



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

About Mechanical
Engineering

PAGE 01

Vission and mission

PAGE 02

Editor Borad

PAGE 03

Short Term Training
Programme

PAGE 04

Guest Lecturer

PAGE 06

Paper Publications

PAGE 07

Internship Programme

PAGE 09

Parents Meet

PAGE 07




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



One Week Faculty development programme on “Numerical Methods using MATLAB” successfully conducted in B.L.D.E.A’S College of Engineering and Technology, between 16th to 20th January 2018 by Department of Mechanical Engineering. The STTP received an overwhelming response with more than 40 participants.



AUDIANCE



PRACTICAL SESSION



PHOTO SESSION

TECHNICAL SESSIONS:

Session I

Dr P V Malaji (Vice Principal, Academics and R& D) BLDEA’S V P Dr PGH CET Vijayapur, he explained about the importance of Numerical methods using MATLAB. In this session participants learned the application on Matlab.

Session II:

In this session, students had hands on session on MATLAB, where in they learnt to frame the equations in Matlab.

Session III

Dr A B Patil (Mathematics) BLDEA’S V P Dr PGH CET Vijayapur, delivered a topic on Linear Algebra-I.

Session IV: Participants Visited Lab of Centre for Excellence (ROBERT BOSCH Hydraulic & Pnuematic kit, PLC, 3-D Printing)

Session VI

Dr. S.I Bekinal, GIT Belagavi, in his sessions carried out a Review of single degree vibration systems.

Session VII: Hands on Training in MATLAB on single degree undamped free vibrations.

Session VIII

Prof V.V Nagthan BLDEA’S V P Dr PGH CET Vijayapur delivered a topic on Basics of Heat transfer and the participants had hands on training on 1-D Heat transfer problems.

Session IX

Prof S.S Chappar BLDEA’S V P Dr PGH CET Vijayapur delivered a topic on finite Difference method and its applications in heat transfer and Fluid flow problems using MATLAB.

Session X

Prof P S Patil covered the topics on Two Degree of Freedom system and Dynamic vibration Absorber.

SHORT TERM TRAINING PROGRAMM ON“ANSYS [DESIGN MODELER & FLUENT]”

BRIGHAM YOUNG

SHORT TERM TRAINING PROGRAMM ON“ANSYS [DESIGN MODELER & FLUENT]”

successfully conducted in B.L.D.E.A'S College of Engineering and Technology, from 08th January 2018 to 12th January 2018 by the Department of Mechanical Engineering. The Programme was mainly focused on Final Year and Pre Final year [Under Graduate/Post Graduate] Students Interested to acquire skills in Computational Fluid Dynamics and Thermal Analysis

SKILL UPGRADATION PROGRAMME

“One day Skill up-gradation program for instructional staff” was organized by Dr.M I Sakri and Prof.S.M.Hatturkar on 2nd Feb 2018.

Resource persons: Dr. M I Sakri and Prof. S M Hatturkar



INAUGURAL SESSION



PROF S M HATTURKAR INTERACTION WITH INSTRUCTIONAL STAFF



PHOTO SESSION WITH STAFFS AND SUPPORTING STAFFS



Guest Lectures

Guest Lectures Organized on
Career Opportunities for engineering students on
06/04/2018

Guest lecture: **Dr sripad Moulikar** from IIT bombay
Date: 13/06/2018
Title: **Faculty Interaction.**



Resource person: **Shri Sundhindra Shirguppi**, Senior Vice President and Head of Global Delivery for Engineering & GeoSpatial Business Group at Rolta Bombay

Mr. Sudhindra Shirguppi holds a Bachelor's Degree in Mechanical Engineering from to Karnataka University. He passed out form BLDEA Engineering College in 1987. He has an Overall industry experience of over 3 decades with strong technical credentials and for over 15 years has been leading a large Global engineering centre with over 500+ multi-discipline engineering resources at Rolta India Limited. Mr Shirguppi is a highly accomplished, innovative, seasoned, results-oriented Senior Management professional with a successful background in design and engineering, project management, product sales, business development, marketing, planning, innovative IoT Solutions and financial management.



Currently, Mr Shirguppi is designated as Senior Vice President and Head of Global Delivery for Engineering & GeoSpatial Business Group at Rolta. He is also responsible for Sales, Marketing, Project Management and Business Operations including P&L responsibility. He has experience of handling both Government/PSU and Private Customers and has spearheaded business opportunities for Rolta in the areas of Enterprise Geospatial with proven IPs in the areas of Smart Cities and e-Governance apart from its normal business lines such as Utilities, Municipalities, Land Record, Oil & Gas, Petrochemicals, Refinery and Process Industries.

The mechanical engineering dept arranged a guest lecture by **Shri Sai Karthik** research Engineer ATI Motors Bangalore on 01/09/2019 at 9.30am on topic Engineering Careers in age of Automation .There was more than 200 students of various semester of mechanical dept and other branches students along with faculty members was present to listen lecture. The following are the some of snaps taken during guest lecture.



papers and publications

Title: "Analysis and experiment of magneto-mechanically coupled harvester"

Elsevier-108(2018)304-316 By **Dr.P.V.Malaji**



Title: "Experimental and theoretical study on dehumidification potential of clay-additives based CaCl₂ composite desiccants"

Faculty: **Prof C R Hiremath**



Title: "Knowledge management for the new global economy: Overview"

Faculty: **Dr.G.V.Patil**
Publication: IJSRD



.Patents, trademarks, copyrights and Technology transfers

Faculty: **Prof S. S. Kulkarni.**
Patent title: Sugarcane plantation Equipment.
Patent App Number: 201841020892.
Patent CBR No: 15428.



Paper presentation at conference

Title: "Influence of welding parameters on hardness and micro structure of Al 6061 alloy"

Faculty: Prof S S Kulkarni

Conference: 8th International conference of recent engineering and technology 2018



CONFERENCE

Title: "Effect of Injection timing, CNG flow rate and combustion chamber shapes of performance of engine optimization with CNG"

Faculty: Prof R S Ellur

Conference: ICRASET 2018



IEEE CONFERENCE

Title: "Investigating the role of subcritical and supercritical bifurcations on the energy harvesting potential of dynamic oscillator"

Faculty: Dr.P.V.Malaji

Conference: 2nd ICAME 2018



INTERNSHIP

INTERNSHIP PROGRAMME

GOAL

SKILLS

KNOWLEDGE

MENTORING

PRACTICE

OPPORTUNITY

TRAINING

Internship Course on BOSCH REXROTH AUTOATION & ADDITIVE MANUFACTURING was successfully conducted at Bosch Rexroth Center of excellence, B.L.D.E.A'S College of Engineering and Technology, from 09th July 2018 to 4th Aug 2018 by Department of Mechanical Engineering. The Programme was mainly focused on Pre Final year Students who are intended to acquire skills in Automation and Additive manufacturing.

About the training programme:

The new generation of manufacturing systems needs technical manpower with a broad education and training, being able to look beyond the borderlines of classical engineering disciplines. One can only get this widened view by appropriate training. Industrial automation has therefore become the most critical technical training and education discipline in the world of vocational training and education.

While the industry needs trained manpower, the academic institutes also face the onerous task of gearing up their curricula and laboratories to international standards. It is, therefore, imperative that the industry and the academia join hands and bridge the divide that exists between theory and practice. The Centre aims at training industry personnel and students of various institutions from Engineering, Diploma and ITI Colleges in the Automation field to enable our industry personnel, faculty and student to have hands on experience and up gradation of knowledge and skills which is an essential for industry progress.

Overview: Many industries are using the power of the air, water, and oil for getting the mechanical force. Agricultural machines, coal mining equipment, automobile manufacturers, earth movers and printers, etc. are some of the sectors which employ hydraulics and pneumatics power for increasing productivity. Keeping the same in mind, Mechanical Engineering Department offers hydraulics and pneumatics training for enhancing employment opportunities among its trainees.

Course content:

- Hydraulics and Pneumatics
- Automation and Mechatronics
- 3-D printing

Inaugural Session

The programme was inaugurated in the Library seminar Hall on 9th July 2018 at 10:30 am. The session was graced, Dr. P.V.Malaji, Dr.S.M.Chadahan and all course Coordinators of the programme center for advanced studies, B.L.D.E.A's College of Engg. & Technology, Vijayapur. Dr.P.V.Malaji briefed importance of various courses.Total number of participants was 40 including 7 participants from VSMIT, Nippani and 1 from Anjuman college of Engg and Tech.Bhatkal.



Internship Sessions



Guest lecture on “ being an Engineer” by Dr.Kushal Das on 13th July 2018



Guest lecture on Additive Manufacturing on 19th July 2018 by Manikandan Mahadevan, Team head, Li2 technologies, Bengaluru



Guest lecture by Lead foundation team on 24th July 2018



Photo Session

Career Academic Orientation (CAC) Programme by Mr.Veresh Biradar ROBERT BOSCH (Robert Bosch Project Lead and Technical Specialist) on 26th September 2018

The programme started with inaugural function by our beloved HOD Dr.G.V.Patil and all staff and students. On his inaugural speech spoke about the importance of such programmes. The Resource person by Bosch Mr. Mr.Veresh Biradar, (Robert Bosch Project Lead and Technical Specialist) was

Here for the presentation. Programme was conducted very smoothly and regularly for and total of 250 students of our 7th semester. It was also included students from Electrical & Electronics departments.

Programme imparted great knowledge to our outgoing students and they were more interactive on each session a day and felt more impressive mainly, this programme covered with presentation by PPT Many of staff members from our department also participated in this programme.



ACCIDENT AVOIDANCE Programme by Dr.Suveen.Janamatti(Consultant Neurosurgeon) & Team

ACCIDENT AVOIDANCE Programme by Dr.Suveen Janamatti (Consultant Neurosurgeon) & Team was organized by Department of mechanical Engineering on 10th october 2018.

The programme started with inaugural function by our beloved HOD Dr.G.V.Patil and all staff and students. On his inaugural speech spoke about the importance of such programmes. Programme was conducted very smoothly and regularly for and total of 150 students of our department. It was also included students other departments.

Programme imparted great awareness to our students about Accidents and Dr.Kembavi orthopedic surgeon was also present and he spoke about the accidents that usually takes place at youth.



Group Photo with guest



CAC Programme By Mr.Veresh Biradar.



Dr. Ragavendra Kembavi speech.



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.



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. CONTRIBUTE SIGNIFICANTLY 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.

BRIGHAM YOUNG