



Faculty Development Programme on “Design of Machine Elements II”

Real Engineer

Two days FDP on “Design of Machine Elements - II” was conducted on 27th and 28th of January 2017. The resource persons were, Dr. S N Kurbet, HOD, Department of Mechanical Engineering, BEC Bagalkot & Dr. H R Vitala, Professor, Department of Mechanical Engineering, SJB Institute of Technology, Bengaluru. The Purpose of the FDP was to adopt student centric environment in education by providing flawless expectations to be accomplished in the class for the benefit of students and to help the teaching faculty in the preparation. About 39 faculties from various Engineering colleges attended the event.



An Engineer is someone who...

observes and wonders

discovers and creates new things

shares their curiosity

asks questions

explores the world around them

constructs inventions

uses tools to solve problems

An Engineer is someone like you!

-Collected

Personality Development Programme “POSSIBLE”

Soft skills have increasingly become the crucial phenomenon at the time of recruitment selection and even in career growth. Soft skills like Communication skills, interpersonal skills, professionalism, empathy, positive attitude, work ethics etc. are the building blocks of student’s career. Personality Development Program POSSIBLE was organised on 18th of February 2017. Ms. G Sowmaya, Life Skill Trainer, TCS, Bangalore, spoke about the importance of personality development in student’s life and also addressed on the topics like balancing personal and student life and preparations for professional life.



Vision

“ To be a well-recognized department in providing conducive environment for learning, leading to well-qualified engineers who are innovative and successful in their diverse careers”.

Mission

M1 : Students: To Prepare, educate, inspire and mentor the students to excel as professionals.

M2: Teaching Learning: To improve pedagogical methods employed in delivering the academic programs.

M3: Faculty: To Facilitate in academic and research activities.

M4: Infrastructure: To provide state of the art infrastructure facilities in the field of mechanical engineering.

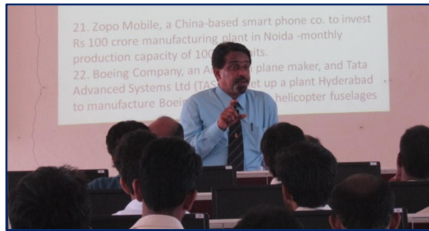
First rule of engineering; beware prototypes. Along with, avoid anything made by an engineer who doesn't have all his own fingers.
- Simon R. Green

Technical Talk by Mr. Lakshmi Prasad	Clay Modelling Competition
 <p>Technical talk on “Industrial Automation and Robotics” was organized by Industry Interaction Cell in association with MESA on 9th of March 2017. Electronic Engineering Graduate Mr. Lakshmi Prasad from GK Robotics spoke about the importance of automation and also he described the application areas. 75 students from Mechanical Engineering attended this programme and got benefitted.</p>	 <p>In order to bring out the creativity among the students in terms of a prototype MESA organised the clay modelling competition on 11th October 2017 with a theme of “super cars”. Clay modelling helps to envisage ideas into reality. This event will provide students an opportunity to appreciate how difficult it is to actually bring any product design into reality. Total 48 teams from all the semesters had taken part in the competition.</p>
Faculty Recharge Programme	
<p>Department also initiated Faculty Recharge Programme from February 16th to March 9th 2017, where all faculty members of Mechanical Engineering Department, made presentations on the courses taught by them for the students. The FRP was inaugurated by the Principal of the college, Dr. M S Govinde Gowda who went on with a presentation on Applied Thermodynamics.</p>	
Intelligent Controls for the mobility of today and tomorrow: Mr. Prasneh Puzhakkal	Internships through Industry Interaction Cell
 <p>Technical talk on “Safe and Dynamic Driving towards Vision Zero” was organised under VCET Puttur SAEIndia Collegiate Club on 7th of April 2017. Talk delivered by Mr. Prasneh Puzhakkal of Continental Automotive Components India Pvt Ltd, Bangalore, addressed about the importance of Electronics and Communication for Mechanical Engineers to manufacture the automobiles and automating them for accident-free driving. Students of 6th & 8th semester from Electronics and Mechanical department were part of it. According to Mr. Prasneh the Chassis & Safety division develops and produces integrated active and passive driving safety technologies as well as products that support vehicle dynamics. The product portfolio ranges from electronic and hydraulic brake and chassis control systems to sensors, advanced driver assistance systems, airbag electronics and sensorics as well as electronic air suspension systems all the way to windscreen washer systems and headlight cleaning nozzles. The focus lies on a high level of system competence and the networking of individual components. Thus products and system functions are developed along the Sense-Plan-Act chain of effects.</p> 	<p>Under Industry Interaction Cell, the department contacted more than 100 companies in Peenya, Bangalore and arranged internship for all third year Mechanical Engineering students. 130 students in more than 25 industries successfully completed 15 days internship programme in the month of January 2017. The companies have greatly appreciated their performance and also have shown great interest in giving apprenticeship for the same students in future.</p>
DESIGN	<p>The Three Gorges Dam is a hydroelectric dam that spans the Yangtze River by the town of Sandouping, located in China. The Three Gorges Dam is the world’s largest power station in terms of installed capacity (22,500 MW). Not only does it produce electricity for the area, it also increases shipping capacity and provides flood storage space. Construction of the dam began in 1994; it opened for commercial operation in 2008.</p>

Corporate Expectations from Mechanical Engineers

Crash Course on Hypermesh and Creo3D

A Talk on “Corporate Expectations from Mechanical Engineers” was organised under MESA for the students of final year on 7th April 2017. Dr. Sekhar S Iyer, Director, Department of MBA addressed on the knowledge students should learn before they face any corporate interviews. The talk turned into a route



map for the students in building their career. He also stressed the basic things like Communication Skills, Knowledge Beyond the Textbooks, Ability to Lead, Positive Approach, Updated with Latest in Technology, Willingness To Travel, and Knowledge of Foreign Languages.

A one week crash course on Hypermesh software and Creo3D Modelling



was conducted by faculty of the Mechanical department namely, Mr. Deepak Kumar Shetty and Mr. Santosh S R for Mechanical Engineering students in the month of January 2017. 40 students attended the programme and got benefitted.

YANTHRIX – 17 : Project Exhibition cum Competition

Prestigious event of Mechanical Engineering Department “Yantrix-17”, a project exhibition cum competition was organised on 5th May 2017. This event is an opportunity for every student to present the knowledge they have acquired in the academics by taking up the projects. Students have enthusiastically participated and a total of 84 teams exhibited their projects.

In the final year segment “Design and Fabrication of Areca Leaf Sheath Chopping Machine” developed by Mr. Swasthik M Holla and team bagged 1st Prize and “Design and Fabrication of Low Head Impulse Turbine” fabricated by Mr. Hemachandra and team won 2nd prize. “Room Air Cooler” by Mr. Varun & team and “Metal Cutter” by Mr. Udayshankar K & team have won 1st and 2nd prizes respectively in Pre-Final Year segment.

Areca Leaf Sheath Cutting Machine



A team of final year Mechanical Engineering students Mr. Swasthik M Holla, Mr. Shashanka C H, Mr. Sooraj Kumar R and Mr. Vijendra Kumar N Naika under the guidance of Mr. Sudarshan M L, Assistant Professor of Department of Mechanical

Engineering have designed and fabricated an Areca Leaf Sheath Chopping Machine.

The main objective of this chopping machine is to effectively chop the areca sheaths into 6mm*6mm size so that it could be fed to cattle as a dry fodder thereby acting as an alternative for paddy straw, which is deficit in the regions like Coastal Karnataka and Kasargod. Also the machine was prepared with the aim of helping the areca plate manufactures to handle the large volume of wastes produced during the plate manufacturing process. This machine was able to achieve a productivity of 300Kg/hr.

This project has backed first prize in “Jnanasangama 2017” under the paper presentation category and has also won first prize in “Yantrix 2017” a model exhibition competition organised by the Department of Mechanical Engineering of VCET. The overall cost involved in fabricating this machine was Rs. 30000.

Low Head Impulse Turbine

Mr. Hemachandra and team from final year Mechanical Engineering designed a turbine under the guidance of Mr. Sunil Lakkundi, Assistant Professor, of Department of Mechanical Engineering. This turbine is specially designed to make it suitable for low head and high discharge places to extract energy from 0.5 kW to 5 kW. This turbine has been successfully tested in vented dam at Panja, Sullia, Dharmastala and Kalladaka.

At a head of 2m and discharge of 60 litre/sec, the Power output of 1 kW was generated

which is sufficient for one household.

Total cost of the Turbine-Alternator assembly for 1 kW of power is Rs 50000 /-.

This kind of turbine can also be used for pumping of water to agricultural fields without motor and electricity. This team has designed different turbines for different head and discharge.



Racing GO-KART - 'STALLION'	All-Terrain Vehicle - 'BLETTATIGUR'
<p>Under SAEIndia Collegiate Club, the second year students brought out a second Go-Kart vehicle named</p>  <p>“STALLION” and participated in the National level Karting championship “Sieger Pro 2017” held at Adithya College of Engineering, Kakinada, Andhra Pradesh from 21st to 25th March 2017. “Stallion” cleared all the Technial inspections and engine tests and secured 6th position in National Level Go-Kart championship. It was also awarded 2nd Lightest vehicle in Weight test. The overall cost of the vehicle was 3 lakhs.</p> <p>Team members of Go-Kart 2 : Manvith D M(Captain), Vinay Kumar(Vice-Captain), Yashas B K, Ajay Vivek, Krishna M V, Sourav Ariga P, Vivek S, Amruth Kumar V, Priyanka Prabhu, Vinay Kumar P S, Devi Prasad, Maruthi T, Shamith S, Nithin S, Charan B L (Driver).</p>	<p>The Mechanical Engineering students of VCET took part in racing event organised by “Delta Inc. Kolkata”. This team of 30 students cleared an Online Quiz after which they started with fabrication of an All-Terrain Vehicle (ATV) named “BLETTATIGUR” under the rules provided by SAE India. The overall cost of the vehicle was Rs.11 lakhs. The team participated in Enduro Student India 2017 which was held at Gee-Dee Advanced Driving Institute at Eachaneri Coimbatore. The Team being one among the two debutants, cleared all the technical inspections and engine tests. The vehicle received a lot of appreciation and good compliments from the organizers.</p> <p>The team members of ATV: Sheldon Floyd Pinto, Sharan D, Abhiman M S, Adesh Shetty, Akhil P B, Kishan Jogi, Rakshith A, Sandeep Acharya, Vinayaka K, Vinodshankar Bhat, Shishir Naik, Yashwanth K C, Swasthik M Holla, Shekhara, Darshan B A, Supritha , Ranjith Bhandary, Kiran P M, Sooraj Kumar, Sachin Kumar M, Ganesh Krishna, Rahul Prabhu, Ajit S Pai, Vishwas M, Gagan Rai, Praveena N, Dheeraj, Supriya Jagannath, Kethan Damle, Suchith G H, Sukshith S M, Kushali K P.</p>
Noteworthy performance at “Manovegam”	
<p>A team of 8 students of Mechanical Engineering Department engineered an un-manned air vehicle by name Grudhra Aerospace. This team has been qualified to participate in the National Level Aero Modelling competition “Manovegam” organised by SAEIndia in association with Safran Aerospace. The event was held at SIT Tumkur. Students secured 6th place in the virtual round where all the design details of vehicle was presented. Final flight round was organised on 14th and 15th April 2017 where our students continued their remarkable performance and secured 7th place among premier engineering colleges nationwide. The total cost of vehicle was around 1.2 lakhs.</p> <p>Faculty Adviser: Mr. Ajith K, Assistant Professor, Department of Mechanical Engineering.</p> <p>Team members of Grudhra Aerospace: Muralikrishna S (Captain), Kaushik Kumar S, Harshavinayaka, Harshavardhana P, Adithya Rai, Prajwal Acharya, Nithin Bangera, Sukshith SM.</p> <p>Their performance was highly appreciated by the staff, Principal and the Management. Despite of hectic academic schedule, they were successful in accomplishing their mission with flying colours. In contrary, the students who are involved with these projects have also shown better results in their University exams.</p>	
<p>WONDER</p>	<p>The Konark Temple has an elaborate and intricate mammoth structure that depicts the chariot of the Sun God replete with 24 carved wheels, each of them 3 m in diameter, pulled by seven horses and guarded by two lions at the entrance that bravely crush elephants. An example of beautiful melee of science, architecture and devotions the sun dials on the temple can calculate time to the exact minute even to this day! There are also three statues of the sun god that catch the rays of the sun precisely at dawn, noon and sunset.</p>