

### **SV COLLEGE OF ENGINEERING** (AUTONOMOUS) Karakambadi Road, Tirupati - 517507





INSTITUTION'S INNOVATION

#### **DEPARTMENT OF**

Mechanical Engineering



**Contact** 



### ABOUT THE SV COLLEGE OF ENGINEERING



- The SV COLLEGES group was founded in 1981, based on the firm belief that education, especially higher education provides a critical pathway to leadership development, economic progress, and social and political equality. Since its inception, the group has continued its mission to passionately teach, mentor, and mold the younger generation to achieve their goals and chase their dreams without any limitations.
- SVCE is a community where care, support and mutual respect flourishes. Our students are our first priority. We welcome you to join us and become yet another SVCE success story.
- We empower our students to achieve professional and personal success by providing them with a comprehensive educational experience aided by pedagogies that foster critical thinking and encourage lifelong learning.
- We are committed and dedicated to pursue excellence in our student's career by providing the best in education, training and the skills necessary to become future leaders. We train our students with interpersonal and communication skills needed to thrive in the world beyond the campus.

### ABOUT THE MECHANICAL ENGINEERING



The Department of Mechanical Engineering is a vital part of engineering colleges and universities, offering undergraduate and graduate degree programs, a diverse curriculum, and active research in areas like Robotics, Renewable Energy Systems, Automobile Engineering, and Mechanics of Materials. The department also provides well-equipped laboratories and facilities, and faculty with expertise in various disciplines. Professional development resources, industry connections, student organizations, and career opportunities are available. Graduates can work in various fields, including aerospace, automotive, development. energy, manufacturing, consulting, and research and Interdisciplinary collaboration is common, often working with other engineering and science departments. The Department of Mechanical Engineering equips students with the skills and knowledge to tackle complex challenges in various industries and contribute to technology advancement.

### VISION OF THE INSTITUTE

• To be a center of excellence focusing on high- quality technical education, research, and technical services with global leadership competence to succeed in employment and higher education with requirements, ethical, social, entrepreneurial aspects updating to the real time.

### **MISSION OF THE INSTITUTE**

- M1: To impart high quality technical education by providing the stateof-the art infrastructure, core instruction.
- M2: Advanced research and technical consultancy services with qualified and senior faculty.
- M3: To prepare the students professionally deft and intellectually adept possessing excellent skill, knowledge and behaviour with global competence.

### **VISION OF THE DEPARTMENT**

• To impart knowledge with global perspectives in pursuit of excellence in Mechanical Engineering Education, Entrepreneurship and Innovation.

### **MISSION OF THE DEPARTMENT**

- M1: To inculcate students with leadership skills with high level of integrity & ethical values for team building and team work.
- M2: To mold the young dynamic potential minds into full-fledged future professionals through effective teaching-learning techniques & industry – institute collaboration.
- M3: To serve the society through innovation and excellence inteaching and research.

### **Program Educational Objectives**

The program educational objectives of the Mechanical Engineering program describe accomplishments that graduates are expected to attain after 3 to 5 years of graduation.

- PEO1: Graduates can demonstrate technical competence in mechanical engineering domain as they apply problem solving skills to conceive, analyze, design and develop products, processes and systems.
- PEO2: Graduates can actively embrace leadership roles and strive hard to achieve professional and organizational goals with adherence to professional and ethical values, team expectations and sensitivities of cultural diversity.
- ✤PEO3: Graduates are committed to practice engineering strategies in industry and government organizations to meet the growing expectations of the stakeholders and also contribute to the societal development.

### **Program Specific Outcomes**

- PSO1 : Ability to apply the knowledge in Thermal Sciences, Design and Manufacturing processes towards the improvement of engineering systems considering productivity, quality and cost.
- **\*PSO2:** Ability to analyze and apply the acquired Mechanical Engineering Knowledge for the sustainable growth of society and self.

### **PROGRAM OUTCOMES**

- PO1: Problem analysis: Identify, Formulate, Research Literature, an Analyse complex Engineering problems reaching substantiated conclusions using First Principles of Mathematics, Natural Sciences, and Engineering Sciences.
- PO2: Engineering knowledge: Apply knowledge of Mathematics, Science, Engineering Fundamentals, and Engineering Specialization for the solution of complex engineering problems.
- ✤PO3: 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 public health and safety, and cultural, societal, and environmental considerations.
- ❖PO4: 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 conclusion. 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 public health and safety, and cultural, societal, and environmental considerations.
- ✤PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex activities with understanding of the limitations.
- PO6: 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.
- PO7: Environment and sustainability: Understand the impact of professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of and need for sustainable development.
- ✤PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- ✤PO9: Individual and teamwork: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- ✤PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with the society at large, such as being comprehend and write effective reports and design documentation, make effective presentations and give and receive clear instructions.
- PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- ✤PO12: 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.



# PROMOTORS



Sri A. Gangi Reddy**, Chairman** PhD,JNU, New Delhi

Prakash Ambavaram, **Vice Chairman** MBA from University of Oxford





Pradeep Ambavaram, **Secretary** MBA from University of Hong Kong

"I have a tendency to concentrate on my errors without counterbalancing them with my areas of expertise"

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#### Dr .N . Sudhakar Reddy Principal, (SVCE)

- Dr. N Sudhakar Reddy, completed his B.E from College of Engineering, GITAM, Visakhapatnam, M.Tech (Computer Science) from College of Engineering JNTU, Anantapur and Ph.D from JNTUA Anantapur in Data mining Specialization.
- He has been awarded the CMI Level 5 Certificate in Management and Leadership.
- He has 22 years of Teaching and Research Experience.
- He worked at various engineering colleges in different positions like Professor, Training and Placement Officer, Head of the Department and Principal.
- He has conducted many training programmes for Engineering and MBA students on life skills and campus recruitment. He acted as a coordinator for Infosys Campus Connect and also trained many students on Programming Fundamentals in STP(Special Training Programme), which is conducted by Infosys, IEG, JNTUH & Rajiv Udyogasri.
- He is the life member of ISTE, CSI, IETE and an annual member of IEEE and ACM. Member of JNTUA-PG Board of Studies in faculty of CSE & MCA.
- He has been with SV College of Engineering, Tirupati since 2008. Under his adroit administration, SVCE is glorified with permanent affiliation, 2(f), 12(B), R&D centers(CSE & ECE), NAAC with "A" grade and NBA for all eligible UG Programmes CE,EEE, ME,ECE,CSE & IT and UGC Autonomous Status.
- He received prestigious ISTE Best Engineering College Principal award in AP and TS for the year 2017 from the Honorable Vice-Chancellor of JNTUA



#### Dr . M . Chandra Sekhara Reddy Head of the Department <u>Mechanical Engineering</u>

- Dr . M . Chandra Sekhara Reddy completed his Ph.D. from J N T University, Hyderabad under the guidance of Prof. V. Vasudava Rao, Department of Mechanical and industrial Engineering in College of Science, Engineering and Technology, UNISA July 2015.
- He completed his M.Tech (Energy Systems) from JNTU College of Engineering, Anantapur in 2003.
- He completed his B.E. (Mechanical Engg.) from Bangalore University in March 1999
- Achieved for NAAC, National Board of Accreditation (NBA) and Autonomous in Sri Venkateswara College of Engineering, Tirupati under my leadership.
- Established all Mechanical Engineering Labs in Sri Venkateswara college of Engineering , Tirupati.
- Established "Dassault 3-D Environment Centre" in association with APSSDC and Dassault Systems in Sri Venkateswara college of Engineering , Tirupati.
- Instrumental for getting "Hyundai Crete Left Hand drive Car for free of cost from Hyundai Motors" in Sri Venkateswara college of Engineering , Tirupati.
- Instrumental for getting BMW Engine with transmission system from BMW under BMW Skill Next.
- Instrumental for getting Prathibha Awards from State Govt. of Andhra Pradesh for the students UG & PG 2016, 2017 & 2018 in Sri Venkateswara college of Engineering , Tirupati.
- Instrumental for getting Permanent Affiliation for Mechanical Engineering for 5 Years by JNTUA, Anantapur.
- Completed a AICTE Sponsored Short Term Training Program on "Nanotechnology and Functional Materials" worth of Rs.3.73 Lakh.
- 21 years of teaching experience in various academic institutions extensively in professional institutions.
- Completed a DST SERB Sponsored National Seminar on "Advances in Nanotechnology in the Field of Mechanical Engineering" worth of Rs.1 Lakh.
- Completed Four IEDC Projects Sponsored by DST.
- Ratified as Associate Professor by JNTUA , Anantapur in 13-10-2015.
- Ratified as Assistant Professor by JNTUH , Hyderabad in 26-03-2009.
- Received "Best Mechanical Engineering Teacher 2019" from State Award by ISTE AP Section, Sponsored by Madanapalle Institute of Technology and Science, Madanapalle.
- Received "Adarsh Vidya Saraswati Rashtriya Puraskar" from Glacier Journal Research Foundation, Global Management Council, Ahmedabad.
- Editorial Board Member of Glacier Journal of Scientific Research, Ahmedabad.
- Achieved NBA, NAAC and Autonomous status under my leadership to department and college.
- BOS Chairman of Mechanical Engineering

#### **DEPARTMENT FACULTY**



Dr. M. Chandra Sekhara Reddy Professor & HOD HEAT TRANSFER



Dr. N. Rajesh Associate Professor NANOTECHNOLOGY



Dr. K. Renugadevi Associate Professor PRODUCT DESIGN AND DEVELOPMENT



Mr. A. Venu Gopal Assistant Professor M.Tech



Dr. M. Vamsi Krishna Professor COMPOSITE MATERIALS



Dr. E. Venkata Kondaiah Associate Professor POWDER METALLURGY



Dr. K. Jagath Narayana Associate Professor COMPOSITE STRUCTURES



Mr. M. Gopala Krishna Assistant Professor PRODUCTION ENGINEERING

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#### **DEPARTMENT FACULTY**



Mr. G. Guru Mahesh Assistant Professor MACHINE DESIGN



Mr. P. Charan Theja Assistant Professor CAD / CAM



Mr. B. Eswaraiah Assistant Professor CAD / CAM



Mr. D. Raju Assistant Professor MACHINE DESIGN



Mr. D. Anjan Kumar Reddy Assistant Professor THERMAL ENERGY



Mr. S. Jaya Kishore Assistant Professor CAD / CAM

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#### **DEPARTMENT FACULTY**



Mr. K. Harshavardhan Reddy Assistant Professor INDUSTRIAL ENGINEERING



Mr. M. Peeraiah Assistant Professor THERMAL ENGINEERING



Mr. N. Balaji Ganesh Assistant Professor THERMAL ENGINEERING



Mrs. M. Sruthi Assistant Professor ADVANCED MANUFACTURING SYSTEMS





Mr. B. Perumal Assistant Professor CAD / CAM



Mr. P. Karunya Moorthy Assistant Professor INDUSTRIAL ENGINEERING

Mr. S. Sri krishna

Teaching Assistant PRODUCTION ENGINEERING

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# NON-TEACHING FACULTY





Mr. V. Kiran Kumar Junior Assistant

> Mr. P. Muni Chengaiah Lab Technician





Mr. T. Jaya Kishore Lab Technician

> Mr. T. Viswanath Yadav Lab Technician





Mr. K. Thirumalesh Lab Technician

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# **DEPARTMENT LABORATORIES**

- Engineering Workshop
- Material Science & Engineering
- Mechanics of Solids
- Computer Aided Machine Drawing
- Manufacturing Technology
- Machine Tools
- Thermal Engineering
- Fluid Mechanics & Hydraulic Machinery
- CAD/CAM
- Additive Manufacturing
- Computer Aided Engineering
- Heat Transfer
- Metrology & Measurements



### **DEPARTMENT LABORATORIES**



**Engineering Workshop** 



**Mechanics of solids** 



**Material science & Engineering** 



Manufacturing Technology



**Machine Tools** 



**Thermal Engineering** 



Fluid Mechanics & Hydraulic

Machinery



CAD/CAM



**Additive Manufacturing** 



**Heat Transfer** 



Metrology & Measurements



**Computer Aided Engineering** 

# FORMER PRESIDENTS OF

## **MEA**



G. Babu Manjunadh 14BF1A0324-ACY:2016-2017

### K.Ashok-15BF1A0346 ACY:2017-2018





### M.Suneel-16BF1A0361 ACY:2018-2019

### A.Ram Dinesh-17BF1A0302 ACY:2019-2020

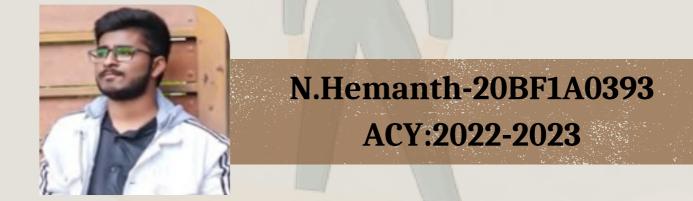




### Apposthalan levy Gabriel 18BF1A0304-ACY:2020-2021

### K.Ramprasad-19BF1A0326 ACY:2021-2022





Shaik Thafshil-22BF5A0343 ACY:2023-2024



Dept. of ME, SVCE

### **ASSOCIATION MEMBERS**

#### FACULTY CO-ORDINATORS



Dr. N. RAJESH Associate Professor

#### **PRESIDENT**



Mr. G. Guru Mahesh Assistant Professor

#### JOINT PRESIDENT



THAFSHIL 22BF5A0343 (III-B)

# BADRINATH

BADRINATH ANAND 21BF1A0304 (III-A)

#### **SECRETARY**



SURENDRA 22BF5A0310 (III-B)

#### **VICE PRESIDENTS**



SAI NAVEEN 22BF5A0343 (III-B)



BHUVANESWARI 22BF5A0345 (III-B)

#### **JOINT SECRETARY**



SRAVAN KUMAR 21BF1A0304 (III-A)



MUKUNDHA 22BF5A0308 (III-B)

#### **TREASURERS**



CHENNA KESHAVA 22BF5A0322 (III-B)



SIVA GANESH 21BF1A0340 (III-A)

#### **JOINT TREASURERS**



RAGAVENDHRA 21BF1A0329 (III-A)



CHARAN 22BFA03008 (II-B)

**EXECUTIVE MEMBERS** 



SRIVARDHAN 23BFA03L71 (II-B)



MAHINDHRA 22BF5A0321 (III-B)



HEMANTH 21BF1A0318 (III-A)



S.M.IBRAHIM 23BFA03L59 (II-B)



RAJU HARSHATH 23BFA03051 (I)

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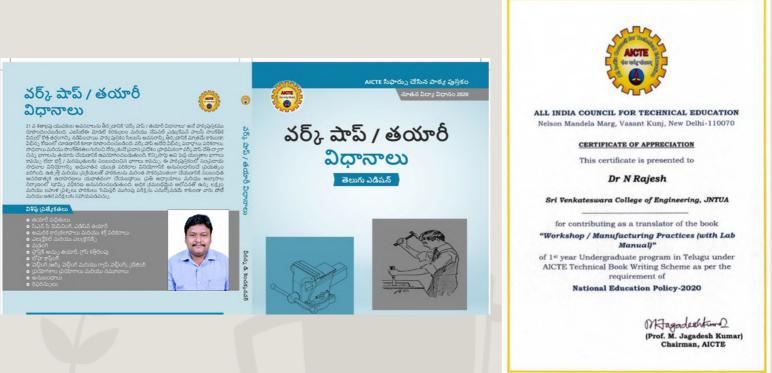
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Dr Jagath Narayana Kamineni and Dr N Rajesh received the recommendation notification (April 18, 2023) of ONE lakh Rupees as a financial assistance under "Assistance to Professional Bodies & Seminar / Symposia Scheme" from SCIENCE & ENGINEERING RESEARCH BOARD (SERB) to organize a national symposium on "Recent Advances in Additive Manufacturing for Mechanical and Aerospace Engineering", Proposed dates of symposia, Dated: 16-Aug-2023 to 17-Aug-2023.



### FACULTY ACHIEVEMENTS



Dr.N.Rajesh

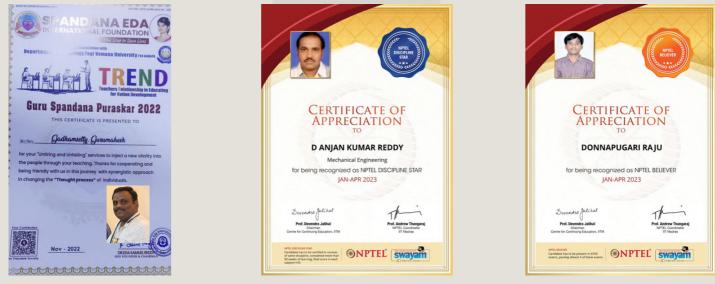
Book Entitled "Workshop Manufacturing Practices with Lab Manual" has been translated for 1st year UG program in Telugu under AICTE Technical Book Writing Scheme as per the requirements of NEP-2020. and ISBN: 978-93-91505-80-6,

Book Code: UG032TE.

G.Guru Mahesh recieved Guru spandana puraskar 2022 for your "Untiring and Unfailing services to inject a new vitality into the people through your teaching. Thanks for cooperating and being friendly with us in this journey with synergistic approach in changing the "Thought process" of individuals.

D. Anjan Kumar Reddy, Assistant Professor received certificate of Appreciation for being recognized as NPTEL Discipline Star from NPTEL, Jan – Apr 2023.

D. Raju, Assistant Professor received certificate for being recognized as NPTEL Believer from NPTEL, Jan – Apr 2023.



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#### Journals:

- Dr. M.Chandra Sekhara Reddy,Synthesis and characterization of silicon dioxide reinforced AZ91D magnesium composites,Materials Today: Proceedings,June 2023, ISSN 2214-7856,https://doi.org/10.1016/j.matpr.2023.05.626
- Dr. Jagath Narayana Kamineni,Investigation of the microstructure and mechanical properties of borosilicate reinforced magnesium nano composites,Materials Today: Proceedings,June 2023, ISSN 2214-7854,https://doi.org/10.1016/j.matpr.2023.05.628
- Dr. E Venkatakondaiah, Improving the mechanical properties of BN reinforced magnesium composites using vacuum sintering method,Materials Today: Proceedings,June 2023, ISSN 2214-7855,https://doi.org/10.1016/j.matpr.2023.05.630
- Mr. D.Anjan Kumar Reddy, Investigating the mechanical properties of titanium dioxide reinforced magnesium composites, Materials Today: Proceedings, May 2023, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2023.05.193
- Dr. M Vamsi Krishna,Influence of titanium diboride reinforced magnesium composites using squeeze casting method,Materials Today: Proceedings,May 2023, ISSN 2214-7853,https://doi.org/10.1016/j.matpr.2023.04.602
- Dr. Jagath Narayana Kamineni,Microstructure and mechanical properties of AZ91D/Si3N4 composites using squeeze casting method, Materials Today: Proceedings,May 2023, ISSN 2214-7853,https://doi.org/10.1016/j.matpr.2023.04.470
- Mr. Guru Mahesh & Dr. N Rajesh, Response surface methodology based evaluation of Sglass fibre composite reinforced with aluminium oxide/pearlite hybrid, Advances in Materials and Processing Technologies, Taylor & Francis, February 2023, Print ISSN: 2374-068X Online ISSN: 2374-0698, https://doi.org/10.1080/2374068X.2023.2180137

#### <u>FDP's:</u>

- Dr. Jagath Narayana K has successfully Completed NITTT 8th Module, "Institutional management and Administrative Procedure", Feb 2023
- Dr. Rajesh attended FDP on Challenges in "3D Printing and part processing", by NIT warangal

### **The Phase of Faculty**



- Dr. Jagath Narayana Kamineni has successfully completed NPTEL course on "Python for Data Science Course", April 1, 2023.
- G Guru Mahesh has attended an online FDP on "Advances in Mechanical Engineering", Organized by Lakireddy College of Engineering, from 19 to 24, June 2023.
- G Guru Mahesh has attended an online FDP on "Contemporary progressions, challenges, and issues in metal 3D printing technology, MITS Madanaplle, from 19 to 23, June 2023.
- Raju D, received a certificate from NPTEL on "National Education policy-2020 Professional Development Program, May 16 to 15 June 2023.
- Dr. Rajesh has attended online FDP on "Data analysis using advanced computational techniques" organized by Department of statistics and mathematics, AMITY University, Kolkata, 24 to 28 july 2023.
- Dr. Rajesh has attended online FDP on "Future Scopes for Additive Manufacturing in industrial and biomedical applications, organized by Adithya Engineering College, 17 to 21 july 2023.

#### Patents:

- Dr.M.Chandra Sekhara Reddy, Dr.M.Vamsi Krishna, Mr.B.Eswaraiah, Dr.K.Renugadevi, Mr.P.Charan Theja, Mr.D.Anjan kumar Reddy, Mr.D.Raju, Dr.Jagath Narayana Kamineni, Mr.M.Peeraiah, registered a patent on "AN ASSEMBLY PROVIDED WITH WIND ENERGY STORAGE AND ELECTRICITY GENERATION AND METHOD THEREOF", PATENT APPLICATION PUBLICATION/INDIA/Application No.202241073035 A | Issued date: 30 Dec 2022.
- Dr. N.Rajesh registered a patent on "Motorized Auger Bore", Intellectual Property India Patents| Designs| Trade Marks| Geographical Indications, Issued date: 12 Jan 2023.
- Mr.S.Jaya Kishore, Mr.P.Charan Theja, and Dr.E.Venkata Kondaiah Published an Indian Patent on "Design and Fabrication of CNC Tablet using Arduino Board" on 06-10-2023 through the Indian Patent Office (IPO) with Application No.202341052878 A



### ALUMNI SEMINAR

### **CAREER OPPORTUNITES AFTER B.TECH IN MECHANICAL ENGINEERING**

A Bachelor of Technology (B.Tech) in Mechanical Engineering can open up a wide range of career opportunities in various industries. Mechanical engineers are in demand for their problem-solving skills, technical knowledge, and ability to design, analyze, and maintain mechanical systems and devices. Here are some career opportunities you can pursue after Engineering.

Mechanical Engineer: This is the most direct career path for mechanical engineering graduates. Mechanical engineers design, develop, test, and maintain mechanical systems and products, such as engines, machines, tools, and **HVAC** systems

To enhance your career prospects, consider gaining additional certifications, such as Professional Engineer (PE) licensure, and staying updated with the latest industry trends and technologies. Networking and internships can completing your B.Tech in Mechanical also be invaluable for securing job opportunities in your chosen field. Your specific career path will depend on your interests, skills, and the industries you are most passionate about.



### **QUALITY CIRCLE FORUM OF INDIA**

Alumni Seminar on the theme "Career Opportunities After B.Tech" on 16th SEP 2023 from 10:30 pm to 11:30 am. The speaker of this program was Mr. M. DHANARAJ, Trainee, exceutive trainer ,Tirupathi, alumnus (Batch2018-20), Programme started with welcome address by our beloved HOD

Dr.M.Chandra Sekhara Reddy sir which was followed by highly motivational lecture delivered by the speaker. The interaction was to guide and inspirational to the students to reach jobs in mechanical engineering field.

Speaker suggested some tips to get success in life and in career. Speaker groomed our students with his productive insights on how the mechanical engineering will be the big thing among all engineering fields. Speaker also shared his beautiful and special moments he spent in our college.



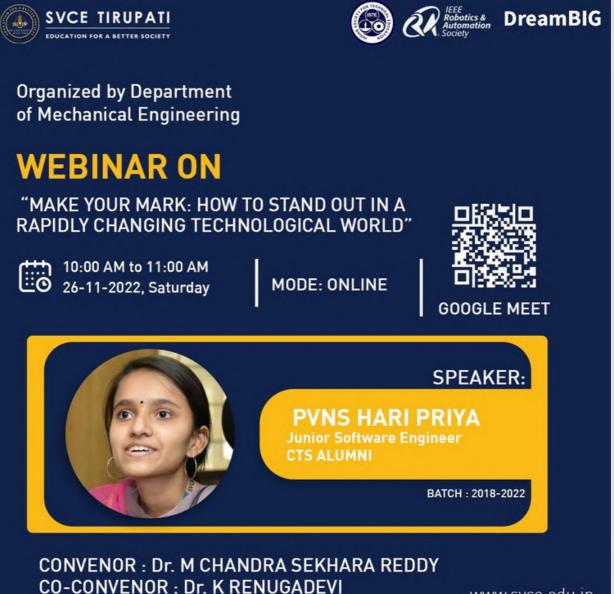
Mr. M. Dhanaraj

Executive Trainer Quality Circle Forum of India (QCFI), Tirupati.



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www.svce.edu.in

#### రూ.6.75 లక్షల జీతంతో ఉద్యోగం

అన్నా.. ఓసీ కేటగిరీకి చెందిన నేను ఇంజ నీరింగ్ ఫైనల్ ఇయర్ చదువుతున్నాను. మా నాన్న పైవేట్ ఉద్యోగి.

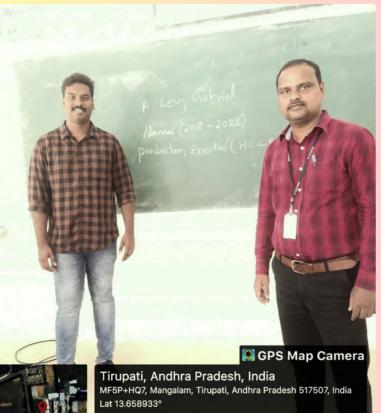


అమ్మ గృహిణి. నేను 2018లో బీటెక్లో జాయిన్ అయ్యాను. ఆ ఏడాది రూ.35 వేలు మాత్రమే ఫీజు రీయింబర్స్ అయింది. 2019 నుంచి పూర్తి ఫీజు రీయింబర్స్ అవు తోంది. ఫీజు దిగులు లేకపోవడంతో అప్ప టి నుంచి బాగా చదివాను. కాగ్నిజెంట్లో ఏడాదికి రూ.6.75 లక్షల జీతంతో మంచి ఉద్యోగం పొందాను. మా చెల్లికి అమ్మ ఒడి వస్తోంది. నేను చదువుకున్న స్కూలు మారిపోయింది. పూరిగా ఇప్పుడు రాష్ట్రంలో విద్యా రంగం కొత్త బాటలో పయనిస్తోంది. థ్యాంక్యూ జగనన్నా హరిప్రియ, తిరుపతి

Staying ahead of rapid technological changes in the world can be challenging but is essential to remain competitive and relevant. Here are some strategies to help you keep up with evolving technology.

#### OBJECTIVES

- Continuous Learning
- Stay Informed
- Experiment and Practice
- Collaborate and Network
- Adaptability
- Mentorship
- Problem-Solving Skills
- Cross-Disciplinary Learning
- Time Management
- Embrace Emerging Technologies



Long 79.48692° 23/09/23 11:41 AM GMT +05:30

Mechanical Engineering department has organized an Alumni seminar on the "company requirements & how to reach onsite from mechanical engineering jobs" on 23th oct 2023 from 10:00am to 12:30 pm the speaker of this program was Mr. A. Levy Gabriel who is a production executive in H.C.C.R TECHANICAL SERVICE PVT. LTD, Bangalore an alumnus (2018 -2022), program started with welcome address by our beloved Dr. M. Chandra Sekhar Reddy sir which was followed by highly motivational lecture delivered by the speaker . The interaction onsite jobs from mechanical engineering field.

Speaker suggested some tips to get success in life and career . Speaker groomed our students with his production insights on how the mechanical engineering is the big branch among all engineering fields speaker also shared his beautiful and special moments he spent in our SVCE college .

Around 80 students attended the program. Few of the questions from the audience were taken up by the speaker during the Q&A sessions .the variety and range of questions raised show that the participants took an active part in the program.

The program was successfully coordinated and conducted by Alumni coordinators. The interaction ended with the department vote of thanks by Jahnavi. SVCE, Tirupati authorities, Speaker, Students and to the Organization team.





Mechanical Engineering department has organaized an alumni seminar on the "HOW to select a job depending upon a core or software &IT Sectors. mechanical engineering jobs". on 22nd September 2023 from 10:00am to 12:30 pm. The speaker of this program was <u>Mr.V.Rajesh</u> who is a TECHNICAL ENGINEER IN (TCS) , Bangalore an alumnus (2018 -2022), program started with welcome address by our beloved Dr. M. Vamsi Krishna sir and Dr. K. Renuga Devi mam which was followed by highly motivational lecture delivered by the speaker . The interaction guide and imbibe the students to get a core based jobs in Mechanical engineering.

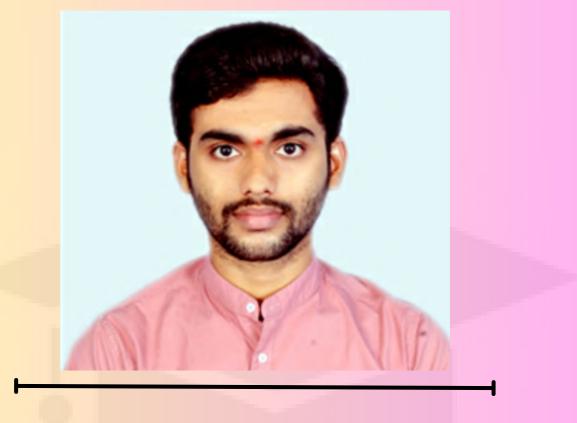
Speaker suggested some tips to get success in life and career. Speaker groomed our students with his production insights on how the mechanical engineering is the big branch among all engineering fields. Speaker also shared his beautiful and special moments he spent in our college.

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Tirupati, authorities, Speaker, Students and to the Organization team.



# **ALUMNI MESSSAGE**



"The Mechanical Engineering Association (MEA) at SV College of Engineering was a transformative experience for me. It helped me participate in various technical symposiums, mini-project activities, and presentations inside and outside the college, expanding my knowledge and network, with the support of our faculty team.

The MEA helped me grow as an engineer and a person, teaching me teamwork, leadership, and communication skills, while giving me a platform to showcase my talents and learn from others. I am grateful for the MEA and my faculty team, which gave me the opportunities and support I needed to grow as an engineer and a person.

I encourage all mechanical engineering students at SV College of Engineering to get involved in the MEA. It is a great way to learn, grow, and network with other students and faculty." From,

> M. Diwakar Reddy-14BF1A0343 Software Test Engineer Coursera



It's an absolute pleasure to be here today as an alumnus/alumna of SVCE. I remember the excitement and anticipation of my student days, and I can't express how wonderful it is to be back among the vibrant community that is SVCE. To the current students, you stand on the brink of a remarkable journey. Your time here will be filled with challenges, discoveries, and friendships that will last a lifetime. Cherish every moment because these years will shape your future in ways you can't yet imagine. As alumni, we're here not just to reminisce, but to support you in your endeavors. Our experiences have taught us valuable lessons, and we're eager to share those insights with you. Don't hesitate to reach out for guidance, mentorship, or simply a friendly chat.

Our college faculty is the heart and soul of our educational institution. The dedicated professors, researchers, and mentors who have guided us through our academic pursuits are nothing short of exceptional. They've not only imparted knowledge but also inspired us to think critically, to question the status quo, and to strive for excellence in everything we do. Their expertise, commitment, and passion have been the driving force behind our growth, and we owe them a debt of gratitude for the wisdom and guidance they've provided. These associations, whether academic, cultural, sports, or special interest groups, provide us with opportunities to discover our passions and interests outside of the classroom. They are platforms for personal growth, leadership development, and networking with like-minded individuals. I remember my time as a treasurer of the MEA club, and how it not only improved my public speaking skills but also introduced me to some of my closest friends.

Your journey has just begun, and we're excited to see where it takes you. Keep learning, stay curious, and embrace every opportunity that comes your way. The alumni community is here to support you every step of the way.

Thank you for allowing us to be a part of this special day, and I look forward to the amazing achievements that all of you will accomplish. Best of luck in your academic pursuits, and may you find success and fulfillment in all your future endeavors. Enjoy the rest of this gathering and the time you have here. Thank you.

> K.Ashok-15BF1A0346 QUALITY CONTROL ENGINEER ZF AUTOMOTIVE



"As an alumnus, I take pride in the enduring connection I have with my alma mater. It's a reminder of the transformative years I spent there, the friendships that were forged, and the knowledge gained. Serving as the former president of the Mechanical Engineers Association was a deeply fulfilling experience. It allowed me to lead and collaborate with fellow engineers, fostering innovation, knowledge sharing, and professional development. During my tenure, we organized engaging events, workshops, and conferences that provided valuable insights and networking opportunities for our members. It was an honor to guide the association, shape its vision, and leave a lasting impact on the community of mechanical engineers. As I reflect on those years, I remain grateful for the chance to contribute to the growth of our field and support the aspirations of emerging engineers.

Special thanks to our dear Principal, Dr. N. Sudhakar Reddy, for inspiring and motivating me throughout. I would also like to express my gratitude to our Head of the Department, Dr. M. Chandrasekhara Reddy, for his immense support in organizing various events within the Mechanical Engineers Association. Thanks to all my teachers who provided me with support and knowledge

#### M.Suneel-16BF1A0361

**B.Tech-ME, Master's in Information Systems, Northeastern University,US.** 



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Ms. K Sivani and Ms. M Mounica, for winning the First Prize in DYNAMECH-2k23 event, on 28th March, 2023 organized by JNTUACE, Anantapur.



Kurakalva Vamsikrishna-18BF1A0348, B. Tech. (ME) from SVCE, for achieving the remarkable title of 'Best Student Innovator' at the ISTE AP State Awards 2022.

#### **3D Printer and Parts**

A machine which was build by a student under the guidance of Dr N.Rajesh . A team of students (Pavan Sai and his team) have designed and utilized our department 3D printer to print 3D printed human face, and they have successfully fabricated the human face.This team have also designed few other models which came out to be a good product









International Machine Tool & Manufacturing Technology Exhibition

#### 19 - 25 January 2023, Bengaluru, India









Dept. of ME, SVCE

## ACADEMIC TOPPERS

## **IV YEAR**





19BF1A0323-K.M.PAVAN SAI-89.27% -9.32CGPA

20BF5A0324-S.SUDHEER KUMAR-87.80% -8.79 CGPA

## III YEAR





20BF1A0368-B.PUJITHA-94.94% -9.47CGPA

21BF5A0302-M.MIHANA BHANU 94.77% -9.32 CGPA

## **II YEAR**





22BF5A0354-V.AKASH-94.59% 9.63 CGPA

21BF1A0329-K RAGHAVENDRA REDDY-92.62 % -9.43 CGPA



**IYEAR** 

22BFA03044-THASIL ANILKUMAR -88.83%-8.77CGPA

## **Group Photos**

#### **FACULTY MEMBERS**



#### 1st Year



## **Group Photos**

#### 2nd Year



#### 3rd YEAR - A



## **Group Photos**

#### 3rd YEAR - B



#### 4th YEAR





#### SV COLLEGE OF ENGINEERING (AUTONOMOUS)

#### DEPARTMENT OF MECHANICAL ENGINEERING

orientation



# NAANDHI 2023 The beginning





#### SV COLLEGE OF ENGINEERING (AUTONOMOUS)

#### DEPARTMENT OF MECHANICAL ENGINEERING

#### ఎస్విసిఈలో ఘనంగా ఓలియంటేషన్ దే

**ప్రజాశక్తి-తిరుపతి(మంగళం):** తిరుపతి-కరకంబాడీ మార్గంలోని శ్రీ వెంకటేశ్వర కాలేజ్ ఆఫ్ ఇంజినీరింగ్లో గురువారం మెకానికల్, సివిల్, ఎలక్షికల్ అండ్ ఎలక్ర్రానిక్స్ ఇంజినీరింగ్ విభగాలలో 2023–24 విద్యా సంవవత్పంలో చేరిన మొదటి సంవత్సరం విద్యార్భులకు ఓరియంటేషన్ డేను నిర్వహించారు. ఈ కార్యక్రమానికి ముఖ్య ఆతిథులుగా వాటర్ రిసోర్స్ డిపార్ట్మెచెంట్ డిఈఈ ఆర్.రాజశేఖర్ రెడ్డి హాజరై మాట్లాడుతూ నేడు దాలా మంది విద్యార్తులు కంప్రూటర్ సైన్స్ పై ఆసక్రి చూఫుతున్నారన్నారు. కాని ఏ ఇంజినీరింగ్ కోర్సు అయినా పునాది వేయడానికి మెకానికల్, సివిల్,

ఆయనా వునాద వయదానికి మెకానికింద, సెవం, ఎలక్రికల్ ఇంజినీరింగ్ పిర్యాంశాలను చదనకుండా ఇతర ఇంజినీరింగ్ డిగ్రీ రేదన్న విషయాన్ని విషర్టన్నున్నాదన్నారు. ఏ సాంకేతిక పరిశ్రమ స్థిపించాలన్నా ఈ మూడు కోర్యులలో నిష్ణాప్రత్వెన ఇంజినీరింగ్ విద్యార్థులకే ప్రాధాన్య ముంటుం దన్నారు. కళాశాల ప్రిన్నిపాల్ ద్రాక్టర్ ఎస్.సుధాకరొరెడ్డి మాట్లాడుతూ విద్యార్థులు మంచి ఏకాగ్రతతో



అండ్ ఫ్టెన్మెంట్స్ ద్వారా బహుశజాతి కంపెనీలలో ఉపాధి అవకాశాలు లభిస్తాయన్నారు. ఈ కార్యకమంలో మెకానికల్, సిబిల్, ఎలక్షికల్ అండ్ ఎలక్ర్యానిక్స్ ఇంజినీరింగ్ నివర్, పెర్యకర్ కండ పెర్రక్షాన్స్ జరజనరంగ విభాగాదిపతులు చంద్రశేఖర్ రెడ్డి, చిత్తరంజన్, లక్ష్మిదేవి, విద్యార్థులు వారి తల్లిదండ్రులు పాల్గొన్నారు.

• The orientation programme is an oppurtunity to introduce the new students to life at the facilitate institute and a smooth transition the new life.

#### **ස. ඩ**්පි ව්**ඩර්**ව් බට<u>හ</u>ී **విద్యార్థులకు ఓలియెంటేషన్ డే**



రిదురి : సెప్టెంటరు 28. మాటాచి స్పూర్లో రోధి కారటు ని రో దో లో స్పట్ట కి సెంకర్ శ్రీ కారిత్ లో అంటిగింగ్ లో సాతన సంవత్సరు 2023-24 వి. బెక్ కేటరర్ ఎంట్రీ విద్యార్థులు ఎయెంటీష్ గో ప్రపంగా సర్పరావారు. ఓ రియంటీష్ కోలో కారు మరదర్ గ్రామం కోట్లు కోట్లు కారింగాలు తేశారు. సమాజుల్లో పేరు కోట్లు కోట్లు కోట్లు కోట్లు కేటా పెటుకూల ద్వారా మర్రత్ స్పుపోల్ దా. సుధార్ రెడ్డి మాట్లుడుకు మాత్రి కొలుదుడదని గర్యులుకోండి. అది మీదు కళిగి ఉన్న చిలువుల స్పుపోల్ దా. సుధార్ రెడ్డి మాట్లుడుకు మాత్రి కొండుదడని గర్యులుకోండి. అది మీదు కళిగి ఉన్న చిలువుల స్పుపోల్ దా. సుధార్ రెడ్డి మాట్లుడుకు మాత్రి పెద్దార్థులు సిరుదు మీరు పుడికి చేరుకోవడాది చాలా కష్టపద్దారు సరికరు సిరుదు పెద్దం అర్థులు చేయా లోకి సురుదుల కేందింది. మరు మార్గరర్ పెరుగాలో సాయకు బాగ్ సరికరు మీరు పుడికి చేరుకోవడాది చాలా కష్టపద్దారు సరికర్ సిరుదు అర్థికులు తెడు కు పెరుదు అవిషర్థులు చేయారికి మరియు మీదు మార్గరర్శుడు మాత్రి రెడుదారి సిరు మిరుగుర్యుంది మరుదులు పెర్తుగులు సురు పొరిగురుర్యంది పెరుదులు పెర్తుర్రంతిందిందు యు మరిళిన వర్త వాల కరిగిం పిరు సార్ధరికులు సిరుదుల్లో ఉరిపింది పారు ఫీరు పిరుదులు పెర్యారులు సిరుదుల్లో సిరుదింతిందిందిందు అరిగి పెరుగు పెరిగురిందిందు కు మరితిగి వి చిరుదులు పరితుంతి రెటుదులు పెరుదు పెరిగురు లు సిరుదులో, పిర్తి జంపైను సుంబంధాలను ఏర్రదుడోగాలని

• The objective is to help both undergraduate students and their parents adjust to campus through a series of activities and sessions organized as part of the programme.

### SOME CLICKS IN ORIENTATION PROGRAMME





"We commenced our event by lighting the lamp of knowledge and wisdom".



SPEECH BY OUR PRINCIPAL Dr. N.SUDHAKAR REDDY



SPEECH BY CHIEF GUEST DEPUTY EXECUTIVE ENGINEER (WRD) RAJA SEKHAR REDDY





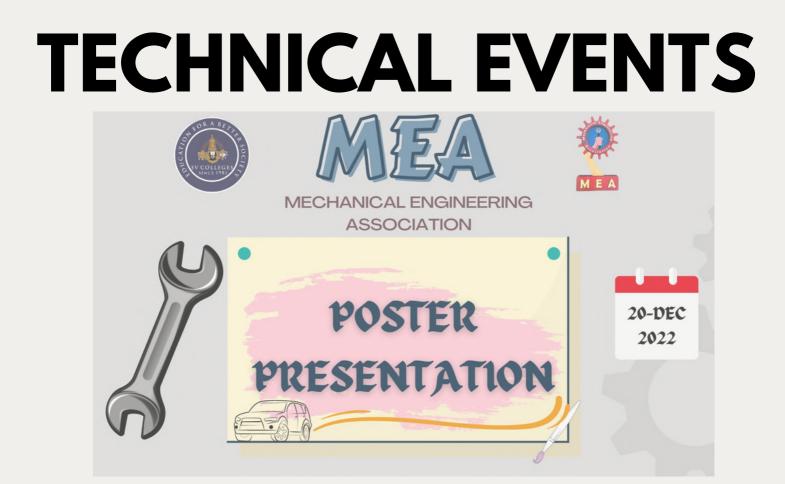
## S V COLLEGE OF ENGINEERING (AUTONOMOUS)

### DEPARTMENT OF MECHANICAL ENGINEERING

# MEA

## The Events conducted for the students on behalf of MEA in the year of 2022

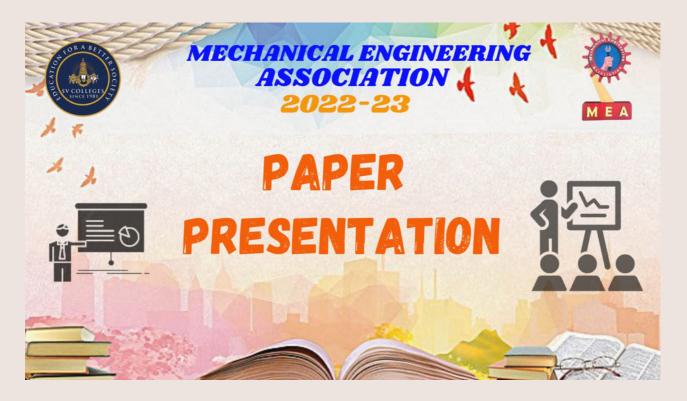






Dept. of ME, SVCE

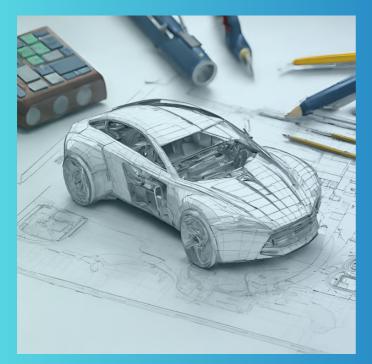
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Paper presentations are essential for sharing academic and research findings, fostering academic discourse, and staying updated with the latest developments in a field. Effective presentation skills, clear communication, and engaging content are key to a successful paper presentation.







CAD design has revolutionized the way products, buildings, and structures are designed and developed. It has become an essential tool in various industries, helping professionals to create better designs, reduce errors, save time and costs, and bring their ideas to life with unprecedented precision and efficiency.





## WORK SHOP ON CATIA V5

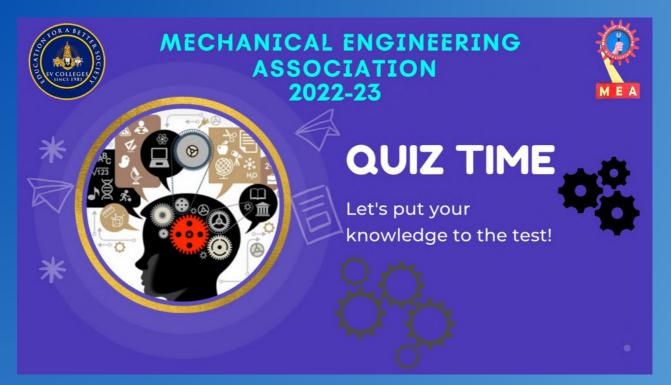


We thank our beloved seniors who helped us to gain knowledge in catia by conducting 4 days workshop on catia v5 part designing.











Quizzes play a versatile role in education and entertainment, helping to engage, educate, and evaluate individuals in a variety of contexts. They can be a fun way to challenge one's knowledge or a useful tool for instructors and trainers to assess and enhance learning. The format, structure, and purpose of a quiz can vary significantly based on the intended use and audience.







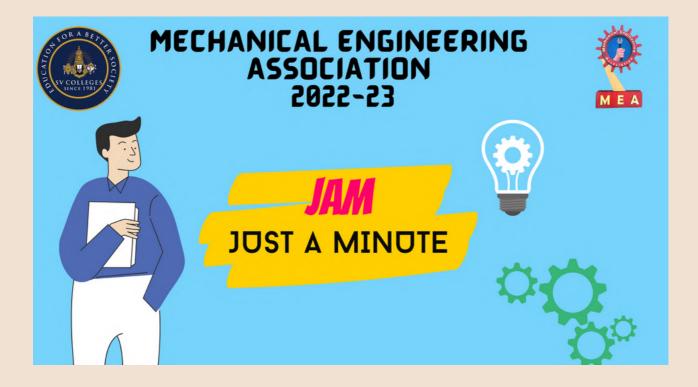


The objective of an "Identify Me" game is for players to guess or correctly identify a particular object, person, place, or concept based on clues, descriptions, or visual hints provided by the game's organizer or presenter.









The objective of the game is for contestants to speak on a given topic for one minute without hesitating, deviating, or repeating any words. It requires quick thinking and verbal dexterity.





## **Non-Technical**



## **<u>Gully cricket:</u>**

It showcases the passion and enthusiasm that people have It sport. for the allows individuals to enjoy the game more accessible and in a grassroots manner, irrespective of their skill level or access to formal cricket facilities.

## **Slow bike race:**







Life is like a slow bike race. It's not about how fast you go, but how well you balance and stay in control in your life

## **Tug of war :**

Life is a bit like a tug of war. There are times when you're pulled in different directions, but you must find your balance and stand strong.



## **Treasure Hunt:**





To find a treasure, you must be willing to take a path you have not yet traveled.

## **Musical chair:**





## **INDUSTRIAL VISITS**



#### INDUSTRIAL VISIT TO SIBAR

#### SIBAR AUTO PARTS Limited was intent to produce "ALLUMINIUM GRAVITY DIE CASTINGS" established as Private Limited Company.

- The 2nd year students visited the Sibar company for an industrial visit on 13/10/2023.
- Sibar is Customers Supplying Castings to Greaves, Lamborghini, Hero, Bajaj etc., in domestic as well as international market such as (OEM Manufacturers and McCulloch, Italy).
- Sibar had taken technical collaboration with Italian firm for Nickel Silicon Carbide plating which is equivalent to Nikasil.
- This company was established in 1983.
- Sibar started production of Hard Chrome Electroplated cylinder blocks in 1987.
- Sibar is the First Company to introduce such Hard Chrome Electroplated Cylinder in India from OEM'S/ Replacement Market.
- Sibar got certified for ISO 9001;2000 in 2006 and Renewed for ISO 9001-2008 in 2009 for its Quality Management Systems.

#### INDUSTRIAL VISIT TO IMTEX 2K23



- Indian Machine Tool Manufacturer Association (IMTMA) organizes (IMTEX) 2023 in its full magnificence. IMTEX which is South and South's East largest exhibition on metal cutting and machine tool technologies is back in physical form after four years.
- IMTEX 2K23 will have Tooltech and Digital Manufacturing as concurrent shows and it is held on 19th January to 25th January 2K23 at BIEC. Tooltech will showcase a range of cutting tools accessories, metrology and CAD/CAM software. Digital Manufacturing exhibition will focus on Additive Manufacturing and Evolving Industry4.0 concepts.
- Students from the Mechanical Department, ranging from the second to fourth year, recently embarked on a visit to Bangalore on 25/01/2023 where they actively engaged in various activities.



WORKSHOPS/KEYNOTE SPEAKERS

Workshops conducted in colleges play a vital role in enhancing students' overall learning experience. These interactive sessions provide a platform for students to acquire practical skills, explore new areas of interest, and foster personal and professional development. Whether it's a workshop on career planning, entrepreneurship, creative arts, or technical skills, these events offer students the opportunity to engage with experts, collaborate with peers, and apply what they've learned in a hands-on environment. College workshops not only supplement academic knowledge but also encourage critical thinking, problem-solving, and networking, preparing students for success in their future endeavors.



The workshop titled "UNLOCK INNOVATION WITH SIX-DAY WORKSHOP ON CATIA-V5" offered participants a comprehensive overview of essential DESIGN analysis and modeling techniques. The workshop commenced with an exploration of topic modeling, emphasizing its applications in uncovering latent themes within MODERN DESIGNS. Participants gained handson experience in implementing NEW DESIGNS like 3D GEOMETRIC MODELLING, 3D MACHINE ANGULAR COMPONENT and COMPONENT. The second part of the workshop delved into TRANSFORMATIONS, CREATING - వి5' అంశంపై కంప్యూ టర్ ప్రయోగశాలలో శిక్షణ ఇచ్చారని SOLIDS, and ADVANCED SOLIDS, ADVANCED SKETCHERS, and make ASSEMBLIES. Finally, జి.సుమోహనా హాజరై విద్యార్థులకు భవిష్యత్తులో కంప్యూటర్స్తో the workshop concluded with a study of చేసే ప్రయోగాల వల్ల కలిగే ఉద్యోగ ఉపాధి అవకాశాలను Advance Design Control, demonstrating its utility in designers create better designs faster కళాశాల ద్వారా నిర్వహించే క్యాంపస్ సెలక్షన్స్లో బహుళజాతి and with less effort. By the end of the workshop, కంపెనీలలో ఉద్యోగాలు పొందే అవకాశం ఉందన్నారు. ఈ participants had a strong foundation in these DESIGNING techniques, enabling them to apply them effectively in various Modeling Platform with ease.

CATIA is a robust application that enables you to create rich and complex designs. The aim of the CATIA V5 Fundamentals course is to teach you how to build parts and assemblies in CATIA. how and to make simple drawings of these parts and assemblies. This course focuses on the fundamental skills and concepts that enable you to create a strong foundation for your designs CATIA V5 allows for the creation of complex and highly detailed 3D models, enabling users to visualize, analyze, and optimize their designs.



కెటియూ-వి5పై అవగాహన కల్పిస్తున్న దృశ్యం

ఎస్విసిఈలో కెటియూ-వి5పై వర్క్షేషాప్ BLOCK ప్రజాశక్తి-తిరుపతి(మంగళం): తిరుపతి-కరకంబాడీ మార్గంలోని శ్రీ వెంకటేశ్వర కాలేజ్ ఆఫ్ ఇంజినీరింగ్లో గత ఆరు రోజుల పాటు 'ఎస్విసి' ఈ–ఏపిఎస్ఎస్డిసి సంయుక్తంగా కెటియూ కళాశాల టిన్సిపా ల్ డాక్టర్ ఎన్.సుధాకర్రెడ్డి తెలిపారు. ఈ వర్క్రేషాప్ కు ఏపిఎస్ఎస్డిసి డీపాల్ సిస్టమ్ శిక్షకులు వివరించారు. ట్రిన్నిపాల్ సుధాకర్రెర్డి మాట్లాడుతూ ఇటువంటి వర్క్ష్ షాప్లను విద్యార్తులు చక్కగా సద్వినియోగం చేసుకొని కార్యక్రమంలో విభాగాధిపతి డాక్టర్ ఎమ్ చంద్రశేఖర్ రెడ్డి, విభాగ అధ్యాపకులు కె.హర్షవర్ధన్ రెడ్డి, డి. అంజన్ కుమార్ రెడ్డి

#### **"BE A STUDENT OF SUCCESS"**



Speaker: Dr P. Subramanyachary Prof. & Head, Department of MBA, SVCE



## One-day WORKSHOP ON ENTREPRENEURSHIP and INNOVATION as a Career Opportunity

Organized by the Department of Mechanical Engineering

Convener – Dr M. Chandra Sekhara Reddy Co-Convener – Dr M. Vamsi Krishna

YOUR TIME IS LIMITED, SO DON'T WASTE IT LIVING SOMEONE ELSE'S LIFE." - STEVE JOBS

The entrepreneurship workshop held at our college was an inspiring and informative event that ignited the spirit of innovation and business acumen among students. With seasoned entrepreneurs and industry experts as guest speakers, the workshop provided invaluable insights into the world of startups and business ventures. Participants learned about ideation, business planning, funding, and marketing strategies, gaining practical knowledge that can be applied to real-world scenarios. The workshop also encouraged networking and collaboration among aspiring entrepreneurs, fostering a dynamic and supportive entrepreneurial community within the college. It was a remarkable opportunity for students to explore their entrepreneurial potential and take their first steps towards creating their own ventures.



The Autodesk Fusion 360 workshop was an enlightening experience, introducing participants to the fascinating world of 3D design and engineering. Held at our college, the workshop provided hands-on training in using Fusion 360, a powerful and versatile CAD/CAM software. Participants learned how to create intricate 3D models and designs, and how to simulate their functionality and performance. The workshop covered various aspects of product design, from parametric modeling to rendering and animation, and even delved into the basics of computer-aided manufacturing (CAM). The integration of cloud-based collaboration tools in Fusion 360 was particularly impressive, enabling real-time teamwork on complex design projects. This workshop not only empowered students with valuable design and engineering skills but also instilled a sense of creativity and innovation. It was a valuable step toward equipping the next generation of engineers and designers with the tools they need to bring their ideas to life in a digital world.



The seminar on advances in additive manufacturing for mechanical engineering at our college was a fascinating exploration of cutting-edge technology in the field. Students and faculty were introduced to the latest developments in 3D printing, ranging from novel materials and techniques to applications in aerospace, automotive, and medical industries. The seminar underscored the potential of additive manufacturing in revolutionizing product design, rapid prototyping, and customization. It also highlighted the role of sustainability and reduced waste in this innovative manufacturing process. Attendees left the seminar with a deepened understanding of how additive manufacturing is reshaping the landscape of mechanical engineering and its potential for creating more efficient, sustainable, and tailored solutions in the industry.

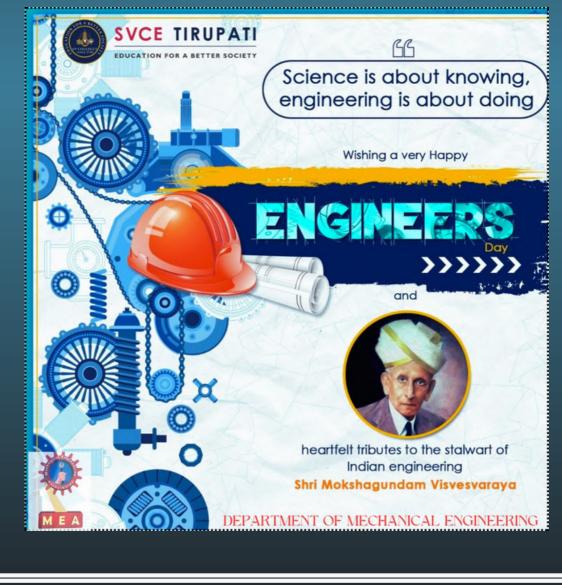


### SV COLLEGE OF ENGINEERING (AUTONOMOUS)

#### DEPARTMENT OF MECHANICAL ENGINEERING

## Events on

## ENGINEER'S DAY



## POSTER PRESENTATION



• By preparing and delivering a poster presentation, you can practice how to summarize, organize, and explain your work in a clear and engaging way.

## PAPER PRESENTATION



• The purpose of a paper presentation is to enhance a particular student's ability in the art of academic writing or making papers in English and to present it.

## CAD MODELLING



- Computer-aided design, also known as 3D Modelling, allows designers to test, refine and manipulate virtual products prior to production.
- These high-quality 3D designs are identical in dimension and detail to the desired finished product, ensuring quality and accuracy for production.



## TECH QUIZ



Quizzes help students identify what they know and what they don't know. The students then have a better idea of how well they grasping the material, are hopefully motivating them to study more and helping them study allocate their time effectively by focusing on the information that still needs more practice.

## PROJECT EXPO



Lat 13.659127° Long 79.487183° 15/09/23 10:35 AM GMT +05:30 Project Expo provides youth with an experience in planning, preparing and displaying an article or an educational exhibit. It is an opportunity for self-expression both verbally and visually. Project Expo also provides the opportunity to share with others what has been learned in the specific project.

## ESSAY WRITING



Essay writing helps students to apply critical thinking and creativity in writing. They present their arguments in a way that will convince readers concerning a topic.

## HALLOWEEN PARTY Organised by MECHANICAL DEPARTMENT





Oct 31 2023, the spookiest extravaganza of the year took centre stage as our Halloween party cast its spell on all who attended. The venue was transformed into a haunted wonderland, with cobwebs, jack-o'lanterns, and eerie decorations setting the perfect tone for a day of ghoulish fun. Guests arrived in an array of black costume. Our Halloween party was a spine-chilling success, making it a day to remember for all who dared to embrace the spirit of the season. This was successful event organised by the Mechanical students and was a happy day to the students to enjoy together with their friends and faculty.







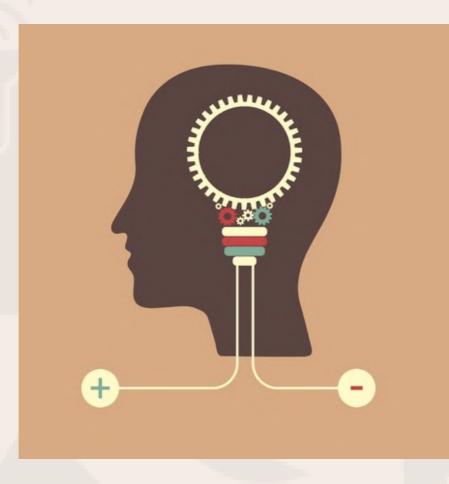


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## STUDENTS

### BEYOND MIND'S EYE



Students pursuing engineering degrees often have a broad spectrum of ideas and aspirations when it comes to the future scope of their chosen field. For many, the allure of engineering lies in the promise of innovation and the opportunity to address pressing global challenges. They anticipate a dynamic and evolving landscape, where adaptability and continuous learning will be key. As they progress through their studies, students are eager to embrace opportunities for research, internships, and collaborations that will prepare them for a future where engineering not only offers job security but also the chance to make a meaningful impact on the world.



"Aerospace engineering is undoubtedly a field with a bright future within the realm of mechanical engineering. This specialized discipline is at the forefront of technological advancement, innovation, and exploration, making it a compelling career choice for those who aspire to push the boundaries of what is possible. The aerospace industry is experiencing unprecedented growth, driven by a combination of government-funded space programs and the emergence of private companies engaged in space exploration, satellite technology, and commercial space travel. The pursuit of ambitious space missions, such as sending humans to Mars or establishing permanent lunar bases, has created a surge in opportunities for aerospace engineers to contribute to cutting-edge spacecraft and propulsion system designs. Furthermore, the advent of commercial space tourism, led by companies like SpaceX and Blue Origin, is set to redefine the possibilities of human spaceflight and make it accessible to a broader audience.

The aerospace engineering field also plays a pivotal role in the development of unmanned aerial vehicles (UAVs) and drones, which have found applications in various sectors, including agriculture, surveillance, and logistics. As environmental concerns intensify, the industry places significant emphasis on designing more fuel-efficient and environmentally friendly aircraft, stimulating research in aerodynamics, propulsion systems, and lightweight materials. Aerospace engineers are the driving force behind the development of advanced materials, such as lightweight composites and alloys, which are critical for reducing the weight and increasing the efficiency of aircraft and spacecraft.

Defense systems are another significant sector where aerospace engineering thrives. The industry continually invests in advanced aerospace technologies, including fighter aircraft, missile systems, and radar technology, making it an indispensable field for those interested in national security and defense. Aerospace engineers are responsible for designing, testing, and maintaining these high-stakes systems, ensuring their reliability and safety.

Moreover, aerospace engineering isn't limited to just the design phase; it also extends to the maintenance and predictive maintenance of aircraft, as well as the development of technologies that improve the longevity and reliability of aerospace components. Research and development in supersonic and hypersonic flight, autonomous flight systems, and spacecraft for scientific exploration further add to the excitement of the field, offering engineers opportunities to contribute to groundbreaking projects and ventures.

Aerospace engineering often involves international collaboration, where engineers work on global projects and ventures, providing an enriching crosscultural experience and diverse career opportunities. To thrive in this field, one should have a strong foundation in mechanical engineering principles while also developing expertise in specialized areas such as aerodynamics, fluid dynamics, structural analysis, control systems, and materials science. Pursuing internships, co-op programs, or advanced degrees in aerospace engineering can be an ideal pathway to prepare for a career in this exciting and ever-evolving field. Aerospace engineering represents a dynamic and forward-looking facet of mechanical engineering, offering a multitude of challenges and opportunities for those passionate about exploring the frontiers of human knowledge and technology".







BANDI VISHAL REDDY 21BF1A0308

## **AUTOMATIONS IN ROBOTICS**

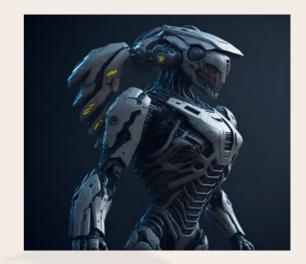
#### **INTRODUCTION:**

Robotics has undergone a remarkable evolution from its early beginnings to the present age. In the early stages, robotics primarily involved simple automated machines for repetitive tasks in industries. Over time, advancements in electronics, computing, and artificial intelligence led to the development of sophisticated robots capable of complex actions and decision-making. Today, robotics encompasses a wide from industrial robots enhancing spectrum, manufacturing efficiency to humanoid robots aiding in healthcare, showcasing the impressive progress in this field



#### **DEVELOPMENT:**

In the grand theater of technological progress, robotics has emerged as the lead performer, captivating audiences with an awe-inspiring performance. Starting as humble marionettes of industry, they've transcended their strings, now dancing to the complex symphony of artificial intelligence and machine learning. These mechanical maestros have shed their rigidity, adopting a fluidity akin to life itself, navigating the world with a grace reminiscent of ballet. Today, robots take center stage, enacting a tale of innovation, pushing the boundaries of human imagination.



#### FEATURES:

The future of robotics holds immense promise as technological advancements propel the field into exciting new realms. With ongoing research and innovation, robots are set to become even more versatile. autonomous, and capable of complex tasks. Artificial intelligence and machine learning will further refine their decision-making and adaptive abilities. enabling seamless integration into various industries. From healthcare and transportation to household assistance and environmental monitoring, robots will enhance efficiency, safety, and quality of life. As society embraces this future, robots will undoubtedly play a pivotal role in shaping our evolving world.





Badrinath Anand 21BF1A0304

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## **ADDITIVE MANUFACTURING**

#### Introduction:

Additive manufacturing, or 3D printing, is a process of creating 3D objects by adding material layer by layer based on a digital design. It allows for the production of complex geometries, customization, and sustainability, while reducing production time and costs. It has broad applications across various industries and has the potential to revolutionize manufacturing. Feature

Additive manufacturing is a process of creating three-dimensional objects by adding layers of material on top of each other. The process starts with the creation of a digital model using computer-aided design (CAD) software. The software then translates the design into a layer-by-layer framework for the additive manufacturing machine to follow. This is sent to the 3D printer, which begins creating the object immediately.



The most common types of additive manufacturing include fused deposition modelling (FDM), stereolithography (SLA), and Selective laser Sintering (SLS), in FDM, a thermoplastic filament is melted and extruded through a nozzle to create the object. In SLA, a laser beam is used to cure liquid resin into solid layers. In SLS, a laser beam is used to sinter powdered material into solid layers.Additive manufacturing has several advantages over traditional manufacturing methods, including reduced costs, greater design flexibility, and faster prototyping. It also enables efficient waste minimization and reduces material waste and energy use. These benefits make additive manufacturing an attractive option for prototyping and production.



SHAIK ABDULLA 23BFA03L61



N. CHARAN TAJ 23BFA03L44



S. VIDYA SAGAR 23BFA03L65

### **THE SCIENCE BEHIND STEALTH TECHNOLOGY**

#### **Introduction**

Stealth technology is a set of techniques used to reduce an object's detectability by radar, infrared, and other sensors. It is used in military applications to make aircraft, ships, and other vehicles less visible to enemy forces.

The two main principles of stealth technology are:

• Shape design: Stealth aircraft and ships are designed with sharp angles and flat surfaces that deflect radar waves away from the radar receiver. This is in contrast to conventional aircraft and ships, which have rounded surfaces that reflect radar waves back to the receiver.

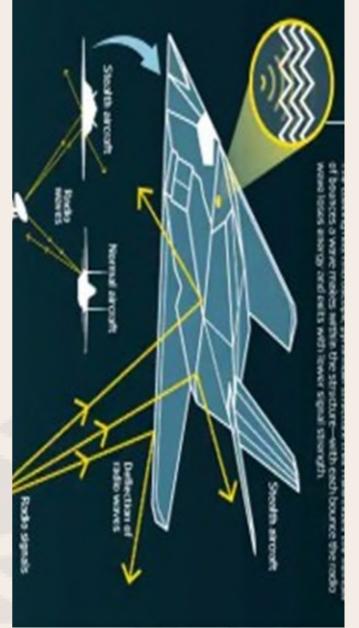
• Radar-absorbent materials (RAM): Stealth aircraft and ships are also coated with RAM, which absorbs radar waves. RAM is made from a variety of materials, including carbon fibers, ferrites, and elastomers.

#### Types of radar-absorbent material (RAM):

- 1. Iron ball paint absorber
- 2. Foam absorber
- 3. Split-ring resonator absorber
- 4. Carbon nanotube

#### <u>Use in stealth technology:</u>

Radar-absorbent materials are used in stealth technology to disguise a vehicle or structure from radar detection. A material's absorbency at a given frequency of radar wave depends upon its composition. RAM cannot perfectly absorb radar at any frequency, but any given composition does have greater absorbency at some frequencies than others; no one RAM is suited to absorption of all radar frequencies. A common misunderstanding is that RAM makes an object invisible.





H. Vishal Sri Sai 22BFA03019

## **ARTIFICIAL INTELLIGENCE**

Artificial Intelligence (AI) has attracted years due interest in recent to AI's technological advancements and its increased ability to process large amounts of data. **Mechanical** engineering faces several challenges today, such as designing systems and components for our future, respectful of sustainability efficiency. and energy Incorporating advanced technologies into their designs help mechanical can engineering



An example of such a technology is AI and data analytics.

There has been tremendous progress in AI in areas such as autonomous vehicles. Focusing more specifically on upfront mechanical design, we will see the application of a machine learning algorithm by Neural Concept in a collaborative scenario; taken not from the future, but from the present. The collaboration scenario between engineers we envisage is the following. AI turnkey solutions could originate from data analysis by data scientists and other expert engineers with expertise in programming languages and AI algorithms. On the other hand, most mechanical engineers would wish to exploit AI solutions while focusing on their expertise

Examples of mechanical engineering skills are factory automation, material synthesis, and product design, including CAD Today's Mechanical Engineering Challenges, Modern mechanical engineering faces pressure from multiple angles. On one side, the demands of creating innovative products and processes. On the other side, ensuring that designs are sustainable and cost-effective.



21BF1AO336 K.Kusuma

# **ARTIFICIAL INTELLIGENCE IN TRIBOLOGY**

#### **ABSRACT:**

\_Artificial Intelligence and in \_There have been very recent particular, machine learning methods have gained notable attention in the tribological community due to their ability predict tribologically to relevant parameters such as, for instance, the coefficient of oil friction or the film thickness. The perspective aims at highlighting some of the recent advances achieved implementing artificial bv specifically intelligence, artificial neutral networks, towards biological research.



Machine Learning refers to a vast set of data -driven methods and computational tools for modelling and understanding complex datasets. These methods can be used to detect automatically patterns in datasets thus creating models to predict future data and other outcomes of interest under uncertainty.

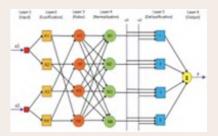
#### **INTRODUCTION:**

advantages in applying methods of deep or machine learning (ML) to improve tribological characteristics of materials by means of artificial intelligence (AI). It is generally concerned with the design and construction of intelligent agents, which is anything that acts in the best way possible in any situation.

#### **TYPES OF MACHINE LEARNING METHODS:**



A prominent method that machines employ to learn is by using artificial neural networks. These networks are based upon the network of neurons in the human brain and have the ability to "learn" in a fashion similar to the way humans do. An ANN is made up of network of model neurons, which can use algorithms to make them function like biological neurons.



**APPLICATIONS OF AI IN TRIBOLOGY: 1.Online Condition Monitoring** 2. Design of Material Composition **3.** Lubricant formulation

4. Lubrication and fluid film formulation.

#### CURRENT CHALLENGES AND FUTURE **RESEARCH ON TRIBOLOGY:**

**Tribology and AI techniques** have already be shown to be effective for many tribological questions. However, one of the biggest obstacles remaining is the interdisciplinary character of tribology represents a great opportunity but also a great challenge for the intense collaborations b/w different disciplines including physics, chemistry, material science, structural and mechanical engineering & computational engineering. Together with the aid of AI/ML algorithms, this can be enable deeper insights and thus guiding us towards more energy-efficient era.



**G**. Srinivas 22BF5A0313

# **DRONE TECHNOLOGY**

#### **INTRODUCTION:**

The term drone usually refers to any undiluted aircraft. Sometimes referred to as unmanned aerial vehicles (UAVs), these crafts can carry out an impressive range of tasks, ranging from military operations to package delivery. Drones can be as large as an aircraft or as small as the plan of your handhold.

#### HISTORY:

The first pilotless vehicles were developed in Britain and the USA during the First World War. Britain's Aerial Target, a small radio-controlled aircraft, was first tested in March 1917 while the American aerial torpedo known as the Kettering Bug first flew in October 1918. Although both showed promise in flight tests, neither were used operationally during the war.

During the inter-war period the development testing of and unmanned aircraft continued. In 1935 the British produced a number of radio-controlled aircraft to be targets for training used as purposes. It's thought the term 'drone' started to be used at this time, inspired by the name of one of these models, the DH.82B Queen Bee. Radio-controlled drones were also manufactured in the United States and used for target practice and trainingtraini



#### **FEATURES**:

- 1.various types of cameras with highperformance, zoom and gimbal steadycam and tilt capabilities;
- 2.artificial intelligence (AI) that enables the drone to follow objects;
- 3.augmented reality features that superimpose virtual objects on the drone's camera feed;
- 4.media storage format;
  - maximum flight time, which determines how long the drone can remain in the air; maximum speeds, including ascent and descendesce;





22BF5A0345 S.Bhuvaneswari



22BF5A0337 R.T. Pavitra devi

# ARTS & CRAFTS

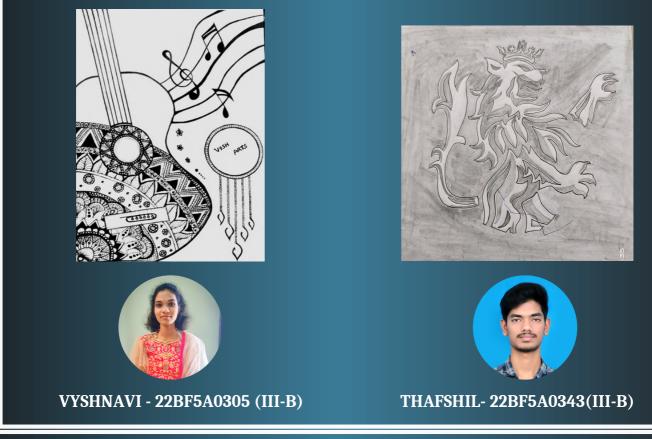








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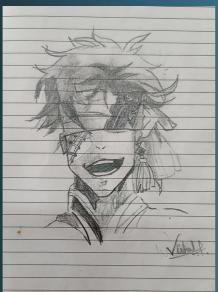


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#### KUSUMA- 21BF1A0336 (III-A) JAHNAVI- 21BF1A0311 (III-A)





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# SPORTS





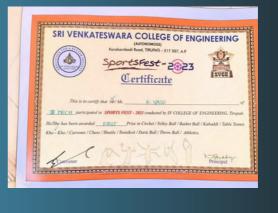






#### PRIZE WINNERS OF KHO-KHO IN INNOVITS - 2K23 CONDUCTED IN VAAGDEVI INSTITUTE OF TECHNOLOGY AND SCIENCES

















## DEPARTMENT OF MECHANICAL ENGINEERING

# PLACEMENT DETAILS OF THE YEAR 2K23





# **Department of Mechanical Engineering**

Placement Details for the Year of 2023



NAME : K.PAVAN SAI 1.COMPANY NAME: Acmegrade, ROLE: Business development associate, PACKAGE: 4 Lpa 2.COMPANY NAME: City union bank, ROLE: relationship manager, PACKAGE: 3.9 Lpa 3.COMPANY NAME: Indo Mim , ROLE: Graduate Engineer Trainee, PACKAGE: 3.3 Lpa 4.COMPANY NAME: India cements, ROLE :Graduate Engineering Trainee, PACKAGE: 2.75 Lpa



NAME : G. OMSAI 1.COMPANY NAME: Acmegrade, ROLE: Business development associate, PACKAGE: 5-4 Lpa 2.COMPANY NAME: City union bank, ROLE: Relationship manager, PACKAGE: 4 Lpa 3. COMPANY NAME: Focus edumatics , ROLE :tutor, PACKAGE: 2.1 lakhs 4.COMPANY NAME: Greenthech, ROLE: Graduate engineer trainee, PACKAGE: 1.9 Lpa



NAME : G. JYOTHI 1. COMPANY NAME: India cements, ROLE :Graduate Engineering Trainee, PACKAGE: 2.75 Lpa 2.COMPANY NAME: ISUZU, ROLE: Industrial Trainee, 3. COMPANY NAME: Indo MIM, ROLE : Graduate Trainee Engineer,



NAME : A . SYAM 1. COMPANY NAME: Focus Edumatics , ROLE :Online Tutor, PACKAGE: 2.5 Lpa 2.COMPANY NAME: GREENTECH ROLE: Graduate engineer trainee, PACKAGE: 1.9 Lpa 3. COMPANY NAME: Indo MIM, ROLE : Graduate Trainee Engineer, PACKAGE: 3.3 Lpa



NAME : K.BHANU JAYA PRASAD 1. COMPANY NAME: Focus Edumatics , ROLE :Online Tutor, PACKAGE: 2.5 Lpa 2.COMPANY NAME: GREENTECH ROLE: Graduate engineer trainee, PACKAGE: 1.9 Lpa 3. COMPANY NAME: Indo MIM, ROLE : Graduate Trainee Engineer, PACKAGE: 3.3 Lpa



NAME : P. PRUDHVI TEJA LCOMPANY NAME: GREENTECH ROLE: Graduate engineer trainee, PACKAGE: 3 Lpa 2. COMPANY NAME: TCL, ROLE : Graduate Trainee Engineer, PACKAGE: 3.5 Lpa



# **Department of Mechanical Engineering**

### **Placement Details for the Year of 2023**



NAME : K. LAVANYA 1.COMPANY NAME: Acmegrade, ROLE: Business development associate, PACKAGE: 6-4 Lpa 2. COMPANY NAME: Focus edumatics, ROLE :Online tutor, PACKAGE: 2.5 lakhs



NAME : Y. YASWANTH 1.COMPANY NAME: Jspiders, *ROLE: Online turo,* 2. COMPANY NAME: City union Bank, *ROLE* : Relationship manager, *PACKAGE*: 4LPA



NAME : T. N.NITEHKUMAI ACHARI 1.COMPANY NAME: Greenthech, ROLE: Graduate engineer trainee, PACKAGE: 2 Lpa 2. COMPANY NAME: City union Bank, ROLE : Relationship manager, PACKAGE: 4LPA



NAME : B. OMPRAKASH 1.COMPANY NAME: Greenthech, ROLE: Graduate engineer trainee, PACKAGE: 2 Lpa 2. COMPANY NAME: Isuzu , ROLE : : Industrial Trainee.



NAME: P. KIRAN KUMAR 1.COMPANY NAME: Indo Mim, ROLE: Graduate Engineer Trainee, PACKAGE: 3.3 Lpa



NAME :P. SAINARASINGARAO 1.COMPANY NAME: Acmegrade, ROLE: Business development associate, PACKAGE: 4.2 Lpa



NAME: C. YASWANTH 1.COMPANY NAME: Indo Mim , ROLE: Graduate Engineer Trainee, PACKAGE: 3.3 Lpa



NAME : N. VENKATESH 1.COMPANY NAME: Focus edumatics , ROLE :Online tutor, PACKAGE: 2.5 lakhs



NAME: G. SRIHARI 1.COMPANY NAME: Focus edumatics , ROLE :Online tutor, PACKAGE: 2.5 lakhs



# **Department of Mechanical Engineering**

Placement Details for the Year of 2023



NAME : S. VAMSI KRISHNA 1.COMPANY NAME: Greenthech, ROLE: Graduate engineer trainee, PACKAGE: 2 Lpa



NAME : A. THARUN 1.COMPANY NAME: Greenthech, ROLE: Graduate engineer trainee, PACKAGE: 2 Lpa



NAME : U. SNEHA SAGAR 1.COMPANY NAME: NAMETCL, ROLE : Graduate Trainee Engineer, PACKAGE: 3.5 Lpa



NAME : M. SURYA NARAYAN 1.COMPANY NAME: Greenthech, ROLE: Graduate engineer trainee, PACKAGE: 2 Lpa



NAME : P. REKHA 1.COMPANY NAME: Acmegrade, ROLE: Business development associate, PACKAGE: 5-4 Lpa



NAME : J. VINAY KIRAN 1.COMPANY NAME: Indo Mim , ROLE: Graduate Engineer Trainee, PACKAGE: 3.3 Lpa



NAME : K. THEJA 1.COMPANY NAME: Mahindra logistics. , ROLE: Whizzard.



NAME : A. SHALEM ABHISHEK 1.COMPANY NAME: India cements, ROLE :Graduate Engineering Trainee, PACKAGE: 2.75 Lpa

TOTAL CRT Reg			90		TOTAL OFFERS	80	NO.OF STUDENTS Placed	52	
	ACADEMIC YEAR		TOTAL Number of Students		CRT REGISTERED STUDENTS	Total Offers	NO.OF Students Placed		
		2019-23	128		90	80	52		
	NAME OF The Company			NO. OF STUDENTS PLACED			PACKAGE PER YEAR		
	QSPIDERS		1						
	TCS			1		3,50,000			
	ACMEGRADE			8		6,00,000			
	INDIA CEMENTS			6		2,76,000			
	Focus Edumatics			s 21		2,50,000			
	CITY UNION Bank			6		3,90,000			
	WHIZZARD			1		5,00,000			
	GREENTECH Industries				20	1,98,000			
	INDO-MIM			11		3,30,000			
	TCL Total Offers Total Placed				5	3,30,000			
				80					
				52					



A farewell is an expression of good wishes to people who are leaving an institution or place of work or residence. A farewell is organized to bid goodbye and good luck to people who are leaving. It helps in conveying a message they will be missed by those they are leaving behind.

Farewell party in the college is celebrated not to just to say goodbye to the friends, as they step into a new realm of life. It also a commemoration to celebrate all the good times together and wishing the best for the future.

"We started here together and now here we are leaving the same way. The funny thing is you never appreciate what you had yesterday until it is gone Today". College Farewell parties are always an exciting affair and bring alive a lot of happy memories.





# <u>CHIEF</u> Editorial committee



Dr. M. Chandra Sekhara Reddy Professor & HOD Department of Mechanical Engineering

### Mr.S.Jaya Kishore M.Tech.,(Ph.D) Assistant Professor Department of Mechanical Engineering



# <u>EDITORIAL COMMITTEE</u>





Vishal Reddy B 21BF1A0308



Badrinath Anand A 21BF1A0304



Anand D 21BF1A0316



Vivek Sagar T 22BF5A0347



Mobeen Ataharulla SK 21BF1A0353



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