|| Jai Sri Gurudev ||

Adichunchanagiri University

BGS Institute of Technology

B G Nagara – 571 448

Department of Mechanical Engineering

YANTHRIK

NEWS LETTER
2022-2023

Institute Vision Mission

VISION

BGSIT is committed to the cause of creating tomorrow's engineers by providing quality education and inculcating ethical values

MISSION

- Imparting quality technical education by nurturing a conducive learning environment.
- Offering professional training to meet industry requirements.
- Providing education with a moral - cultural base and spiritual touch

Program Outcomes (POs)

ENGINEERING KNOWLEDGE : Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PROBLEM ANALYSIS : Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

DESIGN/DEVELOPMENT OF SOLUTIONS : Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

CONDUCT INVESTIGATIONS OF COMPLEX PROBLEMS : Use research based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

MODERN TOOL USAGE : Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

THE ENGINEER AND SOCIETY : Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

ENVIRONMENT AND SUSTAINABILITY : Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

ETHICS : Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

INDIVIDUAL AND TEAM WORK : Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

COMMUNICATION : Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PROJECT MANAGEMENT AND FINANCE : Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

LIFE-LONG LEARNING : Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Department of Mechanical Engineering

Vision

Producing competent and sustainable Mechanical Engineers through Excellence, Innovations and Ethics.

Mission

M1: Offering quality Education by competent faculty.
M2: Providing adequate infrastructure and learning ambience.
M3: Developing inclination towards higher education, research, entrepreneurship and professional ethics.
M4: Promoting interaction with industries.

Program Educational Objectives (PEOs)

PEO 1: Graduates will be pursuing successful career & higher education.
PEO 2: Graduates will be able to Design, Analyze, Fabricate & Manage Applications of Mechanical Engineering.
PEO 3: Graduates will display professional ethics to work in a team & lead the team by effectively communicating the ideas.
PEO 4: Graduates will practice lifelong learning.

Program Specific Outcomes (PSOs)

PSO1: Ability to acquire competencies in Designing, Analyzing and Evaluating the Mechanical Components.
PSO2: Ability to work professionally by applying Manufacturing and Management practices.

A CONCISE REPORT ON THE VISIT OF INDIA MANUFACTURING SHOW (IMS 2022)

Organized at

Bangalore International Exhibition Centre (BIEC)

(Tumakuru Main Road, Madavara Post, Dasanapura, Bangalore, Karnataka)

Facilitated By

Department of Mechanical Engineering

BGS INSTITUTE OF TECHNOLOGY

BG Nagara-571448

Introduction:

With the Divine Blessings of Paramapoojya Jagadguru Sri Sri Sri Dr. Nirmalanandanatha Mahaswamiji and Inspirational Perceptions of Dr. B. K. Narendra, Principal and Dean (Engineering and Management), BGSIT, ACU, Department of Mechanical Engineering has arranged One day visit to India Manufacturing Show (IMS 2022) organized at Bangalore International Exhibition Centre (BIEC), Bangalore on 16th September 2022. As per the directions of Dr. S.H. Manjunath, HOD, MED, Five faculty members, viz., Dr. Ranganatha Swamy. L, Dr. Hemaraju, Prof. B.L. Keerthi, Prof. T.C. Santhosh Kumar and Prof. Pradeep. H of MED along with Two Technical staff and 42 students of 7th Semester B.E, Mechanical visited Exhibition Show at 11:30 AM– 1:30 PM and came back to the Campus by College bus by 4:00 PM.

Venue:

BIEC complements its 40,000 sq.m of covered space in large aesthetically and functionally designed exhibition halls huge upper space area perfectly suitable for showcasing large and heavy machines. VIP Lounge and Business Centre are attached while every hall, in addition to exhibition management facilities.

Objectives:

The objective of IMS 2022 is to accelerate the manufacturing sector by bringing together the best minds, the best technologies and the best practices from across the globe while providing excellent Business and Knowledge sharing opportunities for all its participants. The central theme for IMS 2022 "MAKE IN INDIA, MADE FOR THE WORLD" is in tune with the clarion call given by Hon'ble Prime Minister Shri. Narendra Modi ji and to make MSME sector play pivotal role in Atmanirbhar Bharat Abhiyan.The MSME is the most dynamic industrial sector contributing to about 35% of India's manufacturing output. Further, there is a vision to enhance contribution of MSME's to over 50% in India's GDP.

The objective of the visit is to explore and understand the Advanced Technologies on Automation, Robotics, General Engineering, Aerospace and Defence Engineering.

Around 200 Manufacturing companies showcased their products in the show.

From this visit, we gathered informations over the working principle of advanced machines and their applications in the field of aerospace and defence engineering and role of automation and robotics in industries.

Report on Technical Talk conducted: ''Innovative Nano Materials for Domestic, Industrial & Healthcare Applications'' Organized by Department of Mechanical Engineering, BGSIT in association with Institution of Engineers (IE), Indian Society for Technical Education (ISTE), Institution Innovative Council (IIC) & Nano RAM Technologies, Bangalore on 21/09/2022 from 10.30 am to 12.30pm.

Dr. B K Narendra Principal & Dean, All the HOD's, Faculty members and around 65 students from 7th Semester Mechanical Engg, & PG students of Natural Science attended the Program.

Dr. A Phani Ratna, Founder, Managing Director of Nano RAM Technologies delivered the technical talk starting with the definition of nano materials, synthesis and application in Nano Chemical Technology, Nano Bio-Technology, Nano Agriculture Technology, Nano Coatings Technology, Nano Paints Technology, Nano Smart Materials Technology, Nano Defence/Aerospace Technology, Nano Food Technology. Also highlighted on research areas in Nano Technology with different funding Agencies, helpful for researchers.

Photographs of the Session

A CONCISE REPORT ON THE VISIT OF
CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE
(CFTRI- 2022) (MYSURU)

Facilitated By
Department of Mechanical Engineering
BGS INSTITUTE OF TECHNOLOGY
BG Nagara-571448

Introduction:

With the Divine Blessings of Parama poojya Jagadguru Sri Sri Sri Dr. Nirmalanandanatha Mahaswamiji and Inspirational Perceptions of Dr. B.K. Narendra, Principal and Dean (Engineering and Management), BGSIT, ACU, Department of Mechanical Engineering has arranged One day visit to CFTRI Mysuru on 27th September 2022. As per the directions of Dr. S.H. Manjunath, HOD, MED, 8 faculty members, viz., Dr. Manjunath S H, Dr. Girish K B, Dr. Ranganatha Swamy. L, Prof. B.L. Keerthi, Prof. T.C. Santhosh Kumar and Prof. Pradeep. H , Prof. Sharath S N, Prof. Hemanth C of MED along with two Technical staff and 40 students of 7th Semester B.E, Mechanical Engineering visited CFTRI open day at 11:30 AM– 2.00 PM and came back to the Campus by College bus by 4:30 PM.

Venue:

CSIR–Central Food Technological Research Institute (CFTRI), Mysore

(A constituent laboratory of Council of Scientific and Industrial Research, New Delhi) came into existence during 1950 with the great vision of its founders, and a network of inspiring as well as dedicated scientists who had a fascination to pursue in-depth research and development in the areas of food science and technology. Research focus of CSIR-CFTRI has been revolved around broadly into the following areas:

- Engineering Sciences
- Technology Development
- Translational Research
- Food Protection and Safety

Food Technology being inter-disciplinary in nature the mandate or vision of the Institute is fulfilled through various R&D Departments and Support Departments along with its Resource Centres at Hyderabad, Lucknow and Mumbai.

Objective:

The objective of the visit is to explore and understand the research and technology development is being undertaken in the areas of Food science and Technology and food processing work done by CFTRI as well some products and machinery developed. The main focus of the event is going to be the "Food Technology-Industry Connect". The theme pavilion showcase the information about CFTRI innovative technologies with relevance to Entrepreneurship.

From this visit, we gathered information's over the working principle of advanced machines and their applications in the field of food processing and technology and also Nano technology used in food industry.

A Technical Talk "Preparation of Metal Oxide Nano Materials as a Photo Catalyst for Hydrogen production and Electrode Materials for Lithium Ion Batteries" is organized by The Department of Mechanical Engineering, BGSIT in association with Institution of Engineers (IE), Indian Society for Technical Education (ISTE), Institution Innovative Council (IIC) & Center for Research and Innovation, Adichunchanagiri University on 28/09/2022 from 10.30 am to 11.45 am.

Dr Udayabhanu C Gowda, Post-Doctoral Fellow, Adichunchanagiri University delivered the technical talk on nano materials, synthesis & production of Hydrogen and Lithium. Also highlighted on research areas in Lithium-Ion Batteries: History, Synthesis of Lithium & Hydrogen batteries, Applications and Storage of Lithium & Hydrogen batteries in EVs is discussed.

Principal & Dean, HOD's, Faculty members and around 100 students from 7th Semester Mechanical Engg, & Civil Engineering have attended the Program.

Date: 04/11/2022

Quiz Competition Report

On behalf of celebration of Kannada Rajyotasava-2022, quiz competition was organized to 7th sem students on 04/11/20 22 at CAED Lab from 10.30 AM to 11.30 AM in the Department of Mechanical Engineering. The main objective of this event to make them aware of general knowledge in kannada literature. Totally 8 teams were participated in the event. Questions on Kannada Literature, Vyakarana, & Kavi-parichaya in terms of objectives were given to the students. Team no 3 i.e Mrs. Sinchana Aradhya S B & Mrs Jeevitha M T got the first prize in the event. Dr Ranganathaswamy L Associate Professor, MED distributes the participation certificates to all participants.

Photographs of the Session

Industrial Visit to GT&TC Bengaluru
Class: Mechanical Engineering 5 th Semester
Date: 23/11/2022
Faculty Members: Dr Hemaraju &Keerthi B L

The industrial visit was witnessed by 40 students of the class, who were accompanied by the faculty Dr. Hemaraju. All the students were very excited and left the campus on 23rd November 2022 at 9:30 am by bus.

Visit at GT&TC

We reached the GT&TC at 11.30 am. Deputy General Manager Mr Suresh B S received us at the entrance gave brief introduction about GT&TC. Then the batch of 40 was split into two batches. Mr Srinivas & Mr Anil K took them to explain the various activities involved in GT & TC. They were explained about the departments in GT&TC, projects handled in GT&TC, courses involved in GT&TC. They also explained about Siemens-GT&TC COE-Robotics lab. They also gave brief introduction how GT&TC will address high-tech industry segments viz., Automotive, Industrial machinery, Industrial automation, Aerospace & Defence also renewable energy. They had explained about collaboration of GT&TC-Siemens to train students on relevant industry processes and help create industry-ready trained personnel. From this there are better career opportunities for students and will eventually foster further industrial development in the state of Karnataka.

"NATIONAL INTEGRATION DAY"

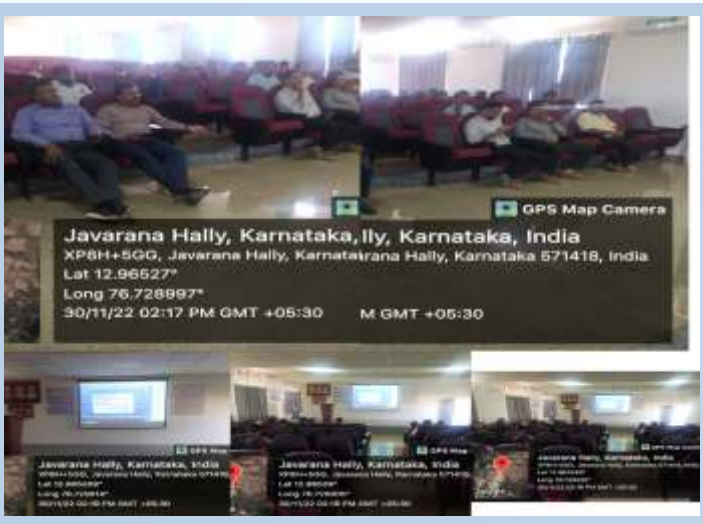
Report On National Integration Day
Date: 23rd December 2022
Venue: BGSIT, MED Seminar hall.
Time: 2.00 PM to 4.00 PM
Organizer: Mr. Sharath N
Assistant professor
Mechanical department

Department of Mechanical Engineering has conducted " National Integration day" for ME Students on 23rd Nov 2022 from 2:00 pm to 4:00 pm at MED Seminar Hall. The main objective of this is to inspire people to maintain unity, peace, love and brotherhood the day espouses the message of upholding unity and integrity among the citizens of India, regardless of caste, color, language, religion and social status & National Integration Day 2022 marks the 105th birth anniversary of Indira Gandhi. National integration refers to a situation in which people bind themselves as a whole by discarding all distinctions. On behalf of this organized Essay writing competition to 7th & 3rd sem students. Totally 40 students were participated in the event Mrs. Nikitha and Mr. Vinay got appreciated by staff members.

TECHNICAL TALK ON APPLICATIONS OF IOT IN FOUNDARY INDUSTRY

Department of Mechanical Engineering organized technical talk on 'Applications of IOT in Foundry Industry" on 30.11.2022 through online mode by Mr. Sivakumar Subbarayan, Vice president , JS Auto cast Pvt. Ltd., Coimbatore, with 36+ years of experience in Manufacturing organisations, in association with IIF Chapter Bangalore. He shared his experience in developing IOT and solving problems in the Foundries faced during the process of casting huge components.

He motivated all the students about 80+ from BGSIT, Mechanical Department to adopt learning IOT based projects like Mould flow analysis, Heat transfer in moulds, Temperature distribution, etc



NATIONAL SERVICE SCHEME
"Swachh Bharath Abhiyaan at bellur cross in association with Pattana Panchayath"

Report on NSS Activities
Date: 05th December 2022
Venue:Bellur cross to Bellur pattana panchayath.
Time: 10.00 AM to 01.30 PM
Organizer: Mr. Sharath N
Programme coordinator
NSS Unit-05
Mechanical department

NSS Unit volunteers of the BGSIT-ACU were actively involved in Swachh Bharat Abhiyaan activities, awareness on waste disposal (degradable and non-degradable) etc. NSS unit of BGSIT with Rotary Club, B G Nagar has organized cleanliness program at Bellur cross to Bellur pattana panchayath on 05th December 2022. 50 NSS volunteers were actively participated in removing the plastic garbage's such as plastic plates, cups, water bottles, plastic covers & others thrown by passengers on road. Volunteers collected 1 tractor of plastic garbage's from these 2.5 km premises. Teaching and non teaching faculties of BGSIT, Mechanical Dept. - Mr. Sharath N, Mr. Pradeep H, Mr. Santhosh Kumar TC were present & supported the students in the cleaning program. Panchayath Development Officer and Health inspector Dhanalakshmi is appreciated the NSS volunteers for their effort & selecting this area for the cleaning program. After the cleaning program small refreshment has been arranged for the NSS volunteers.

DESIGN AND INNOVATION CLINIC – 2023 REPORT

Date: 13/04/2023

Adichunchanagiri University, NAIN Centre BGS Institute of Technology BG Nagar participated in the Design and Innovation Clinic 2023 organized by Central Manufacturing Technology Institute (CMTI) at Yashwanthapura, Bangalore on 11-04-2023 to 13-04-2023 between 09:00 AM to 05:00 PM. Around 86 teams from different part of the state participated in the event. 12 teams registered from BGS institute of Technology .8 teams are shortlisted in the first round. Two teams are selected for the second round one each from computer science engineering department and the electronics and communication engineering. With the leadership of Dr. B K Narendra Dean Engineering & Management BGSIT, Dr.Girish.K.B. NAIN Coordinator& Mr. Amith B J DIA witnessing the event. BGS Institute of Technology was appreciated by CMTI for registering the highest number of projects and issued appreciation certificate and memento


DESIGN & INNOVATION CLINIC 2023


GPS Map Camera
Bengaluru, Karnataka, India
143, Platinum City, Peenya, Yeswanthpur, Bengaluru, Karnataka 560022, India
Lat 13.033196°
Long 77.534498°
11/04/23 12:00 PM GMT +05:30


GPS Map Camera
Bengaluru, Karnataka, India
2GMP+V7M, Yeshwanthpur Industrial Area, Phase 1, Yeswanthpur, Bengaluru, Karnataka 560022, India
Lat 13.035339°
Long 77.535765°
12/04/23 04:46 PM GMT +05:30


FLIGHT CONTROL ACTUATORS
GPS Map Came
Bengaluru, Karnataka, India
143, Platinum City, Peenya, Yeswanthpur, Bengaluru, Karnataka 560022, India
Lat 13.033191°
Long 77.5345°
11/04/23 12:01 PM GMT +05:30


GPS Map Camera
Bengaluru, Karnataka, India
2GMP+V7M, Yeshwanthpur Industrial Area, Phase 1, Yeswanthpur, Bengaluru, Karnataka 560022, India
Lat 13.034804°
Long 77.536128°
13/04/23 11:53 AM GMT +05:30


GPS Map Camera
Bengaluru, Karnataka, India
143, Platinum City, Peenya, Yeswanthpur, Bengaluru, Karnataka 560022, India
Lat 13.033169°
Long 77.534465°
11/04/23 12:06 PM GMT +05:30