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*CAMPUS GEARS*

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WELCOME TO OUR

*Newsletter*

# Department of Mechanical Engineering

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ISO 9001 : 2015 Certified Institution



**USHARAMA**

**COLLEGE OF ENGINEERING AND TECHNOLOGY**

**AUTONOMOUS**

On NH-16, Telaprolu, Near Gannavaram, Krishna District - 521109.

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CODE:URCE

## About the Department

The Department of Mechanical engineering is established at USHARAMA College of Engineering & Technology in the year 2010 with the approval of AICTE and intake is of 60 seats. It offers Undergraduate degree program in Mechanical Engineering. The department is adjudged as one of the pioneering departments at URCE with well qualified and experienced faculty.

The specializations of the faculty are well balanced to cater the academic needs of students effectively. To impart more practical exposure to the students the laboratories are housed spaciouly and are equipped with more than adequate machinery, tools and software's to satisfy the needs of students. Qualified and well trained technical staff assists the students during lab work.

## INSTITUTE VISION

**To emerge as a centre of excellence in technical education by imparting quality teaching learning practices and research for the transformation of society.**

## INSTITUTE MISSION

- **Provide an ideal and the best class infrastructure to foster exploration in engineering and research.**
- **Build dedicated faculty with student centric teaching incorporating experiential, innovative skills.**
- **Encourage lifelong learning, entrepreneurial thinking and ethical responsibility in students to address societal challenges.**

## DEPARTMENT VISION

**To impart quality education in the field of Mechanical Engineering to meet the industrial standards and technological needs of the society.**

## DEPARTMENT MISSION

- **To provide quality education for career building and skill enhancement and to become globally competitive.**
- **To groom the students with leadership qualities, problem solving approach, along with team work and effective communication.**
- **To promote higher education, entrepreneurship skills, research cum innovation with a focus on industrial and societal needs and to mould the students with professional ethics and moral values.**

## PROGRAM EDUCATIONAL OBJECTIVES

(PEOs)

**PEO 1: To train the graduates in building a successful professional career in Mechanical Engineering.**

**PEO 2: To encourage the graduate engineers to achieve their goals through higher education and Research & Development activities.**

**PEO 3: To support the graduates to become moral & ethically responsible citizens in the development of the nation.**

## PROGRAM SPECIFIC OUTCOMES

(PSOs)

**PSO1: Apply Engineering fundamental knowledge, complex mathematics, science and provide solutions to mechanical Engineering system.**

**PSO2: Design and develop products innovatively with modern tools and to optimize manufacturing processes.**

## Programme Outcomes (POs)

**PO - 1: Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

**PO - 2: Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

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**PO - 3: Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO - 4: Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

**PO - 5: Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

**PO - 6: 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.

**PO-7: Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**PO -8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**PO - 9: Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**PO - 10: Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**PO - 11: Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**PO - 12: 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.

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## **FACULTY NEWS**

### **PAPER PUBLICATIONS(National/International Journals/ Conferences)**

#### **SCI/SCIE/ESCI indexed journals:**

Nil

#### **Scopus**

#### **Conferences**

Nil

### **RESOURCE PERSONS IN STTPS/FDPS**

Dr. R. Bhargavi

“Advanced materials processing and Characterization methods” Dept. of ME., Tirumala Engineering College Narasaraopet, Guntur District, Andhra Pradesh, 13<sup>th</sup> – 17<sup>th</sup> Feb 2023.

Dr. B. Kiran Babu

“Materials: Processing and Applications” Dept. of ME., VKR, VNB & AGK College of Engineering, Gudivada, Andhra Pradesh, 18<sup>th</sup> March 2023.

### **FACULTY DEVELOPMENT PROGRAM / SHORT TERM TRAINING**

#### **PROGRAM ORGANIZED**

Six days FDP on “Advances in Manufacturing Processes” on 24<sup>th</sup> - 29<sup>th</sup> April, 2023.

Key note speakers are:

1. Dr. P. Vamsi Krishna, Associate Professor, NIT, Warangal.
2. Dr. V.V.S. Prasad, Professor, Andhra University, Visakhapatnam, AP.
3. Dr. Syed Kamalludin, Professor, Vignan University, Visakhapatnam, AP.
4. Dr. P.S. Rama Srikanth, Professor, Dean School of ME, VIT, AP.
5. Dr. K. Murahari, Professor, L.B.R.C.E, Dept. of ME, Mylavaram, AP.
6. Dr. Abid Ali, Professor, Dept. of M.E., Potti Sriramulu College of Engineering, Vijayawada.

#### **FACULTY DEVELOPMENT PROGRAMS ATTENDED**

1. K. Vidya, A one week online FDP on “Innovations in Mechanical Engineering” organized by the Department of Mechanical Engineering, VVIT, Nambur, Andhra Pradesh, India organized from 26/12/2022 to 30/12/2022.
2. K Vidya,. 5-day Online FDP on the theme “Inculcating Universal Human Values in Technical Education (UHV-I)” organized by All India Council for Technical Education (AICTE) from 20/02/2023 to 24/02/2023.

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3. J. Ashok Kumar, K. Vidya, Rahul N Karmanekar, Dr V Ajay Kumar,. 5-day Online FDP on the theme “Inculcating Universal Human Values in Technical Education (UHV-II)” organized by All India Council for Technical Education (AICTE) from 24/04/2023 to 29/04/2023.

**CERTIFICATIONS COURSES THROUGH NPTEL**

Ch. V. Krishna, completed a certification course titled,“ Introduction to Industry 4.0 and Industrial Internet of Thinking” offered through Swayam - NPTEL during Jan-April 2023.

J. Ashok Kumar, completed a certification course titled,“ Introduction to Industry 4.0 and Industrial Internet of Thinking” offered through Swayam - NPTEL during Jan-April 2023.

## **STUDENT ACTIVITIES**

### **INDUSTRIAL VISTS/WORKSHOPS/SKILL DEVELOPMENT PROGRAMS**

#### **INDUSTRIAL VISIT**

IV B.Tech. students of Mechanical Engineering visited “Hindustan Coca-Cola Beverages Private Limited”, Tenali on 24-02-2023.

#### **WORKSHOPS/SEMINARS**

The department of Mechanical Engineering organized -----

1. One week training program on " CNC Programming & Machining " by Pathan Mahabub Khan, Trainer, association with APSSDC at Andhra Loyola Institute of Engineering and Technology, Vijayawada, for III B.Tech ME students on 26/12/2022 to 30/12/2022.
2. A One week training program on " AutoCAD " by Prasanna Lakshmi, Trainer, association with APSSDC, at Usha Rama college of Engineering and Technology (Autonomous) for ME students on 03/01/2023 to 07/01/2023.
3. A Seminar on " Smart Materials and Their Applications " Dr. P.S. Rama Srikanth, Professor, Dean School of ME, VIT, AP. for ME students on 16/02/2023.

#### **PARTICIPATIONS IN PROFESSIONAL EVENTS**

1. D Rambabu, K Durga Prasad, K Srikanth has participated in the event Technical Quiz at Lakireddy Bali Reddy College of Engineering, Mylavaram, Andhra Pradesh on 28-12-2022.
2. N Sai Dinesh, K Ratnakar, M Naga Malleswara Rao has participated in the event Technical Quiz at Lakireddy Bali Reddy College of Engineering, Mylavaram, Andhra Pradesh on 28-12-2022.
3. Y Sriharsha, B Vijay Jeevan Kumar, M Sasi Kumar has participated in the event Poster Presentation at Lakireddy Bali Reddy College of Engineering, Mylavaram, Andhra Pradesh on 28-12-2022.
4. D Mohan Surya, T Naga Maha Akhilesh, V Leela Naga Sandeep has participated and won 2<sup>nd</sup> prize in the event Poster Presentation at Lakireddy Bali Reddy College of Engineering, Mylavaram, Andhra Pradesh on 28-12-2022.
5. M Sasi Kumar, B Vinay Kumar, B Vijay Jeevan Kumar has participated in the event Technical Quiz at Swarnandhra College of Engineering & Techonlogy, on 10-02-2023.
6. M Sasi Kumar, P Vamsi, G Sai Krishna has participated in the event Technical Quiz at Swarnandhra College of Engineering & Techonlogy, on 10-02-2023.
7. M Siva Ramakrishna, T Naga Maha Akhilesh, T Pavan Kalyan has participated in the event Project Expo at Swarnandhra College of Engineering & Techonlogy, on 10-02-2023.
8. T Ratnakar, V Leela Naga Sandeep, A Chennakesava has participated in the event Project Expo at Swarnandhra College of Engineering & Techonlogy, on 10-02-2023.

9. S Suresh, U. Raviteja, K Venkata Narendra Reddy has participated in the event Poster Presentation at Prasad V. Potluri Siddhartha Institute Of Technology, Vijayawada on 11-03-2023.
10. K Praveen Tejas, P Vamsi, G Sai Krishna has participated and won 2<sup>nd</sup> prize in the event Poster Presentation at Prasad V. Potluri Siddhartha Institute Of Technology, Vijayawada on 11-03-2023.
11. M Siva Ramakrishna, T Naga Maha Akhilesh, T Pavan Kalyan has participated in the event Technical Quiz at Prasad V. Potluri Siddhartha Institute Of Technology, Vijayawada on 11-03-2023.
12. T Ratnakar, M Sasi Kumar, B Vinay Kumar has participated and won 2<sup>nd</sup> prize in the event Technical Quiz at Prasad V. Potluri Siddhartha Institute Of Technology, Vijayawada on 11-03-2023.
13. B Vijay Jeevan Kumar, M Sasi Kumar, D Mohan Surya has participated in the event Project Expo at DNR College of Engineering & Technology, Bhimavaram, Andhra Pradesh on 12-04-2023.
14. T Naga Maha Akhilesh, V Leela Naga Sandeep, A Chennakesava has participated in the event Project Expo at DNR College of Engineering & Technology, Bhimavaram, Andhra Pradesh on 12-04-2023.
15. T Naga Maha Akhilesh, T Pavan Kalyan, T Ratnakar has participated in the event Poster Presentation at DNR College of Engineering & Technology, Bhimavaram, Andhra Pradesh on 12-04-2023.
16. M Sasi Kumar, B Vinay Kumar has participated in the event Poster Presentation at DNR College of Engineering & Technology, Bhimavaram, Andhra Pradesh on 12-04-2023.
17. S Suresh, U. Raviteja has participated and won 2<sup>nd</sup> prize in the event Technical Quiz at Lakireddy Bali Reddy College of Engineering, Mylavaram, Andhra Pradesh on 28-04-2023.
18. K Venkata Narendra Reddy, K Praveen Tejas has participated and won 2<sup>nd</sup> prize in the event Technical Quiz at Lakireddy Bali Reddy College of Engineering, Mylavaram, Andhra Pradesh on 28-04-2023.
19. P Vamsi, G Sai Krishna has participated in the event Technical Quiz at Lakireddy Bali Reddy College of Engineering, Mylavaram, Andhra Pradesh on 28-04-2023.
20. M Siva Ramakrishna, T Naga Maha Akhilesh has participated in the event Technical Quiz at Lakireddy Bali Reddy College of Engineering, Mylavaram, Andhra Pradesh on 28-04-2023.
21. G Vamsi Krishna, N Sai Mani Kowshik has participated and won 2<sup>nd</sup> prize in the event Project Expo at Lakireddy Bali Reddy College of Engineering, Mylavaram, Andhra Pradesh on 28-04-2023.
22. B Pavan Kalyan, N Leela Prasad has participated and won 2<sup>nd</sup> prize in the event Project Expo at Lakireddy Bali Reddy College of Engineering, Mylavaram, Andhra Pradesh on 28-04-2023.
23. K Lakshman, M Sasi Kumar Prasad has participated in the event Project Expo at Lakireddy Bali Reddy College of Engineering, Mylavaram, Andhra Pradesh on 28-04-2023.

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## **CONFERNCES**

1. G. Vamsi Krishna, G. Chandu, K.B. Prakash, K. Mini Sai “Investigation of Mechanical and Thermal Properties of Bio Polymer using Kenaf Fiber” International Conference on Emerging Trends In Mechanical Engineering and Industrial Automation – 2023, (NEC-ICETMEIA-2023), 09<sup>th</sup> & 10<sup>th</sup> June, 2023, at Narasaraopet Engineering College, Andhra Pradesh, India. ISBN No: 978-93-91420-39-0.
2. B Vivek, K Pradeep, K Sai Pavan, K Dineshnadh “Experimental Study on CI Engine Fueled with Cotton Seed Oil and Diesel Blends” International Conference on Emerging Trends In Mechanical Engineering and Industrial Automation – 2023, (NEC-ICETMEIA-2023), 09<sup>th</sup> & 10<sup>th</sup> June, 2023, at Narasaraopet Engineering College, Andhra Pradesh, India. ISBN No: 978-93-91420-39-0.
3. V N Swamy, Y J Krishna, K Sunil, T Teja “Fabrication And Evaluation of Mechanical Properties on Epoxy Resin Based Graphene Nano Particles Composite” won 2nd prize, International Conference on Emerging Trends In Mechanical Engineering and Industrial Automation – 2023, (NEC-ICETMEIA-2023), 09<sup>th</sup> & 10<sup>th</sup> June, 2023, at Narasaraopet Engineering College, Andhra Pradesh, India. ISBN No: 978-93-91420-39-0.

## చిన్న విత్తనం - పెద్ద చెట్టు

ఒక చిన్న గ్రామంలో సీత అనే అమ్మాయి ఉండేది. ఆమెకు చదువంటే చాలా ఇష్టం. కానీ వారి కుటుంబ పరిస్థితులు బలహీనంగా ఉండేవి. పుస్తకాలు కొనడానికి కూడా డబ్బు సరిపోకపోయేది.

ఒక రోజు ఆమె గురువు ఒక చిన్న విత్తనం ఇచ్చి,

"దీన్ని నాటుకుని ప్రతిరోజూ చూసుకుంటే, ఇది పెద్ద చెట్టుగా పెరుగుతుంది. అలాగే నువ్వు కూడా కష్టపడితే గొప్ప వ్యక్తిగా మారుతావు," అని చెప్పారు.

సీత ఆ విత్తనాన్ని తన ఇంటి దగ్గర నాటి ప్రతిరోజూ నీళ్లు పోసేది. అదే సమయంలో ఆమె తన చదువుపై కూడా శ్రద్ధ పెట్టింది. ఎలాంటి కష్టాలు వచ్చినా ఆమె ఆగలేదు.

కొన్ని నెలల తర్వాత ఆ విత్తనం మొలకెత్తి చిన్న మొక్కగా మారింది. సంవత్సరాలు గడిచే కొద్దీ అది పెద్ద చెట్టుగా పెరిగింది. అదే సమయంలో సీత కూడా చదువులో మంచి ప్రతిభ చూపి ఉన్నత చదువులు పూర్తి చేసింది.

తరువాత ఆమె ఒక విజయవంతమైన శాస్త్రవేత్తగా మారింది. ఆ చెట్టు నీడలో కూర్చొని, తన చిన్ననాటి కష్టాలను గుర్తు చేసుకుంటూ,

"చిన్న ప్రయత్నాలు కూడా ఒకరోజు పెద్ద ఫలితాలు ఇస్తాయి," అని అనుకుంది.

G Vamsi Krishna (IV Year)

