

To educate and enrich effective and responsible Mechanical Engineers to fulfill the needs of industry and society.



SWARNANDHRA

College of Engineering and Technology

(Autonomous)

Seetharampuram, Narsapur, Andhra Pradesh 534280



MECHAZINE

BI - ANUAL MAGAZINE

DEPARTMENT OF
MECHANICAL ENGINEERING

Editorial Members

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DEPARTMENT OF MECHANICAL ENGINEERING



Empowering Minds

The Department of Mechanical Engineering was established in the academic year 2004. The Department presently offers Under-graduate study program leading to the degree of Bachelor of Mechanical Engineering and Post Graduate program M.Tech CAD/CAM. The initial intake of the department is 60 in UG Programme. Then the Department got approval for additional intake of 30 in 2008 another 30 in 2009, latter 60 more seats were added in 2015 with approval from AICTE for UG Programme. PG Programme - M.Tech. (CAD/CAM) is started in 2009 with an intake of 18. The present intake is 180 in UG and 18 in PG Programmes.



Building Futures

The department was accredited by National Board of Accreditation (NBA) in 2013 and was recognized as research centre by Jawaharlal Nehru Technological University Kakinada (JNTUK) in 2016. The Department has 31 faculty members are highly qualified and experienced in all streams of Mechanical Engineering. The faculty has been active in offering consultancy services to industries and conduct courses regularly to facilitate the continuing education of practicing engineers.

The department having DASSAULT System Lab associated with APSSDC. Experimental and computational facilities are being continuously upgraded. The Department has Association of Mechanical Engineering which is a forum for students to develop their professional skills. Students are also encouraged to take part in awareness campaigns that have social relevance. Alumni of the department have occupied very high positions at National and International level.

VISION AND MISSION

VISION

INSTITUTION

"To produce global competent, ethical and dynamic professionals by creating Centre of Excellence in Technical Education for societal empowerment."

DEPARTMENT

To educate and enrich effective and responsible Mechanical Engineers to fulfill the needs of industry and society.



MISSION



INSTITUTION

- To provide quality education with knowledge and skills for rural and urban students.
- To collaborate the industries with academia for empowering the students to meet global standards
- To induce highly ethical entrepreneurship in young minds with good leadership quality for the society
- To enhance the institution in Research and Development by human intellectual capability.

DEPARTMENT

- To lay a strong foundation of technical knowledge by concentrating on fundamental concepts of Mechanical engineering.
- To develop creative thinking and innovative methods for solving complex engineering problems.
- To develop team spirit, leadership and professional qualities.
- To strengthen research abilities in collaboration with industry.

PRINCIPAL DESK

Welcome to another exciting academic year! As your principal, I am thrilled to embark on this journey of learning and growth with each and every one of you.



Dr. S. Suresh Kumar

BE,MS, M.Tech, Ph.D

PRINCIPAL

This year, let's embrace the challenges ahead with enthusiasm and resilience. Let's support one another, celebrate our successes, and learn from our setbacks.

Together, we can create an environment where every student feels valued, empowered, and inspired to reach for the stars.

I encourage you to take advantage of all the resources available to you—from our dedicated teachers to our extensive library to our extracurricular programs. Seize every opportunity to grow academically, socially, and personally.

“AS YOUR PRINCIPAL, I AM HERE TO SUPPORT YOU EVERY STEP OF THE WAY. WHETHER YOU NEED GUIDANCE, ENCOURAGEMENT, OR SIMPLY SOMEONE TO LISTEN, MY DOOR IS ALWAYS OPEN..”

Let's work together to make this academic year one filled with achievement, joy, and unforgettable memories

HOD DESK

"Welcome, esteemed students, to the beginning of your exciting journey here at Swarnandhra College of Engineering and Technology. As the Head of the Department, I extend my warmest greetings to each of you."



Dr. A Gopichand

B.TECH, M.Tech, Ph.D

PROFESSOR, HOD-ME

Remember that your education is not only about absorbing information but also about developing critical thinking skills, problem-solving abilities, and a deep understanding of your chosen field. Take advantage of the resources available to you, including our experienced faculty, state-of-the-art facilities, and opportunities for research and practical application.

Remember the importance of collaboration and teamwork. Your peers can be invaluable sources of support and inspiration, so don't hesitate to work together, share ideas, and learn from one another.

AS YOUR HEAD OF DEPARTMENT, I AM COMMITTED TO PROVIDING YOU WITH THE SUPPORT AND GUIDANCE YOU NEED TO SUCCEED. I LOOK FORWARD TO WORKING WITH EACH OF YOU AND WITNESSING THE INCREDIBLE PROGRESS WE WILL MAKE TOGETHER.

Wishing you all the best for a successful and rewarding year ahead.

FA WORKSHOPS/CONFERENCES ATTENDED BY FACULTY:

OBJECTIVE

The primary is to enhance the professional capabilities of educators, equipping them with the knowledge, skills, and strategies necessary to excel in their roles as teachers, mentors, and leaders. Through a diverse array of workshops, seminars, and interactive sessions, we have explored innovative teaching methodologies, pedagogical best practices, and the latest trends in education.

S. No	Name of the Faculty	Program Description	Organized by
1	Dr. A. Gopi Chand	ICMPC-2019	GRIET – Hyderabad
2	Dr. A. Gopi Chand	Digital fuel volume indicator in motorbike	IJRASET
3	Mr. R Sam Sukumar	ICTIEE- 2019	MREC, Hyderabad
4	Mr. R Sam Sukumar	ICSIE-2019- ELSEVIER	Jawahar Engineering College, Chennai, India
5	Mr. K Balaji	Innovation In Materials And Manufacturing	SRKR Engg college,
6	Mr. K Balaji	Innovation In Materials And Manufacturing	IJRET
7	Mr. K Balaji	Innovation In Materials And Manufacturing	IJET
8	Mr.N.V.S Shankar	Icamer 19	NIT, Warangal
9	Mr.N.V.S Shankar	Applied robotics control lab	European center of mechatornics, Germany
10	Mr K Jitendra	Icamer 19	NIT, Warangal
11	Mr. B.Mahesh Krishna	Digital fuel volume indicator in motorbike	IJRASET
12	Mr Ch Harish Kumar	Product Re Engineering	VVIT, Guntur
13	Mr M Veerraju	Product Re Engineering	VVIT, Guntur

STUDENT'S FOCUS

- P Rachana, of VIII Sem secured first position in Paper presentation in "GVIT FEST- 2K19" held at Gvit Bhimavaram on 15& 16th Feb 2019, in poster presentation in "GECFEST'19" held at GEC Gudlavalleru on 21st to 23rd February 2019, Published a paper on "Digital fuel volume indicator in motorbike" in IJRASET V7/ May 2019.



- S Hanuman Reddy of VI Sem won 3rd prize in ppt in "SAHASRA 2K19" held at GIET Rajahmundry on 21st & 22nd February 2019. 1st & 2nd prize in poster & ppt in "VISIT UTSAV 2K19" held at VISIT Tadepali Gudem on 1st & 2nd march 2019
- Also at "ALOKA 2K19" held on 27th& 28th February 2019 at DNR Bhimavaram, 1st prize in event "Scrap to Art Competition" conducted by SCET on 9th February 2019, in Poster Presentation in "ANVESHANA in Search for Talent" held at SASI, Tadepalligudem on 22,23th February 2019, 3rd place in ppt in "SAHASRA National Tech Fest" held on 21st & 22nd February 2019.
- S P M Eswar Kumar of VI Sem won the 1st prize in event "Scrap to Art Competition" conducted by SCET on 9th February 2019 and in Poster Presentation in "ANVESHANA in Search for Talent" held at SASI, Tadepalligudem on 22nd ,23th February 2019.
- Secured 2nd prize in paper presentation in "ALOKA-2K19" held at DNR Bhimavaram on 27th & 28th February 2019, in event ROBO success in "SANKETA2K19" held at SRKR Engg College Bhimavaram on 29th & 30th January 2019.

ACADEMIC TOPPERS

"THE JOURNEY OF A THOUSAND MILES
BEGINS WITH A SINGLE STEP."
- LAO TZU

"EDUCATION IS NOT PREPARATION
FOR LIFE; EDUCATION IS LIFE ITSELF."
- JOHN DEWEY

our success is a result of your
dedicated hard work and
commitment. We wish you all the
best to achieve all the goals you
have set for yourself in career
and life and for all your future
endeavors.



ACADEMIC TOPPERS

Congratulations..



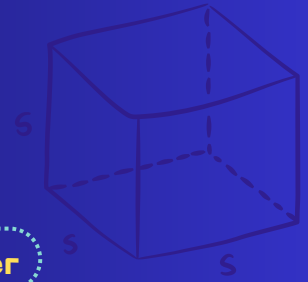
8th Semester Topper

NAME: N HARI DURGA SRINIVAS
H.T NO: 15A21A0365
CGPA: 9.57



6th Semester Topper

NAME: B LAKSHMI VISWANADH
H.T NO: 17A25A0314
CGPA: 9.14



$$V = s^3$$



4th Semester Topper

NAME: DGUDURI D P S HARI RAJU
H.T NO: 18A25A0312
CGPA: 9.70

As we stand at the threshold of our engineering journey, it's crucial to remind ourselves of the incredible path we've chosen. Ours is a field that shapes the world around us, where imagination meets innovation, and where every challenge is an opportunity to create something truly remarkable

IMPORTANT EVENTS

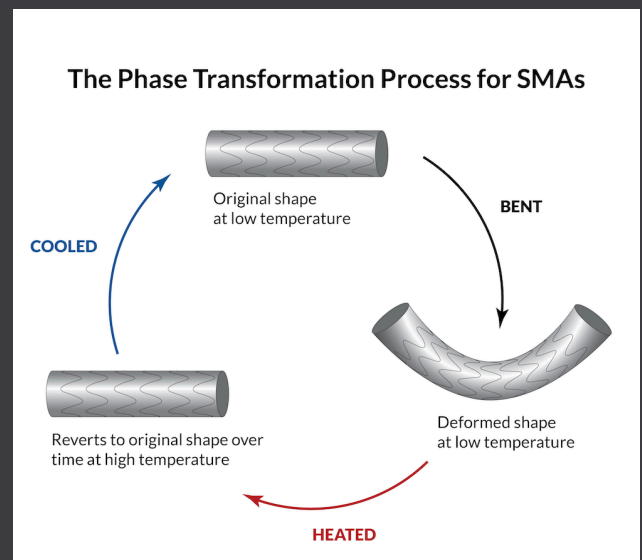
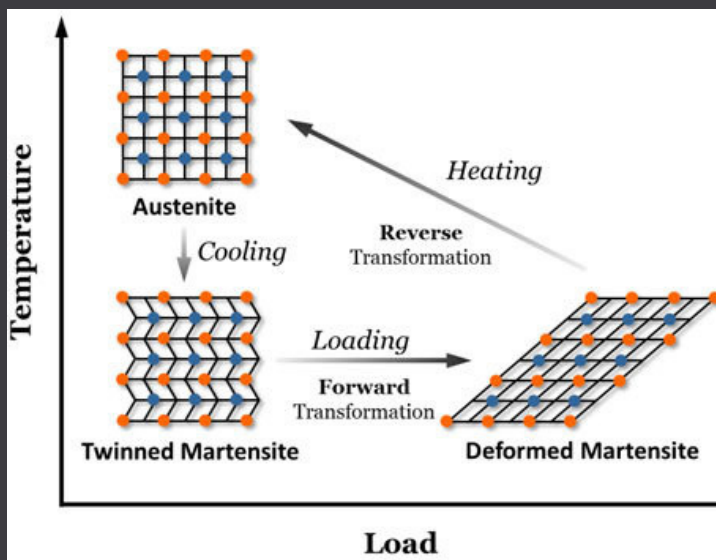
- VTHREE DAYS WORKSHOP ON IOT CERTIFICATE BY MS.A S SNIHARIKAA FROM APSSDC FOR VI & VIII SEM STUDENTS FROM 21-02-2019 TO 23-02-2019.
- VTWO WEEKS WORKSHOP ON CREO BY P MUTHUKUTTIRAFROMDIAGNALCADD,CHENNAI FROM 22-04-2019 TO 08-05-2019
- VONE WEEK WORKSHOP CONDUCTED ON CNC LATHE BY MR.K.SRINIVAS FROM APSSDC/ DESIGN LABS FOR V & VII SEM STUDENTS FROM 04-02-2019 TO 09-02-2019 ALSO FOR VI SEM FROM 11-02-2019 TO 16-02-2019.
- VDR.G ROBERT SINGH M.E., PH.D JOINED AS ASSOC PROFESSOR ON 27TH MAY 2019
- V DR.RSANJEEV KUMAR M.E., PH.D JOINED AS ASSOC PROFESSOR ON 3RD JUNE 2019

TRENDS IN TECHNOLOGY

SHAPE-MEMORY ALLOY

“

A shape-memory alloy is an alloy that can be deformed when cold but returns to its pre-deformed shape when heated. It may also be called memory metal, memory alloy, smart metal, smart alloy, or muscle wire. Parts made of shape-memory alloys can be lightweight, solid-state alternatives to conventional actuators such as hydraulic, pneumatic, and motor-based systems. They can also be used to make hermetic joints in metal tubing..



This unique property makes shape-memory alloys incredibly useful in various applications, including:

1. **Biomedical Devices:** SMAs are used in stents, orthodontic wires, and other implantable devices due to their biocompatibility and ability to apply controlled forces.
2. **Aerospace:** They are utilized in actuators, adaptive wings, and other components that require lightweight, reliable mechanisms.
3. **Automotive Industry:** SMAs find application in automotive components like valves, actuators, and safety systems, improving performance and safety.
4. **Consumer Electronics:** They are used in applications such as eyeglass frames, where flexibility and durability are important.
5. **Robotics:** SMAs are employed in robotic actuators and grippers due to their ability to provide precise and controlled motion.

GALLERY



**One Week workshop on Robo studio for B.Tech VII Sem students
from 28-01 to 02-02-19**



**Two weeks workshop on Non-Destructive Testing by V J Bharath
Kumar from VIDAL NDT, Vijayawada from 29.04.19 to 11.05.19**

GALLERY



RTA officer at Scrap to Art competition held on 9th February 2019



FDP on Applied Robotics control lab at Germany