
- Students must present in uniform.
- To carry observation book
- Record should be certified by both subject faculty and HOD
- Is to follow the examination rules of the University.
- To carry Hall ticket
- Wear ID card in the neck.
- Wear apron.

## **Career in Mechanical Engineering**

By Mr. Rohith kumar, Asst. Professor  
Mechanical engineering is one of the oldest branches of engineering it is also referred to as the 'mother' branch of engineering. Another appealing feature of mechanical engineering is that the application base of this field of study is extremely broad and diverse. Almost all inventions during the ancient period and a vast majority in the modern era are direct contributions of one or the other application of mechanics.

After successful completion of the graduate program, you can go for the two years masters program in mechanical engineering through GATE/PGCET. Students interested in further studies can do a PhD.

### **Job prospects**

Since mechanical engineering is the broadest of all engineering fields, the job prospects on offer for skilled mechanical engineers are aplenty and unending. Mechanical engineers are required to design, test, manufacture, install, operate and maintain a wide array of machines and mechanical systems that are used in countless industries. These professional can find employment both in the government and private sector undertakings. There is great demand for skilled mechanical engineers in different segments of the industry. The expertise is required in traditional manufacturing industries such as automobiles, aviation, shipping, aerospace, power plants and machinery manufacturing. In recent times, the services of expert mechanical engineers have even been sought in fields such as nanotechnology, biomedical

engineering, energy conservation and environmental engineering.

According to a survey mechanical engineering is amongst the most sought after branches of engineering preferred by students seeking admission to various technical institutes across India in the recent years.

In broad terms, the job profile of mechanical engineers can be classified into the following functional segments:

- Design
- Production
- Analysis and testing
- Installation& maintenance
- Research and Development

### **Top Companies**

- Automobile and auto part manufacturers
- Aerospace industry
- Various government sector undertakings
- Aviation companies, steel plants
- Thermal plants and gas turbine manufacturers
- Air conditioning and refrigeration industry
- Shipping industry
- Engineering consultancies  
Armed forces.

## **PAY PACKET**

The average monthly salary of mechanical engineers who are new to this profession is approximately in the range between Rs.10,000 and Rs.25000. Good campus placements can fetch even better packages for deserving students. Mechanical engineers who hold a post-graduate degree from a reputed academic institute tend to get better offers than diploma and degree holders. Highly skilled mechanical engineers can easily command pay packets as high as Rs 08-14 lacs per annum.