

Since 1906

**Bearys**  
Education

Quality  
Personality  
Integrity

**Bearys**  
Institute of  
Technology (BIT)

Department of Mechanical Engineering

# BEACON

(Building Excellence in Advanced , Controlled and Optimized Engineering)

[Annual News Letter Volume 1, Issue 1/AY 2023-24]



Bearys Knowledge Campus, Lands End, Innoli, Near Mangalore University, Mangalore - 574199

# Bearys Institute of Technology

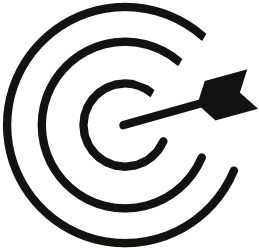
## VISION

To be a premier institution in engineering education and research, fostering innovation, societal responsibility, and ethical leadership for a sustainable future.

## MISSION

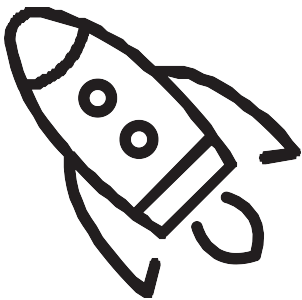
1. Promote innovation and cutting-edge research to develop sustainable engineering solutions for real-world and global challenges.
2. Cultivate ethical leadership and technical excellence among students to become responsible and leading engineering professionals.
3. Encourage active societal engagement and industry collaboration to drive inclusive growth and environmental responsibility.

# Mechanical Engineering Department



## VISION

To create a sustainable future by producing world-class mechanical engineers who can contribute towards a progressive, peaceful and greener world.



## MISSION

1. To provide students with necessary skills and knowledge to design and develop innovative mechanical systems that are environment friendly.
2. To provide students and faculty members with opportunities for professional development and support in research, innovation, and entrepreneurship.
3. To provide a supportive learning environment through well qualified faculty members and state-of-the-art laboratories that encourage students to think critically and creatively, and to engage in real-world problem-solving.

# Content

- Editor's Message
- Principal's Message
- HOD's Message
- Department Overview
- Mechanical Engineering  
Students Association (MESA)
- Faculty Achievements
- Funded Projects
- Industrial Visits
- Student's Achievement
- Student Testimonial

# Editor's Message



Dear Reader,

I am delighted to present the inaugural edition of the Department of Mechanical Engineering newsletter. This publication aims to provide you with a comprehensive overview of the dynamic activities and achievements within our department.

In this first issue, we have highlighted a range of engaging events and initiatives, including seminars, guest lectures, project exhibitions, industrial visits and sports activities of Mechanical Engineering Department.

We hope this newsletter serves as a valuable resource, offering insights into the many ways our department is making an impact from academic discussions to extracurricular events, each feature reflects the spirit of innovation and collaboration that defines our community.

We look forward to your continued engagement and support as we celebrate our accomplishments and share exciting updates in future editions.

Thank you for your enthusiasm and commitment to the Department of Mechanical Engineering.

**Dr. Mohamed Kafeel Delvi**  
**Editor-in-Chief**

# Principal's Message



I am delighted about the initiative to introduce the Department of Mechanical Engineering annual newsletter, BEACON. The credit goes to the editorial committee members and the Department coordinator who have put in their best efforts to collect the information and present it in the best possible way in a very short period. The enthusiasm shown by each one of them is commendable.

The department intends to collect information such as activities conducted, student and faculty achievements, Research paper Publications , Patent and Research activities share it with all the stakeholders. I anticipate that this will foster healthy competition among the departments, encouraging them to be more proactive and strive for excellence in all areas.

My best wishes to the Department of Mechanical Engineering on launching this newsletter.

**Dr. S. I. MANJUR BASHA**

# HOD'S Message



It is with great pleasure that I present the first edition of our departmental newsletter. The Department of Mechanical Engineering has made significant strides in recent years, fostering strong connections with a diverse range of industries. These partnerships have been instrumental in tailoring our programs to meet the evolving needs of industry professionals. Our commitment to consultancy and collaborative research with esteemed industrial partners has enriched our department with invaluable insights and opportunities for innovation.

Our department is dedicated to enhancing the educational experience of our students. We are currently offering value-added courses on Artificial Intelligence and Management to ensure they stay ahead in a rapidly changing technological landscape. Additionally, we regularly organize technical symposiums, workshops, industrial visits, and internships to provide practical exposure and update technical skills in alignment with industry expectations.

Our faculty members remain deeply engaged in research activities, contributing to reputable journals, securing patents, and leading funded projects. These efforts not only advance knowledge but also keep us at the forefront of technological developments. As we move forward, I extend my heartfelt best wishes for the continued growth and success of our department. Together, we will continue to foster excellence and drive innovation in the field of Mechanical Engineering.

**Dr. VASANTHA KUMAR**

# Department Overview

The Department of Mechanical Engineering was established in the academic year 2010. It currently has an intake capacity of 60 undergraduate students for the B.E. program and 9 postgraduate students for the M.Tech program in Machine Design. The department is also a VTU-recognized research center. The Department has a team of dedicated teaching and non-teaching staff members and also bestowed with an honor of having Doctorates in its team whose major research areas include Design Engineering, Thermal Engineering, Non-Conventional Engineering, Advanced Materials and Computer Integrated Manufacturing.

The Department is having state of art laboratory facilities at the under graduate and post graduate program. "SUPERSONIC AERODYNAMIC RESEARCH LABORATORY", a rare of its kind setup was developed in the department to enhance and create opportunity for enthusiastic and dynamic researchers in the area of jet tests, ballistics, projectiles and wind tunnels.

Department aims to the overall growth of the students through activities like industrial visit, add on course, project exhibition, technical quiz, poster presentation contest throughout the year. Technical talks on Emerging Technologies are arranged by inviting Experts from reputed institutions like NIT's, IIT's and Industries.

To enhance industry-institute interaction, industrial visits and internship programs are arranged in the reputed industries for the benefit of student fraternity. The department has pledged to develop its students into the best engineers in society, instilled with strong human values, who will serve the nation as a whole.

# Mechanical Engineering Staff



## Teaching Staff

Sl. No.	Name	Designation	Qualification	Experience (Years)
1	Dr. Vasantha Kumar	Associate Professor & HOD	B.E, M.Tech, Ph.D	19
2	Dr. Imran Mokashi	Associate Professor	B.E, M.Tech, Ph.D	17
3	Dr. Mohamed Kafeel Delvi	Associate Professor	B.E, M.Tech, Ph.D	12
4	Prof. Arvind Kumar	Assistant Professor	B.E, M.Tech, (Ph.D)	13
5	Prof. Manjunath Ichchangi	Assistant Professor	B.E, M. Tech, (Ph.D)	14
6	Prof. Vinod Kumar N	Assistant Professor	B.E, M.Tech,	8
7	Prof. Gokuldas M	Assistant Professor	B.E, M.Tech, (Ph.D)	11
8	Prof. Prithviraj M	Assistant Professor	B.E, M.Tech (Ph.D)	8
9	Dr. Sandeep Nambiar S	Assistant Professor	B.E, M.Tech, Ph.D	5

## Technical Staff

1	Mr. Clement Varthika	Foreman	Diploma	18
2	Mr. Abdul Sathar	Lab instructor	Diploma	23
3	Mr. Bharathraj	Lab instructor	Diploma	2

## Supporting Staff

4	Mr. Yogesh	Attender	SSLC	8
---	------------	----------	------	---

# Mechanical Engineering Students Association (MESA)



**Dr. Imran Mokashi**  
**MESA Coordinator**

The Mechanical Engineering Students Association (MESA) is a platform created to enhance the learning experience of our students by blending academic knowledge with practical exposure. At MESA, we believe in fostering an environment where students of Mechanical Engineering can actively engage in co-curricular activities that not only complement their classroom learning but also prepare them for the challenges of the industry. Our aim is to encourage collaboration, innovation, and leadership among students, offering them opportunities to participate in technical workshops, seminars, industrial visits, and project exhibitions.

Through these initiatives, MESA strives to develop a well-rounded skill set in our students, making them industry-ready professionals. As the coordinator of MESA, I am excited to share the work and achievements during the academic year 2023-24 in this newsletter of Mechanical Engineering department.

Sl. No.	Name of the faculty	Designation	
<b>Executive Committee</b>			
1	<b>Dr. Vasantha Kumar</b>	HOD	President
2	<b>Dr. Imran Mokashi</b>	Associate Professor	MESA-Coordinator
3	<b>Prof. Vinod Kumar N.</b>	Assistant Professor	Treasurer
4	<b>Prof. Arvind Kumar</b>	Assistant Professor	Member
5	<b>Prof. Manjunath Ichchangi</b>	Assistant Professor	Member
6	<b>Dr. Mohamed Kafeel Delvi</b>	Associate Professor	Member
7	<b>Prof. Gokuldas M</b>	Assistant Professor	Member
8	<b>Prof. Prithviraj M</b>	Assistant Professor	Member
9	<b>Dr. Sandeep Nambiar</b>	Assistant Professor	Member
<b>Student Committee</b>			
1	<b>Mr. Syed Tanveer Ahamed</b>	4 <sup>th</sup> year	Chairperson
2	<b>Mr. Shahejahan</b>	4 <sup>th</sup> year	Vice Chair & Secretary
3	<b>Mr. Ismail Afraz</b>	4 <sup>th</sup> year	Treasurer
4	<b>Mr. Hashir</b>	4 <sup>th</sup> year	Member
5	<b>Mr. Zawed</b>	4 <sup>th</sup> year	Member
6	<b>Mr. Zamshed</b>	4 <sup>th</sup> year	Member
7	<b>Mr. Akeel</b>	4 <sup>th</sup> year	Member
8	<b>Mr. Amir Hussain</b>	4 <sup>th</sup> year	Member
9	<b>Mr. Hayyan Akhtar</b>	3 <sup>rd</sup> year	Member
10	<b>Mr. Sayyad Rameez K R</b>	3 <sup>rd</sup> year	Member
11	<b>Mr. Mahin Sahal</b>	3 <sup>rd</sup> year	Member
12	<b>Mr. Mohd Kunhi Ameen</b>	2 <sup>nd</sup> year	Member
13	<b>Mr. Abdul Rahman Shafeeq</b>	2 <sup>nd</sup> year	Member

# Inauguration of Mechanical Engineering Students Association

## MESA 2023-24

The event began with Mr. Shahejahan, Master of Ceremony, addressing the gathering and introducing MESA. This was followed by the invocation led by the prayer team under Ms. Shabana, creating a solemn and respectful atmosphere.

A video presentation highlighting the activities conducted by the Department of Mechanical Engineering during the academic year 2022–23 was then screened for the audience.

Dr. Vasantha Kumar, Head of the Department of Mechanical Engineering, delivered the welcome address. The formal inauguration of MESA 2023–24 was carried out through the ceremonial watering of a plant by the dignitaries, symbolizing growth and new beginnings. On this occasion, Dr. S. I. Manjur Basha, Principal of BIT, along with the Chief Guest, Dr. Kumar G. N, unveiled the new logo of the MESA forum.

Following the inauguration, the MESA Coordinator, Dr. Imran Mokashi, briefed the gathering about the functioning of MESA and its various committees. The student office bearers were then presented with designation badges by the Principal, BIT. Dr. Imran Mokashi subsequently administered the oath to the faculty members and students of the Department of Mechanical Engineering.

Dr. Mohamed Kafeel Delvi introduced the Chief Guest to the gathering. Dr. Kumar G. N then delivered his keynote address, where he appreciated the contributions of Indian engineers and institutions from tier-2 and tier-3 cities towards nation-building. He encouraged students to develop both their technical and administrative skills.

In his address, the Principal of BIT, Dr. S. I. Manjur Basha, appreciated the department's efforts and motivated students to actively participate in such initiatives for their overall development.

The department also celebrated a significant achievement — the successful completion of PhD by Dr. Mohamed Kafeel Delvi. The dignitaries felicitated him in recognition of his academic accomplishment.



Unveiling of NEW LOGO



Welcoming Chief Guest



Principal's Address

# Freshers's Day



The much-awaited “ARAMBHAM” Freshers’ Day for second-year Mechanical Engineering students was conducted as a lively and engaging event designed to build camaraderie and guide students as they began a new phase of their academic journey.

The program was inaugurated by the Head of the Department, Dr. Vasantha Kumar, who warmly welcomed the students and officially opened the event. In his address, he encouraged the students to embrace the opportunities and challenges that lie ahead in the field of Mechanical Engineering. He emphasized the importance of collaboration, innovation, and maintaining a strong passion for learning. His motivating words set a positive and inspiring tone for the rest of the program.

Following the inaugural address, the event moved into an interactive segment featuring a variety of fun games and team-building activities. These activities were thoughtfully designed not only for entertainment but also to strengthen teamwork, communication, and problem-solving skills among the students. The sessions helped the freshers connect with their peers, creating a friendly and supportive atmosphere within the department.

Overall, ARAMBHAM successfully blended motivation, interaction, and enjoyment, making it a memorable and meaningful start for the second-year Mechanical Engineering students.

# VANAMAHOTSAVA



The "VANAMAHOTSAVA" celebration organized by MESA and the NSS Unit of BIT Mangalore, was held on July 4, 2024. The event aimed to instill a sense of environmental responsibility and encourage active participation in nature conservation initiatives.

Dr. Vasantha Kumar, Head of the Department of Mechanical Engineering, extended a warm welcome to all the attendees. The event was graced by the Chief Guest, Dr. Prashanth Naik, Professor in the Department of Biosciences at Mangalore University.

In his address, Dr. Naik highlighted the importance of nature conservation and appreciated BIT Mangalore for adopting sustainable practices on its campus. He encouraged students to take active responsibility in protecting the environment and promoting green initiatives.

Dr. S. I. Manjur Basha, Principal of BIT Mangalore, also addressed the gathering and emphasized the need for regular participation in such eco-friendly activities to build environmental awareness and responsibility among students. As part of the initiative, more than 25 saplings were planted on the occasion, marking a meaningful step toward a greener campus.

# Project EXPO 2024



The Department of Mechanical Engineering organized the Final Year Students' Project Exhibition — "PROJECT EXPO 2024" for the students of Mechanical Engineering.

The program was graced by Dr. Manjappa Sarathy, Director – Research and Consultancy, Sahyadri College of Engineering and Management, Mangalore, as the Chief Guest.

The event was presided over by Dr. Aziz Mustafa, Vice Principal, Bearys Institute of Technology, Mangalore, along with the Head of the Department of Mechanical Engineering, BIT Mangalore.

The inauguration ceremony was held at the International Seminar Hall, BIT, on 27th May 2024.

The event commenced at 10:00 A.M. with Mr. Hayyan Akhtar, a 6th Semester Mechanical Engineering student, serving as the Master of Ceremony.

He initiated the program by welcoming the gathering, introducing the event, and escorting the dignitaries to the dais.

The invocation was rendered by Ms. Aksha and team from the Department of Computer Science and Engineering, creating a pleasant and respectful atmosphere for the program

The program was welcomed by Dr. Vasantha Kumar, HOD, Department of Mechanical Engineering, BIT Mangalore. Vice Principal Dr. Aziz Mustafa gave the inaugural speech, in which he briefed about the importance of project work also he congratulated the Mechanical engineering department for providing platform for students to showcase their innovative ideas.

Dr. Manjappa Sarathy addressed the students and discussed the importance of project work and briefed about the funding opportunities for student projects from state government and central government and also shared knowledge of patent registration, start up and government schemes for students ideas.

Chief Guest, Vice Principal BIT, HOD Mechanical Engineering department along with faculty members of Mechanical department and other departments visited BIT ARENA where final year students demonstrated their project work. Chief Guest Dr. Sarathy Manjappa and Dr.Aziz Musthafa , Vice Principal BIT appreciated the projects.



# Entrepreneurship & Start-up

The Department of Mechanical Engineering at BIT (Bearys Institute of Technology) in collaboration with the Institutions Innovation Council (IIC) organized a workshop titled "Entrepreneurship, Skill, Attitude, and Behavior Development" on February 22, 2024.

The workshop aimed to inspire students to develop an entrepreneurial mindset and cultivate essential skills and attitudes for success in their careers. Dr. Imran Mokashi, the IIC President and Convener of BIT, played a pivotal role in coordinating the workshop, ensuring its smooth execution. Dr. Vasantha Kumar, the Head of the Department of Mechanical Engineering, welcomed the attendees warmly, setting the tone for the event. The Presidential address was delivered by Dr. S I Manjur Basha, the Principal of BIT, who emphasized the importance of fostering an entrepreneurial spirit among students. The workshop featured distinguished speakers who shared their experiences and insights with the students. Mr. Rajarama C G, CEO of Ecobliss, delivered a motivational talk, encouraging students to envision themselves as entrepreneurs dedicated to serving their community and nation. Mr. Donson D'Souza, Chief Operating Officer & Client Relations at Blackfrog Technologies Pvt. Ltd., engaged with the attendees, sharing his experiences in research and development, notably in creating "The Portable Medical-Grade Refrigerator" used for storing and transporting vaccinations and organs. The workshop concluded with Dr. Sandeep Nambiar S delivering a heartfelt vote of thanks.



**Principal Welcoming Mr. Rajaram, CEO Ecobliss**



**Principal Welcoming Mr. Donson D'Souza, COO BlackFrog Tech.**



# World Green Building Week - 2023



The Department of Mechanical Engineering successfully organized World Green Building Week on 15th September 2023 for the students and staff of the department. The program witnessed active participation from both students and faculty, contributing to its overall success.

As part of the observance, an awareness program titled “Stop Plastic Pollution – Be a Part of the Green Solution” was conducted to promote environmental responsibility and sustainable practices. In support of this initiative, clay water dispensers were distributed to various institutes across the Bearys Knowledge Campus, encouraging the reduction of plastic usage.

The program was formally inaugurated by Dr. S. I. Manjur Basha, Principal of BIT, who appreciated the department’s initiative in organizing such an environmentally significant event and encouraged continued efforts toward sustainability.

The event was coordinated by Prof. Arvind Kumar, Assistant Professor, Department of Mechanical Engineering.



**Principal Addressing**



**A Clay Water Dispenser**

# “SAYONARA” Farewell Function

The 2nd and 3rd year students of the Department of Mechanical Engineering organized a farewell function for the final-year outgoing students under the theme “SAYONARA.” The event was a heartfelt occasion filled with appreciation, memories, and good wishes. The program was anchored by Mr. Hayyan Akhtar of 6th semester, who served as the Master of Ceremony. The gathering was welcomed by Mr. Faiz of 4th semester.

The Head of the Department, Dr. Vasantha Kumar, addressed the students with warm and encouraging words. He expressed his gratitude to the outgoing students for their contributions to the department and wished them great success in their future endeavors.

The function was graced by Dr. Manjappa S, Director – Research and Consultancy, Sahyadri College of Engineering and Management, as the Chief Guest. In his address, he encouraged students to nurture curiosity and develop an interest in research. Dr. Mohamed Kafeel Delvi, Assistant Professor, shared his experiences with the graduating batch and spoke fondly about their four-year journey in the department. The outgoing students expressed their gratitude and shared their memorable experiences in the department and institute. To make the occasion lively and enjoyable, the pre-final year students organized a variety of fun activities and entertainment programs for the final-year students. The event was attended by faculty members and students, creating a warm and friendly atmosphere. The farewell function turned out to be a memorable occasion that strengthened bonds and served as a cheerful and heartfelt send-off to the outgoing students.



Chief Guest Address



Final Year Students

# MECHSPO - 2K24



The Department of Mechanical Engineering successfully organized the Sports Day “MECHSPO-2K24” on 7th March 2024 for the students and staff of the department. The event witnessed enthusiastic participation from both students and faculty, contributing to its grand success. The indoor games included Chess, Carrom, Shuttle Badminton, and Ludo, while the outdoor events comprised Cricket, Football, and Volleyball. The competitions promoted teamwork, sportsmanship, and a healthy competitive spirit among the participants.

The event was inaugurated by Dr. Aziz Mustafa, Principal, Bearys Institute of Emerging Sciences, along with Dr. Vasantha Kumar, Head of the Department of Mechanical Engineering, who addressed the gathering and encouraged everyone to actively participate in sports alongside academics. Mr. Prithviraj M, Director, BIT Polytechnic, was also present and witnessed the sports meet.

Prof. Gokuldas M, Assistant Professor, Department of Mechanical Engineering, served as the coordinator of the event and ensured the smooth conduct of all activities.

The valedictory ceremony was held in the evening, during which winners were honored with medals and trophies. The title of Overall Champions was secured by Team Drillers. The program was hosted by Mr. Faiz, a second-year Mechanical Engineering student.

# Indoor Games



Ludo



Chess



Carrom

# Outdoor Games



Football



Prize Distribution

# FDP & Workshop attended by Faculty

Sl. No	Faculty Name	Details
1	<b>Dr. Vasantha Kumar</b>	<ul style="list-style-type: none"> <li>• Advancement and Application of Artificial Intelligence and Machine Learning, DY Patil College of Engineering, Pune</li> <li>• Vehicular Vibration Control with Modern Suspension System, NIT Karnataka</li> <li>• Advancements and Application of Artificial Intelligence and Machine Learning, Smt. Kashibai Navale College of Engineering, Pune</li> </ul>
2	<b>Dr. Imran Mokashi</b>	<ul style="list-style-type: none"> <li>• The ABC of Accreditations (NAAC), Association of Muslim Professionals, Maulana Azad University, Jodhpur</li> <li>• Round 2 NAAC Accreditation – Way Forward to Quality Education, Aligarh Muslim University, Malappuram, Kerala</li> </ul>
3	<b>Dr. Sandeep Nambiar</b>	<ul style="list-style-type: none"> <li>• Advancements and Application of Artificial Intelligence and Machine Learning, Smt. Kashibai Navale College of Engineering, Pune</li> <li>• Advance Manufacturing and Material Processing, Anant Gyan Knowledge and Skill Development</li> </ul>
4	<b>Dr. Mohamed Kafeel Delvi</b>	<ul style="list-style-type: none"> <li>• The ABC of Accreditations (NAAC), Association of Muslim Professionals, Maulana Azad University, Jodhpur</li> <li>• Modeling and Design for Manufacturing Excellence Using Fusion 360, SDI Mangalore</li> <li>• Introduction to Modeling and Design for Manufacturing Using Fusion 360 Autodesk, AIT Mangalore</li> </ul>
5	<b>Mr. Manjunath Ichchangi</b>	<ul style="list-style-type: none"> <li>• Introduction to Psychology, NPTEL</li> <li>• Psychology of Everyday Life, NPTEL</li> </ul>

# Faculty Achievement

## Dr. Mohamed Kafeel Delvi Felicitated by Honorable Speaker for the Ph.D Award



**Honorable Vidhansaba speaker Mr. U T Khader , Chairman, Principal with other dignitaries felicitating Dr. Mohamed Kafeel Delvi on the completion of Ph.D**

Dr.. Mohamed Kafeel Delvi, a faculty member in the Department of Mechanical Engineering at Bearys Institute of Technology (BIT), was conferred with a Ph.D. The dissertation, titled "Studies on Mechanical and Tribological Behavior of ZA27/MoS<sub>2</sub> Hybrid Composite," was completed under the guidance of Dr.. K Mohamed Kaleemulla from Visvesvaraya Technological University, Belgaum (VTU).

# State Level Funds Santioned

## 47th series of Student Project Program (SPP): Under KSCST

2023-24- List of Student Project Proposals Approved for Sponsorship Indian Institute of Science  
Campus, Bengaluru – 560 012

Website: [www.kscst.org.in](http://www.kscst.org.in), <https://kscst.karnataka.gov.in> | Email: [spp@kscst.org.in](mailto:spp@kscst.org.in)

Sl. No.	Project Code	Project Title	Team Members	Amount
1	47S_BE_2983	DESIGN AND FABRICATION OF PORTABLE WIND ENERGY CONSERVATION SYSTEM FOR STREET ELECTRICAL LIGHTING	<b>Guide: Dr. IMRAN MOKASHI</b> <b>Team:</b> <ul style="list-style-type: none"><li>•Mr. MK SYED TANVEER AHMED</li><li>• Mr. MOHAMMED SHAHE JAHAN</li><li>•Mr. MD ZAWED EQUBAL</li><li>•Mr. MAHAMM</li></ul>	Rs. 7,000.00
2	47S_BE_3957	CONVERTED TO DRINKING WATER USING PEDAL POWER WITH SOLAR POWER	<b>Guide: Dr. MOHAMED KAFEEL DELVI</b> <b>Team:</b> <ul style="list-style-type: none"><li>•Mr. MAHAMMAD ASHFAK,</li><li>•Mr. AHMED SHAHIN</li><li>•Mr. MAHAMMAD FAZIL,</li><li>• Mr. MAHAMMAD ZAMSHID</li></ul>	Rs. 7,000.00
3	47S_BE_1544	DESIGN AND FABRICATION OF BEACH CLEANING ROBOT	<b>Guide: Dr. SANDEEP NAMBIAR S</b> <b>Team:</b> <ul style="list-style-type: none"><li>• Mr. ABDULLA JUNAID CH,</li><li>• Mr. MOHAMMED AZZAH K.A.,</li><li>•Mr. PAWAN KUMAR</li></ul>	Rs. 7,000.00

# VGST Fund Applied

- 1) Compact Robotic Approach to efficient agriculture

Principal Investigator: Prof. Prithviraj

Co-Principal Investigator: Dr. Vasantha Kumar

- 2) Design and fabrication of beach cleaning robot Principal

Investigator: Dr. Sandeep Nambiar S Co-Principal Investigator: Prof.  
Gokuldas

- 3) Solar Operated Unmanned Boat Weed cutter and waste plastic bottle collector for Netravati River in Adyar Bridge, Mangalore.

Principal Investigator: Prof. Arvind Kumar

Co-Principal Investigator: Prof .Manjunath Ichchangi

- 4) Design and Analyses of wind energy generation system at variable pressure

Principal Investigator: Dr. Mohamed Kafeel Delvi

Co-Principal Investigator: Dr. Imran Mokashi

# International Papers Published

Sl. No.	Author	Title of Paper	Publication citation	Co-Author
1	Dr.Vasantha Kumar	In-Vitro Biocompatibility Study and Comparison of Magnesium AZ31 and PEEK 450G Biomaterials Used as Cardiovascular Stent Implants	Journals of Mines Metal & Fuels, Vol 71, Issue 1, April 2023, PP 66-72	<ul style="list-style-type: none"> <li>• C. M. Ramesha,</li> <li>• V. Sharanraj,</li> <li>• Sadashiva M</li> <li>• Kavya K</li> </ul>
		Design and Fabrication of Electric Carrier Vehicle	Gradiva Review Journal, Vol 9, Issue 5, May 2023, pp 1025-1031	<ul style="list-style-type: none"> <li>• Ahammed Bilal,</li> <li>• Abdul Rahiman Rasheeq B L,</li> <li>• Hasan Ashiqu</li> <li>• Mohammed Hashir C A</li> </ul>
		Study of Mechanical behavior of 3D printed PLA Material manufactured by Fused Deposition Model Technique	International journal of Scientific Research in Engineering and Management Vol 8, May 2024, pp 1-4.	<ul style="list-style-type: none"> <li>• C. M. Ramesha,</li> <li>• Sharanraj,</li> <li>• Sadashiva</li> <li>• Kavya K</li> </ul>
2	Prof.Arvind Kumar	Smart Beach Cleaning Machine	Gradiva Review Journal, Vol 9, Issue 5, May 2023, pp 1454-1460	<ul style="list-style-type: none"> <li>• Vasantha Kumar,</li> <li>• Manjunath Ichchangi,</li> <li>• D Dritha Kumar</li> <li>• Dinakara</li> <li>• Prashanth Kutinha</li> </ul>

Sl. No.	Name	Title of Paper	Publication citation	Co-Author
3	Prof. Manjunath Ichchangi	Solar Powered Chicken Shop Waste Crusher and Fertilizer Making Machine	Gradiva Review Journal, Vol 9, Issue 5, May 2023, pp 1450-1453	<ul style="list-style-type: none"> <li>• Arvind Kumar,</li> <li>• Vasantha Kumar,</li> <li>• Mohammed Shakir Ali,</li> <li>• Imthiya Ahammad,</li> <li>• Niyaz Ahammad</li> <li>• Nazeeb Ahammad Shafeeq</li> </ul>
4	Prof. Gokuldas M	Design and Fabrication of Low Cost Electric Operated Tricycle Cart for Village Farmers	Gradiva Review Journal, Vol 9, Issue 5, May 2023, pp 1397-1404	<ul style="list-style-type: none"> <li>• Vasantha Kumar</li> <li>• Ibrahim Khaleel,</li> </ul>
5	Dr. Sandeep Nambiar S	A Study to Investigate the Influence of Machining Parameters on Delamination in the Abrasive Water jet Machining of Jute-Fiber Reinforced Polymer Composites: An Integrated Taguchi and Response Surface Methodology (RSM) Optimization to Minimize Delamination	Journal of Composites Science, Vol 7, Issue 11, Nov 2023, pp 475	<ul style="list-style-type: none"> <li>• BRN Murthy,</li> <li>• Ssthis Rao U,</li> <li>• Nithidh Naik,</li> <li>• SR Potti,</li> </ul>

Sl. No.	Name	Title of Paper	Publication citation	Co-Author
		Study on Mechanical Characteristics of TiB <sub>2</sub> , WC, ZrB <sub>2</sub> and B <sub>4</sub> C Reinforced Al 2XXX, 6XXX and 7XXX Series Alloys—A Systematic Review	Advances in Modelling and Optimization of Manufacturing and Industrial Systems, Vol 1, Issue 1, Nov 2023, pp 393-403	BM Karthik, K Nithesh, S Sharma, D Srinivas,
	Dr..Sandeep Nambiar S	Mechanical and microstructural analysis of cobalt coated CNT/Al <sub>2024</sub> reinforced aluminum based composites for aerospace and automotive applications	Publication date 2024/12/8 Journal Cogent Engineering Volume 11 Issue 1 Pages 6 Publisher Taylor & Francis	Kathik BM

# Patent

Name	Title	Patent Number	Date	Publisher
Dr. Vasantha Kumar	Dewtor – Economically Feasible Optimistic Low Cost High Strength Dew Collector	202341052650 A	Application Date: 04/08/2023 Publication Date: 01/09/2023	Controller General of Patents, Designs and Trade Marks, India



Office of the Controller General of Patents, Designs & Trade Marks  
Department of Industrial Policy & Promotion,  
Ministry of Commerce & Industry,  
Government of India

(<http://ipindia.nic.in/index.htm>)



(<http://ipindia.nic.in/index.htm>)

## Application Details

APPLICATION NUMBER	202341052650
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	04/08/2023
APPLICANT NAME	1 . Dr.Vinay S 2 . Dr. SADASHIVA MARIVIAH 3 . PES College Of Engineering 4 . Dr. SRINIVASA M R 5 . Mrs. INDIRA M 6 . Dr. SHIVANAND H K 7 . Mr. GOURAB SAMAJDAR 8 . Dr. PRAVEEN KUMAR S 9 . Dr. SANTHOSH V 10 . Dr. VASANTHA KUMAR 11 . Mr. SIDDESH KUMAR N M 12 . Dr. D VIJAYASREE 13 . Mr. DEEKSHITH M V
TITLE OF INVENTION	DEWTOR - ECONOMICALLY FEASIBLE OPTIMISTIC LOW COST HIGH STRENGTH DEW COLLECTOR
FIELD OF INVENTION	CIVIL
E-MAIL (As Per Record)	sadashiva015@gmail.com
ADDITIONAL-EMAIL (As Per Record)	siddusiddeshnm@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	

# Industrial Visits

Sl. No.	Industry	Date	Semester
1	Varahi Hydro Electric Power Plant (VHEP), Hosangadi	15 June 2023	8th
2	KEI Electrical Machines Ltd.	5 Dec 2023	7th
3	Lamina Foundries Ltd.	13 Feb 2023	3rd
4	Eco Bliss	19 Jan 2024	4th
5	Deccan Plastic Industries Pvt. Ltd.	19 Jan 2024	4th
6	Compco Chocolate Factory	13 Jan 2024	6th
7	Shakti Tool	11 July 2024	6th
8	Gurucharan Industries	11 July 2024	4th
9	GTTC	11 July 2024	3rd

# Industrial Visits



**Varaahi Hydro Electric Power Plant**



**KEL Electrical Machines Ltd.**

# Industrial Visits



Lamina industry



Eco bliss industry

# Industrial Visits



COMPCO chocolate factory



Deccan Plastic industry

# Industrial Visits




GTTC industry



Shakti industry

# Student's Achievement

## Students Qualified in GATE and IELTS Exams



### GRADUATE APTITUDE TEST IN ENGINEERING 2024

अभियांत्रिकी स्नातक अभिक्षमता परीक्षा २०२४  
ORGANISING INSTITUTE: INDIAN INSTITUTE OF SCIENCE, BENGALURU

#### SCORE CARD

Name of the Candidate  
**AHMAD AZWEER**

Name of the Parent/Guardian  
**UMMAR FAROOQ**


Registration No. **ME24521332033**

Test Paper  
**Mechanical Engineering (ME)**


Date of Examination **February 3, 2024**

GATE Score	<b>334</b>	Marks out of 100	<b>27.33</b>
All India Rank (AIR) in the test paper	<b>9047</b>	Qualifying Marks	
		General	<b>28.6</b>
		EWS/OBC-NCL	<b>25.7</b>
		SC/ST/PwD	<b>19.0</b>

Number of candidates appeared for the test paper **65546**



Prof. Chandra Sekhar Seelamantula  
Organising Chairperson, GATE 2024  
On behalf of NCB-GATE  
Ministry of Education (MoE)



05546546647710338232637571551

A candidate is considered **qualified** if the marks secured are greater than or equal to the qualifying marks mentioned for the category, for which a valid category certificate, if applicable, must be produced along with this Score Card.

This Score Card is valid up to 31<sup>st</sup> March 2027.

# IELTS<sup>™</sup>

## Test Report Form

ACADEMIC

**NOTE** Admission to undergraduate and post-graduate courses should be based on the ACADEMIC Reading and Writing Modules. GENERAL TRAINING Reading and Writing Modules are not designed to test the full range of language skills required for academic purposes. It is recommended that the candidate's language ability as indicated in this Test Report Form be re-assessed after two years from the date of the test.


Centre Number **INB55** Date **07/JAN/2023** Candidate Number **721311**

### Candidate Details

Family Name **MUNGATH**

First Name **VANASYAM**

Candidate ID **W6017169**



Date of Birth **07/11/2000** Sex (M/F) **M** Scheme Code **Private Candidate**

Country or Region of Origin

Country of Nationality **INDIA**

First Language **MALAYALAM**

### Test Results

Listening	<b>8.5</b>	Reading	<b>7.5</b>	Writing	<b>6.5</b>	Speaking	<b>7.5</b>	Overall Band Score	<b>7.5</b>	CEFR Level	<b>C1</b>
-----------	------------	---------	------------	---------	------------	----------	------------	--------------------	------------	------------	-----------

# Placement : 2023-24



**Mr. Mohammed Shahe Jahan**  
Fujitech India Pvt. Ltd.



**Mr. Md Zawed Equbal**  
Fujitech India Pvt. Ltd.



**Mr. Mohammed Ziyad**  
Fujitech India Pvt. Ltd.



**Mr. MK Syed Tanveer Ahmed**  
Fujitech India Pvt. Ltd.



**Mr. Mohammed Fazil**  
Fujitech India Pvt. Ltd.

# Academic Toppers

## 8th Semester



Mr.AKEEL FAHIM(92.40%)  
(4BP20ME001)



Mr. D ZAWED EQBAL(91.20%)  
(4BP21ME004)



Mr.MOHAMMED SHAHE  
JAHAN(90.60%)  
(4BP22ME011)

## 7th Semester



Mr.MAHAMMAD SHAFI (86.87%)  
(4BP21ME406)



Mr.AKEEL FAHIM(92.40%)  
(4BP20ME001)



Mr. D ZAWED EQBAL(91.20%)  
(4BP21ME004)

# Academic Toppers

## 6th Semester



**Mr. UMAR FAROOQ (85%)**  
**(4BP21ME015)**



**Mr. ABDUL SAMAD A (80%)**  
**(4BP22ME400)**



**Mr. SHAREEFUL THOUZEEM (79%)**  
**(4BP21ME011)**

## 5th Semester



**Mr. UMAR FAROOQ (85%)**  
**(4BP21ME015)**



**Mr. HAYYAN AKHTAR (80%)**  
**(4BP21ME002)**



**Mr. SAYYAD RAMEEZ K**  
**R(78%)**  
**(4BP21ME013)**

# Academic Toppers

## 4th Semester



**Mr. Ahmad Suhail Kalandar (81.66%)**

**4BP22ME003**



**Mr. Mohammed Ameen (79.22%)**

**4BP23ME404**



**Mr. Faiz (81%)**

**4BP23ME402**

# Academic Toppers

## 3rd Semester



**Mr. Ahmad Suhail Kalandar (81.66%)**

**4BP22ME003**



**Mr. Faiz (81%)**

**4BP23ME402**



**Mr. Saifuddeen Safdar – (81%**

**)**

**4BP23ME411**



**Mr. Abdul Razeek (78.55%)**

**4BP23ME401**



**Mr. Mohammed Ameen (79.22%)**

**4BP23ME404**

# Student Testimonial



## **A JOURNEY OF GROWTH AND GUIDANCE**

Dear Professors and Students of the Mechanical Engineering Department, As I reflect on my journey through my Bachelor's education, I am reminded of how instrumental the Department of Mechanical Engineering, BIT Mangalore was in shaping my academic path and my personal and professional growth. BIT and the Department of Mechanical Engineering gave me the tools, guidance, and support I needed to pursue my studies. I am forever grateful for the experiences that laid the foundation for my future endeavors.

## **MY JOURNEY FROM BIT TO FAU GERMANY,**

As a proud graduate of the Class of 2022, I can honestly say that my time at the Department of Mechanical Engineering BIT, Mangalore prepared me in ways I could never have anticipated. When I first set foot on campus, I was eager to learn but unsure of the direction my career would take. Through the mentorship of dedicated faculty members, the encouragement of my peers, and the wealth of resources available to students, I found my calling and set my sights on pursuing advanced studies. The guidance I received from the academic advisors was invaluable.

I owe a special thanks to Associate Professor Dr. Imran Mokashi for his unwavering encouragement and insightful advice, which gave me the confidence to apply to the Master's Program and ultimately pursue an MSc in Electromobility ACES. The Importance of Mentorship and Support One of the most defining aspects of my experience was the personalized mentorship I received. Faculty members were always approachable, offering more than just academic instruction in helping me connect with professionals in my chosen field. The BIT, Mangalore career service is a resource like no other, providing insights, opportunities, and a sense of belonging long after graduation. The lessons I learned during those formative years continue to serve me today as I work toward my goals in MSc Electromobility.

**MR. VANASYAM**

**4BP18ME003**

# Student Testimonial



## A JOURNEY OF GROWTH AND GUIDANCE

Dear Professors and Students of the Mechanical Engineering Department,

It is with great pride and excitement that I share my journey with all of you since graduating from our esteemed Mechanical Engineering program. I have recently started working as a Graduate Engineer Trainee (GET) at Fujitec India Pvt. Ltd., and I wanted to take a moment to reflect on this transition and how my education has shaped my career thus far.

## MY WORK AT FUJITEC

As a GET at Fujitec, I am involved in the installation and maintenance of elevator systems, which has allowed me to gain hands-on experience in the field of mechanical systems engineering. My daily tasks involve understanding and working on complex mechanical assemblies, problem-solving in real-time, and collaborating with teams to ensure the smooth execution of various projects.

## MY JOURNEY AFTER BIT

Throughout this journey, I've come to appreciate the importance of practical knowledge and teamwork. The collaborative projects and lab sessions we had in the mechanical engineering department truly prepared me for the dynamic environment at Fujitec. The ability to adapt, innovate, and approach problems with a fresh perspective has been key to my success in this role. One of the memorable experiences at Fujitec has been seeing the direct impact of our work on people's lives. Elevators and escalators are such an integral part of modern infrastructure, and being a part of this essential service has been a fulfilling experience. I am immensely grateful to all my professors and mentors in the department for the guidance and support provided during my academic journey.

**MR. MOHAMMED SHAHE JAHAN**

**4BP21ME411**