MECHANICAL ENGINEERING MAGAZINE 2019-20

DR **G V PATIL**
HOD
MECHANICAL ENGINEERING DEPARTMENT

THE DEPARTMENT OF MECHANICAL ENGINEERING IS A PART OF B.L.D.E.A'S V.P.DR. P.G.HALAKATTI COLLEGE OF ENGINEERING. & TECHNOLOGY. VIJAYAPUR SINCE ITS INCEPTION AND WAS ESTABLISHED IN 1980 WITH AN INTAKE STRENGTH OF 40. IN 1994, THE PROGRAM WAS FIRST APPROVED BY A.I.C.T.E. FOR AN INTAKE STRENGTH OF 60 (LETTER NO. F. 41- 43/B 111/RC-MB/93/16239) SUBSEQUENTLY, THE PROGRAM IS APPROVED EVERY YEAR.

THE DEPARTMENT HAS GROWN TREMENDOUSLY OVER THE YEARS AND IS NOW RECOGNIZED AS THE MAJOR ENGINEERING DEPARTMENT OF THE INSTITUTE WITH PRESENT INTAKE STRENGTH OF 180 AND QUALITY TEACHING AND INSTRUCTION AT THE UG/PG LEVEL.

THIS PROGRAM HAS BEEN ACCREDITED BY THE NATIONAL BOARD OF ACCREDITATION(NBA) FOR ENGINEERING AND TECHNOLOGY, NEW DELHI FOR A PERIOD OF THREE YEARS FROM 31ST MARCH 20066 (LETTER NO. F. NO. NBA/ACCR-499/2004 DATED 07-04-2006). THIS PROGRAM WAS AGAIN RE-ACCREDITED BY THE NATIONAL BOARD OF ACCREDITATION (NBA) FOR ENGINEERING AND TECHNOLOGY, NEW DELHI FOR A PERIOD OF THREE YEARS FROM 30TH JUNE 2018 AND PRESENTLY IT'S ACCREDITED FOR A PERIOD OF THREE YEARS UP TO 30TH JUNE 2021(LETTER NO. F. NO. 25-29/2010-NBA DATED 08-11-2018). THE DEPARTMENT HAS THE STRENGTH OF 42 MULTIFACETED FACULTIES AND IS A HOMOGENEOUS BLEND OF EXPERIENCED AND JUNIOR FACULTY MEMBERS. THE AVERAGE EXPERIENCE OF TEACHING FACULTY IS ABOUT 13 YEARS. THE DEPARTMENT HAS ENOUGH INFRASTRUCTURE REQUIRED TO CATER FOR THE NEEDS OF MECHANICAL DEGREE ASPIRANTS.

Contents

VISION

TO BE RECOGNIZED AS A DEPARTMENT OF EXCELLENCE BY PROVIDING HIGH QUALITY MECHANICAL ENGINEERING EDUCATION ALSO CONTRIBUTE IN RESEARCH RELEVANT TO INDUSTRIAL SOCIETY

MISSION

- IMPARTING QUALITY EDUCATION TO THE STUDENTS AND ENHANCING THEIR SKILLS TO MAKE THEM COMPETETATIVE IN INDUSTRY
- ESTABLISH CENTRES OF EXCELLENCE AND COLLABORATE WITH R&D ORGANIZATIONS TO FOSTER RESEARCH ACTIVITIES
- COLLABORATE WITH INDUSTRIES TO PROVIDE SOLUTIONS TO THE IDENTIFIED PROBLEMS
- PROMOTE ENTREPRENEURSHIP

EDITOR BOARD

Dr Geetanjali V Patil

HOD MECH DEPT

Prof Rajendra Kattimani

ASSISTANT PROFESSOR

Short Term Training Programme

"CURRENTS TRENDS AND TECHNOLOGIES OF INDUSTRY"

CO-ORDINATOR:
Prof.P.S.Patil ,Prof.V.V.Hokranl and Prof.S.R.Biradar BLDEACET VIJAYAPUR.
Organizing Committee members :
Nitish Avarasang, Veeresh Pattar, Kumar Deshmukh and Shrinidhi Managooli.
Targeted Audience:

6th Semester students of Mechanical Engineering Dept, Electrical & Electronics Dept, BLDEACET VIJAYAPUR.
RESOURCE PERSONS:
Mr Veeresh BiradarTechnical Specialist, Robert Bosch.
Mr NithyandTechnical Specialist, Robert Bosch.
Dr Muralidhar Development Manager, Danske IT
Dr Sanjeev K NaikTechnical Specialist, Automotive Design, L&T Technology.
Mr Rakesh PatilTechnical Trainer, Ashok Leyland.
No. of Participants: 80 + Students.

Inaugural Session

The programme was inaugurated in the LIBRARY SEMINAR HALL on 5th March 2019 at 10:30 am. The session was graced, by Prof. G.V.Patil Head Dept. of Mechanical Engg, Prof. P.V.Malaji, Mr VERESH BIRADRA [Technical specialist] REPORT BOSCH PVT.LTD.and Prof. P.S.Patil Coordinator of the programme, B.L.D.E.A's College of Engg. & Technology, Vijayapur. Prof. G.V.Patil and Prof. P.V.Malaji briefed the importance of such programs for mechanical students and Staff.

Activity: TECHNICAL TALK

Date: 05.03.2019
Topic: Currents Trends and Technologies of industry
Resource Person: Mr. Nithyanand & Veeresh Biradar
Technical Specialist, Rebort Bosch Pvt Ltd, Bangalore.
The Resource Persons briefed about the Importance of current trends like IOT, BLOCKCHAIN, And Artificial Intelligence.

The Technical Talk focused on following key points:
1. Artificial Intelligence (AI)
2. Machine Learning
3. Robotic Process Automation or RPA
4. Blockchain
5. Virtual Reality and Augmented Reality
6. Internet of Things

Activity: TECHNICAL TALK Date: 06.03.2019
Topic: Currents Trends and Technologies of industry
Resource Person: Dr.Muralidhar
Development Manager, Denske IT, Bangalore.
Technical Talk on Data Analytics A Brief Report

About the Talk
The main goal of this technical talk is to provide the insights of what's the latest trend in the area of Big data analytics. The resource persons for the day was from the Denske IT, Bangalore. In his talk he has covered importance of data analytics and basic ideas and the provided various tools details used for the data analysis.
At the outset, the students are very happy and few of the students interacted with resource person Dr.Muralidhar, and Finally Prof.V.V.Hokrani proposed the vote of thanks.

Momento Presentation,to Mr.Nityanand (Technical Specialist REBORT BOSCH)

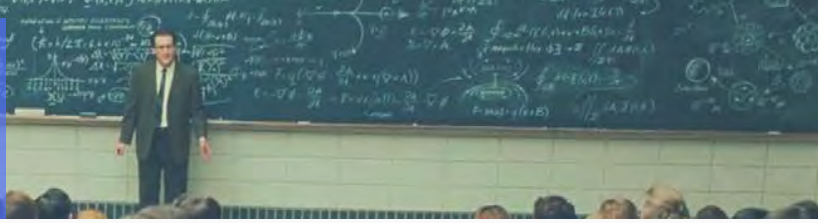
Snap During the Sessions

Students and Expert interaction during practical session

Students and Expert interaction during practical session

Valedictory Function: Left To Right Prof Talasdar Dr P V Malaji Dr G V Patil Prof Prashant Patil

Faculty and Students Achievements



Dr. Arvind Kotagond and Dr. Ramesh Jeergal has attended as a session chair person /keytone speaker " 4th nationa conferenceon research and developmentin Mechanical Engineering(NCRDME 19) " under QIP BCUD SPPU Puneon 1st to 2ndMarch 2019

Dr. A.D. Kotagond

Dr. R.N. Jeeragal

· The following students / alumni projects selected for students project Fund under NAIN – Karnataka New Age Incubation Network scheme By KTECH, Dept of IT,BT and S&T ,Government of Karnataka ,detals of the projects and grants are mentioned below

Title:Design and Fabrication of Agriculture Weede
Project Cost:78,280/-
Prject Team:Farook Mantur
Mallikarjun Angadi
Vijayakumar kulakrni
Manish H
Project Guide:**Prof R S Kattimani**

Title:Design and Development of Solar powered Battery pereted electric
Project Cost:88,000/-
Project Guide:**Dr.Iresh Bhavi**
Prof. V V Nagathan

Title:1 in 4 sugarcanr plantation machine
Project Cost:3,00,000/-
Prject Team:Chetan Magdam
Gangappa Arakeri
Sachin pawar
Project Guide:**Dr. B M Angadi**
Project Title :Recycling of Biodegradable Waste
Project Cost:2,00,000/-
Project Team:Sitar anantapur
Hanumantaray D
Vijayakumar
Sagar Sonar
Project Guide:**Dr. B M Angadi**

· Dr P V Malaji has invited for Technical talk on " Introductio to MATLAB and its applications to Mechanical Engineering" at KLEIT Hubballi on 27-02-2019

INTERNSHIP AND TRAINING PROGRAMME

INTERNSHIP PROGRAM ON"CAE CONCEPTS - INDUSTRIAL APPROACH" 05/07/2019 to 02/08/2019

CO-ORDINATOR:
Prof. P. S. Patil

RESOURCE PERSONS:
Mr. Shashidar A.L(Faurecia Pvt. Ltd)
Mr. Vijay (CADVISION R&D)

About the training programme:

The internship programme on CAE Concepts-INDUSTRIAL APPROCH", in collaboration with CADVISION R&D Pvt Ltd Bangalore was organized for the 17 students of six semester of our department for period of one month from 05/07/2019 to 02/08/2019.
Internship training is one of the requirements to be fulfilled in order to obtain the Bachelor's degree in technology for 6th Semester students. Each student needs to do training in a recognized company of their respective domain. The students have to undergo compulsory training for duration of 4 weeks which is intended for their exposure to the industry. A well planned, properly executed and evaluated software training helps a lot in developing a professional attitude. It develops an awareness of software approach to problem solving, based on a broad understanding of processes. Besides software training build self confidence among students and let students know the technical knowledge and professionalism. During industrial training on "CAE Concepts-INDUSTRIAL APPROCH", most of the theoretical knowledge gained during the course of studies was put to test. Various efforts and processes involved in designing of a components was studied and understood during the training.

CAD VISION R&D licensed Professional consulting engineering firm, develop static or transient, linear or nonlinear finite element models to evaluate structural and thermal responses. These finite element analyses produce detailed time or frequency histories, graphs and contour plots of stress, structural, and thermal loads, and deformation under various loads or service conditions.

Practical Session

Dr G V Patil addressing the session

The MOU was done with the CADVISION R&D and B.L.D.E.A's Engineering College for benefit of students.
The objective of this Memorandum of Understanding is:
To provide a formal basis for initiating interaction between BLDEACET and CADVISION R&D in mutually beneficial areas such as:

a) Internship and training to students
b) Staff exchange programm
c) Support for research activities

1. PROPOSED MODES OF COLLABORATION

BLDEA'S and CADVISION R&D propose to collaborate through
a.Industry based Student projects.
b.R&D projects, which may be carried out wholly CAS, BLDEACET or at premises of CADVISION R&D or partly at BLDEA'S and partly at CADVISION R&D.
c.Any other appropriate mode of interaction agreed upon between BLDEACET and CADVISION R&D.
d.Internship / Placement assistant for Final Year Students.

Photo Session

Report on Four Week Hands on Training

"CATIA" was organized By Mechanical Engineering Department, BLDEA's Vachana Pitamaha Dr. P.G. Halakatti College of Engineering and Technology, Vijayapur, Karnataka and approved by IEI.
Coordinators: Prof. S.S.Chappar, Mechanical Engineering, Department,
Target Audience: V Sem students.
Venue: Seminar Hall, Library Complex, BLDEA's Vachana Pitamaha Dr. P.G. Halakatti College of Engineering and Technology, Vijayapur

Date: 27 August -27 September, 2019
The Programme was inaugurated with invocation song by students of the college at 9.00 A.M which was followed by ceremonial lighting the lamp by the Hon'ble Chief Guest Prof. S .B. Koulagi, and other dignitaries were present. Prof. S. S. Chappar, coordinator of the Programme briefed the audience about the objectives of the training programme. Gathering was welcomed by Dr. B. M. Angadi, Inaugural function concluded with vote of thanks by Dr. G. V. Patil.

CATIA training course involves "Learning by Doing" using state-of-the-art infrastructure for performing hands-on exercises. This extensive hands-on experience in CATIA training ensures that you absorb the knowledge and skills. CATIA Course provides continued education through its learning.

COURSE CONTENT:
- Sketcher.
– Part Design
– Wire Frame and Surface Design
– Drafting
- Assembly
.

Participation certificates were distributed to all the participants during the valedictory function. Participants expressed their satisfaction about the topics and resource persons and the organization of the event. About 40 student participants participated in the Programme.

inauguration Function: Prof S. S. Chappar (From Left), Dr.G.V.Patil, Head Mechanical Engineering Department, and Prof. S. B. Koulagi

Practical Session

SEMINAR

Topic: 3D Printing Technology

A Seminar organized by the Department:

A Seminar was organized on 7thNovember, 2019 from 11 am to 1.00pm and the details are as under.

Resource Person:

Dr. Yogi Gandhi
CEO
US Institute of 3D Technology
California - 94563

Topic: 3D Printing Technology Resources person Dr.Yogi Gandhiaddressed the students regarding the 3D printing technology by comparing traditional and modern methods and its applications in various fields. He also glanced on the basic principle used in Additive manufacturing, various materials for 3D printing, Different types of printers, Success stories. The session was very interesting for the students because of the real demonstration on 3D printer.

And also he explained about training programmes and Internships conducted by USI3DT at our institute to boost the technical skill using different methods used for 3D printer. Approximately 200 students of V semester from Mechanical, Electronics& Communication, Automobile, Architecture, Civil and Electrical& Electronics Engineering have attended the seminar.

Principal Discussion with Chief guest

Presentation by chief Guest

Chief guest welcomed by Principal Dr V P Huggi

Staffs and Students

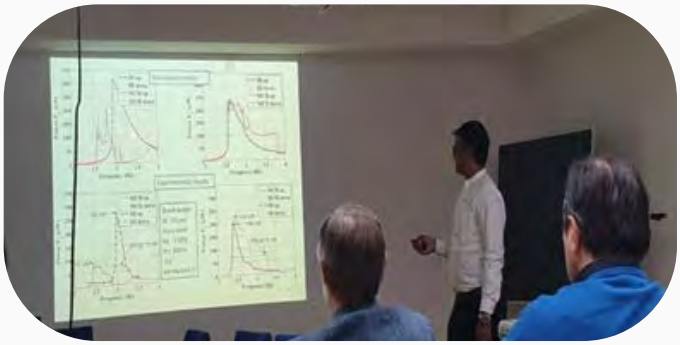
Guest Lecture

As a Guest Scientist visit to Lublin University of Technology, Lublin, Poland by Dr. Pradeep V Malaji from 25.11.2019 to 05.12.2019

Dr. Pradeep V Malaji, Department of Mechanical Engineering has visited Lublin University of Technology, Lublin, Poland as a guest scientist under ehDIALOG (International project, Ministry of Science and Higher Education, Poland). During his visit he interacted with, faculties and researcher of the university. He delivered talk at Maria Curie-Skłodowska University, Lublin. He interacted with Vice Rector (Research) of Lublin University of Technology regarding possible MoU with BLDEA. He also visited Lodz University of Technology, Lodz.

Department of Mech. Engg. Lublin University of Technology, Lublin

Lab visit Lublin University of Technology, Lublin



Presentation at Maria Curie-Skłodowska University

Interaction with Vice Rectors and Head Dept. of Automation and Robotics

POLITECHNIKA LUBELSKA
LUBLIN UNIVERSITY OF TECHNOLOGY

ehDIALOG

CONFIRMATION

Staff member: dr Pradeep V. Malaji

Sending institution: Department of Mechanical Engineering, BLDEA's DR. P.G.H. CET, Vijayapur-03, Karnataka India

Receiving institution: Lublin University of Technology, Poland

This is to certify that the above mentioned person was a guest scientist and has given lectures/ seminars within the topic of Energy Harvesting under the ehDialog programme at our institution. The date of visit: 24.11.2019 – 5.12.2019

Deputy Rector for Scientific Affairs
Lublin University of Technology
Prof. Marzenna DUDZIŃSKA

DIALOG

Guest Lecture organized by the department of Mechanical Engineering on 6th September, 2019 from 2 pm to 5.15 pm
Resource Person:

1. **Shri Santosh Herimath**
Group Manager
Tata Technologies
Pune

2. **Shri Kiran Hittalmani**
Senior technical lead
BOSCH
Banagalore

Topic: Current and Future trends in automobile engineering

Resources person Santosh Herimath addressed the students regarding the current trends in automobile engineering. He concentrated on how to design chess and other automobile parts are designed and how the modification will be done on the design. The other resource person Kiran Hittalmani about Future Mobility, or New Mobility, which is simply, what will happen to our transportation needs in the future .he also explained artificial intelligence and related software's. He even concentrated on how artificial intelligence helps in predicting future data.

Left to Right Prof V V Hokrani Dr S S Kulkarni Dr P V malaji Mr Kiran Hittalmani Prof R S Kattimani Mr Santosh Hiremath

Guest Lecture organized by the department of Mechanical Engineering on 7th September, 2019 from 9:30 am to 1:00 pm

Resource Person:

Dr.Prasanna G Bhat
General Manager
Powertrain Engineering department
ARAI
Pune.

Topic: BS-IV to BS-VI Changes & Challenges and Future Mobility

Resources person Dr.Prasanna G Bhat addressed the students regarding the BS (Bharat Stage) norms which are based on EURO (European) emissions standards. The "India 2000" was rolled out in the year 2000, followed by BS-II and BS-III in 2001 and 2005 respectively. It wasn't until BS-IV, that more stringent emissions mandates were enforced. In 2016, the government of India decided to skip BS-V altogether and implement BS-VI by the year 2020. BS-VI is a stricter, more restrictive norm that will give a jumpstart to India's long battle with air pollution. With the implementation of the BSV-I norms, India will come at par with the US and European equivalent emissions norms.

Alsoexplained about Future Mobility, or New Mobility, which is simply, what will happen to our transportation needs in the future The new mobility eco-system "Future Mobility" will be influencing the traffic and transportation sector with offerings for fast, economic, sustainable, safe, efficient and customised & comfortable travel. While electric vehicles and high speed rails will take over, hyper loop or gyroscopic vehicles are emerging as well. Future mobility will depend more on smart roads, drones, AI, sensors & data.

Presentation by Mr Prasanna Bhat

Prof Loni presents a memento to Mr Prasanna Bhat

Dr. G.V. Patil presented a bouquet to Mr. Prasanna Bhat

Photo Session

Photo Session

PARENTS MEET

Conducted on 05/05/2018

Summary:20 parents have attended the meeting. Their opinions were taken into account. Feedback: Satisfied with the department activities and motivation to the students by organizing guest lect, Ted talks,etc.

FRESHERS DAY

Department Fresher's day celebration by MESA19-09-19 to 21-09-2019

Department Sports


MECHANICAL
ENGINEERING


MECH

TEACHERS DAY

On Sept 5th 2019 on the eve of Teachers day celebration, students of department of mechanical engineering organized fun events for all the staffs

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

I. ESTABLISH A SUCCESSFUL CAREER IN MECHANICAL ENGINEERING OR RELATED FIELDS IN INDUSTRY AND OTHER ORGANIZATIONS WHERE AN ENGINEERING APPROACH TO PROBLEM-SOLVING IS HIGHLY VALUED.

II. DEVELOP ABILITY AMONG STUDENTS TO SYNTHESIZE DATA AND TECHNICAL CONCEPTS FOR APPLICATION TO PRODUCT DESIGN.

III. CONTRIBUTESIGNIFICANTLY IN MULTIDISCIPLINARY A WORK ENVIRONMENT WITH HIGH ETHICAL STANDARDS AND WITH THE UNDERSTANDING OF THE ROLE OF MECHANICAL ENGINEERING IN THE ECONOMY AND THE ENVIRONMENT.

IV. EXCEL IN GRADUATE STUDY AND RESEARCH, REACHING ADVANCED DEGREES IN ENGINEERING AND RELATED DISCIPLINES.

V. ACHIEVE SUCCESS IN PROFESSIONAL DEVELOPMENT THROUGH LIFE-LONG LEARNING.