



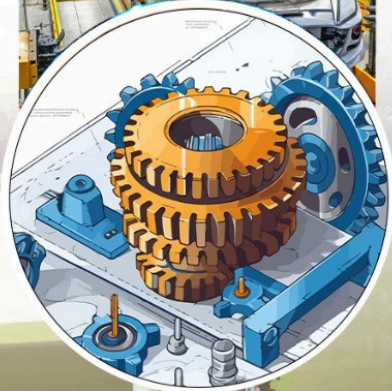
# MECH CONNECT

## Department Magazine

A:Y: 2024-25

# MECHANICAL ENGINEERING

- Advanced Labs & Workshops
- Industry-Focused Curriculum
- Exposure to Robotics & Automobiles
- Internship & Career Opportunities





**CHAIRMAN**

**Sri K. Venu Gopal**

It's my pleasure to invite you to this campus, which is abundantly endowed by nature and sufficiently enriched with our abiding commitment to quality and values. I am sure it will be a pleasant and enlightening experience for you to explore the treasures for yourself.



**SECRETARY**

**Sri K. Sai Rohith**

we from RCE thrive every day in providing the highest quality education, placements and skill sets for our students, which go in parallel with a fastmoving environment



**PRINCIPAL**

**Dr. M. Muralidhara Rao**

It is my pleasure to express about your study for a career at RCE. A unique place with state-of-the-art infrastructure and equipment on cutting-edge technologies with knowledge transfer by experienced faculty and technical staff. Having chosen to study at RCE, It will make you competent in advanced technologies along with scheduled training programs throughout the course. The present era of technical careers focuses on multi-disciplinary activities which makes the identity of one's career. So, I promise the above are fulfilled at RCE. I welcome you all, to this distinguished campus to transform your lives.



## **INSTITUTE VISION**

To emerge as a “Centre of excellence” offering high quality Technical Education and Research Opportunities to learners and also develop complete personality of graduates with good communication, discipline, lifelong learning, leadership qualities, ethics and global standards there by making them professionally deft and intellectually adept to contribute for the advancement of environment and society.

## **INSTITUTE MISSION**

- To impart high quality technical education by providing the state-of-the art infrastructure, core instruction and well experienced and qualified faculty.
- To develop highly motivated engineering professionals with good knowledge, communication skills, human and ethical values, requisite skills and competence.
- To produce highly successful graduates who can contribute to the profession to resolve the societal and environmental issues in the society.

## **DEPARTMENT VISION**

**To become a centre of excellence in the field of Mechanical Engineering by providing quality technical education and research to learners and solve social and environmental problems by developing innovative and creative skills in them and make the graduates employable along with lifelong learning, leadership and entrepreneurial skills.**

## **DEPARTMENT MISSION**

**To provide a platform to the aspiring mechanical engineers to attain quality education by utilizing the state of art Infrastructure, Innovative teaching methods and eminent faculty. To empower students with innovative and research skills to attain opportunities in Mechanical Engineering field and be solution providers with a lifelong learning attitude. To equip the learners with a sense of ethical and professional responsibilities towards society and environment along with leadership and entrepreneurial skills.**



## **DEPARTMENT PEO'S**

**PEO-1:** Gain the knowledge of principles in applied and basic engineering sciences which are necessary to formulate and solve problems related to Mechanical

**PEO-2:** Engineering.

Apply analysis, design, optimization and implementation skills in order to

**PEO-3:** formulate and solve Mechanical Engineering problems.

Develop the latest skills in cutting edge technologies and modern tools to

**PEO-4:** simulate the real time problems without experimentation.

Develop their managerial and Entrepreneur skills, Ethical and Professional skills and Art of multi-disciplinary approach and team work to solve the

**PEO-5:** problems of industry and society.

Recognize the needs of the future world of science & technology especially Mechanical Engineering and engage themselves in lifelong learning and research.

## **DEPARTMENT PSO'S**

### **U.G PSOs**

**PSO-1:** An ability to analyze, design and evaluate mechanical components and systems using state-of-the-art software tools needed for Mechanical Engineers as demanded by the industries from time to time.

**PSO-2:** An ability to work in operation and Maintenance plants of manufacturing and other sectors

**PSO-3:** Imbibing confidence to design, redesign, produce and reproduce the Mechanical Engineering components at any scale

### **P.G PSOs**

**PSO 1 :** Prepare process sheets and working drawings to manufacture a machine element.

**PSO 2 :** Model, simulate, analyze and optimize mechanical systems / processes through application of software.

# DEPARTMENT PO'S

## PO NO

## PROGRAM OUTCOME

- PO-1 Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and Engineering specializations to the solution of complex engineering problems.
- PO-2 Problem Analysis:** Identify, Formulate, review research literature and analyze complex engineering problems to arrive at substantiated conclusions using first principles of mathematics, natural and engineering sciences.
- PO-3 Design/Development of Solutions:** Design solutions for complex engineering problems and design system components, processes to meet the specifications with 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 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 modelling to complex engineering activities with and 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 teams and in multidisciplinary Settings
- PO-10 Communication:** Communicate effectively with the engineering community and with society at large. Be able to comprehend and write effective reports documentation. Make effective presentations, and give and receive clear instructions.
- PO-11 Project Management and Finance:** Demonstrate knowledge and understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team. Manage projects 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.



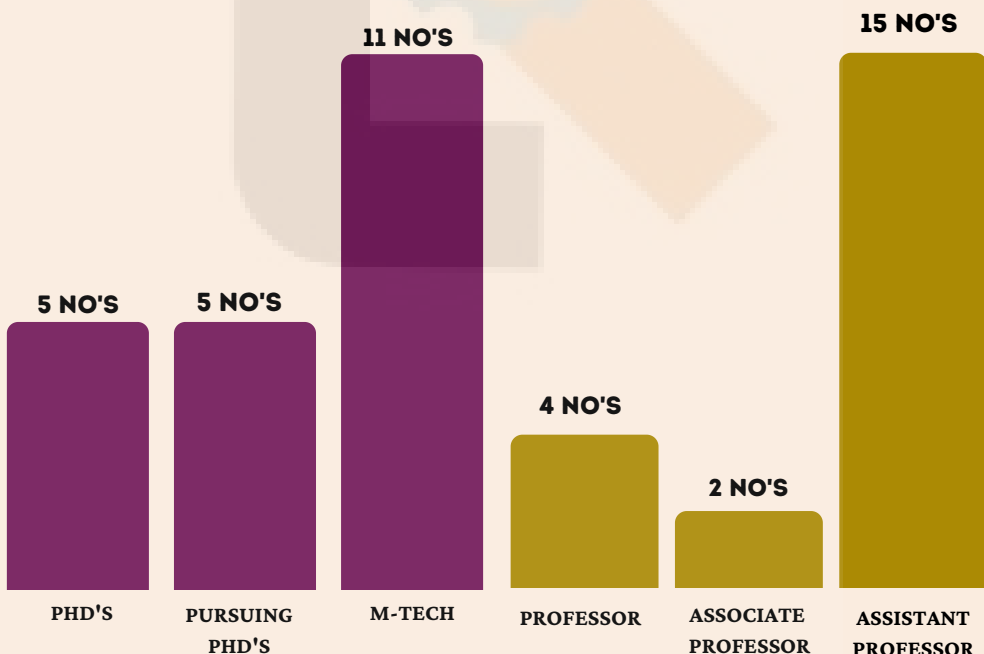
# FACULTY MEMBERS

## NAME

## DESIGNATION

## EXPERIENCE

|                                         |                       |          |
|-----------------------------------------|-----------------------|----------|
| 1.Dr. M. Muralidhara Rao[M.Tech,Ph.d]   | Principal & Professor | 25 Years |
| 2. Dr. Bazani Shaik [M.Tech,Ph.d]       | HOD& professor        | 15 Years |
| 3.Mr.B.Sudhakara Rao [M.Tech,(Ph.d)]    | Associate professor   | 12 Years |
| 4.Dr. Raffi Mohammed [M.Tech,Ph.d]      | Professor             | 15 Years |
| 5.Dr.Kota.Venkateswarlu [M.Tech,Ph.d]   | Associate professor   | 12 Years |
| 6.Dr.K.Anand Babu [M.Tech,Ph.d]         | professor             | 12 Years |
| 7.Mr.KPVSR Vinay Kumar [M.Tech]         | Assistant professor   | 10 Years |
| 8. Mr. G. Chitti Babu [M.Tech,(Ph.d)]   | Assistant professor   | 10 Years |
| 9.Mr. A. Rahul Kumar [M.Tech,(Ph.d)]    | Assistant professor   | 10 Years |
| 10. Mr. J. Srikanth [M.Tech,(Ph.d)]     | Assistant professor   | 8 Years  |
| 11.Mr. K. Bhavanarayana [M.Tech,(Ph.d)] | Assistant professor   | 11 Years |
| 12. Mrs. P. Lakshmi kala [M.Tech ]      | Assistant professor   | 6Years   |
| 13. Mr. Y. Hemanth [M.Tech ]            | Assistant professor   | 7 Years  |
| 14. Mr. G.V. Phani Babu [M.Tech ]       | Assistant professor   | 7 Years  |
| 15. Mrs. P. Naga Sravani [M.Tech ]      | Assistant professor   | 6 Years  |
| 16. Mr. S. Suneel Kumar [M.Tech ]       | Assistant professor   | 6 Years  |
| 17.Mr. P. Bhargava Kumar [M.Tech ]      | Assistant professor   | 4 Years  |
| 18. Mrs. B. Devi Priyanka [M.Tech ]     | Assistant professor   | 5 Years  |
| 19. Mr. M. Sai Ram [M.Tech ]            | Assistant professor   | 2 Years  |
| 20. Mr. J. Ashok Kumar [M.Tech ]        | Assistant professor   | 5 Years  |
| 21. Mrs. O. Pavitra [M.Tech ]           | Assistant professor   | 6 Years  |





## ***ABOUT COLLEGE***

The Founders of RATNAM EDUCATIONAL INSTITUTIONS of Nellore, Committed to excellence established Ramachandra College of Engineering in Eluru. RCE, is approved by AICTE and affiliated to JNTU Kakinada. The institute boasts of the State-of-the Art facilities, well built infrastructure and a serene lush green naturally landscaped sprawling campus far from the hustle and bustle of the town, providing congenial environment for learning. RCE has a team of highly experienced, well qualified and dedicated faculty members in all disciplines. In addition, RCE organizes guest lectures by eminent professors, experts from industry to the students in their respective areas of specialization. The aim of RCE is to attain national prominence providing outstanding education in the field of computing for their productive careers in industry, academia, and government. The institute boasts in the state of the art facilities. Right from the inception the institute is attaining High pass percentage of above 60% with majority of them securing distinctions. The institute is aiming to implement e-Learning in the campus. The institute has signed MOUs with Various Multinational company's like TATA , Reliance HR solutions etc which helps the students to visit the Industries and get practical experience. Every department in the institute has Technology forums & hobby clubs for students for knowledge transfer. To strike the balance between knowledge is power and health is wealth excellent facilities with standards for all kinds of indoor & outdoor games & sports with trainers are made available for the students.





## ***ABOUT DEPARTMENT***

Welcome to the Department of Mechanical Engineering at RCEE. We began our voyage in the middle of 2011 with the intake of 60 seats and it was enhanced to 120 seats in the year 2012. The Department pursues expertise based designing educational programs surrounded by JNTUK and essential focal point of the educational program is to grant specialized ability to understudies with hands-on preparation in the research centers, advance their critical thinking aptitudes and development of new innovations. The Department keeps up dynamic research by urging workforce and understudies to complete synergistic and interdisciplinary research. Department has given chances to both faculty and understudies to embrace innovative improvements and the department keeps up dynamic research by urging workforce and understudies with utmost dedication. Subsidizing from different Government/Non Government bodies helps us to explore. Our Department contributes in tackling the mechanical difficulties of the general public and I urge you to investigate our site for further subtleties.

## Department of Mechanical Engineering Best Team Spirit Award





# MECHANICAL ENGINEERING LABS



**ENGINEERING WORKSHOP**



**COMPUTER ADIED MANUFACTURING  
LAB**



**MECHANICS OF SOLIDS LAB**



**METALLURGY AND MATERIAL  
SCIENCE LAB**



**MACHINE TOOLS LAB**



**COMPUTER ADIED DRAFTING LAB**



**FLUID MECHANICS AND HYDRAULICS  
MACHINERY LAB**



**THEORY OF MACHINES LAB**





**THERMAL ENGINEERING LAB**



**DYNAMICS OF MACHINERY LAB**



**METROLOGY &  
INSTRUMENTATION LAB**



**3D-PRINTING LAB**



**HEAT TRANSFER LAB**



**PROJECTS LAB**



**MANUFACTURING PROCESSES LAB**





## ADVANCED MECHANICAL TOOLS TRAINING PROGRAM

**MSME TOOL ROOM – HYDERABAD**

**CENTRAL INSTITUTE OF TOOL DESIGN**

(Sub – Centre Vijayawada)



**ONE DAY TRAINING PROGRAM: 13-03-2025**

**ENTREPRENEURSHIP AWARENESS PROGRAM (EAP)**

**UNDER ENTREPRENEURSHIP SKILL DEVELOPMENT PROGRAM**

**(E-SDP) SCHEME SPONSORED BY GOVERNMENT OF INDIA. MINISTRY OF MSME**





**Mr.K.venkateswarlu from our Department awarded  
Ph.D from Pondicherry central university.**







## Mr.P.Bhargav Kumar from our Department Completed his QIP program from IIIT Kottayam in Artificial intelligence and Data Science



# CERTIFICATE OF COMPLETION



Certificate No: 24PGIIITK0068

AICTE-QIP-PG CERTIFICATE PROGRAMME ON ARTIFICIAL INTELLIGENCE AND DATA SCIENCE  
 OFFERED BY  
 INDIAN INSTITUTE OF INFORMATION TECHNOLOGY KOTTAYAM

This is to certify that

## Mr. Pitchuka Bhargava Kumar

bearing AICTE ID :1-7408131767 working at Ramachandra College Of Engineering  
 (A), Eluru has successfully completed the programme held during 7th July 2024 to  
 20th December 2024

  
**DR. RUBELL MARION LINCY G**  
 Program Coordinator

  
**IIITK Pala : 31/01/2025**

  
**DR. M RADHAKRISHNAN**  
 Registrar







# NSS Programs



# Placements 2024-25

| <b>S.No</b> | <b>Industry Name</b>                         | <b>No.of Students<br/>Selected</b> |
|-------------|----------------------------------------------|------------------------------------|
| 1.          | Madras Engineering<br>Industries Pvt Ltd     | 25                                 |
| 2.          | M.S.Square Technologies                      | 01                                 |
| 3.          | M.P.Birla Group                              | 01                                 |
| 4.          | Indigo Pro-Engineered<br>Buildings Pvt .Ltd. | 01                                 |
| 5.          | Cognizant                                    | 01                                 |

Still Counting..

# ACADEMIC TOPPERS

## A.Y: 2024-25 ODD SEM

### I YEAR I SEM

|            |            |                |           |
|------------|------------|----------------|-----------|
| I TOPPER   | 24ME1A0351 | SHAIK SOHEL    | 8.34 SGPA |
| II TOPPER  | 24ME1A030  | B.N.V.V.NIKHIL | 8 SGPA    |
| III TOPPER | 24ME1A353  | S.KIRAN        | 7.78 SGPA |

### II YEAR III SEM

|            |            |                   |           |
|------------|------------|-------------------|-----------|
| I TOPPER   | 24ME5A305  | KARETI SUDHAKAR   | 8.95 SGPA |
| II TOPPER  | 24ME5A0304 | GORIPARTHI RAJESH | 8.68 SGPA |
| III TOPPER | 23ME1A0321 | K. N. RAMASWAMI   | 7.78 SGPA |

### III YEAR I SEM

|            |            |                |           |
|------------|------------|----------------|-----------|
| I TOPPER   | 22ME1A0315 | K. SATISH BABU | 8.23 SGPA |
| II TOPPER  | 22ME1A0330 | PUJARI MANOHA  | 7.95 SGPA |
| III TOPPER | 22ME1A0326 | P. MAHINDRA    | 7.81 SGPA |

### IV YEAR I SEM

|            |            |               |           |
|------------|------------|---------------|-----------|
| I TOPPER   | 21ME1A0304 | B. DHANUSH    | 8.12 SGPA |
| II TOPPER  | 21ME1A0318 | P. VIJAY BABU | 8.08 SGPA |
| III TOPPER | 22ME5A0315 | S. RAVI TEJA  | 7.78 SGPA |



# HIGHLIGHTS OF RCE

- PART OF 15 YEARS OLD EXCEPTIONAL EDUCATION LEGACY OF RCE
- OUTSTANDING RECORD OF PLACEMENTS
- POOL OF ILLUSTRIOUS FACULTY WITH 27 DOCTORATES
- ENTREPRENEURIAL SENSITIZATION WITH THE SUPPORT OF DST, GOVT OF INDIA STRONG AND RESOURCEFUL NETWORK OF ALUMNI
- FOCUS ON ALL ROUND DEVELOPMENT BY CO CURRICULAR AND EXTRACURRICULAR ACTIVITIES, STUDENTS PERFORM EXCEPTIONALLY WELL IN INTER AND INTRA COLLEGE COMPETITIONS.
- SCINTILLATING SPORTS FACILITIES WITH CRICKET GROUND, FOOTBALL GROUND, VOLLEYBALL COURT AND MANY INDOOR SPORTS.
- APPROVED BUSINESS INCUBATION CENTRE BY MSME, GOVT. OF INDIA.
- ACCREDITED BY NBA & NAAC.
- AWARDED FOR EDUCATION EXCELLENCE, INDUSTRY INTERACTION AND PLACEMENTS.
- STRONG FOCUS ON TECHNICAL AND SOFT SKILLS TRAINING, ENHANCING EMPLOYABILITY OF STUDENTS.
- TECHNOLOGY BASED INDUSTRIAL COLLABORATION VIA CENTRE OF EXCELLENCE, DASSAULT SYSTEMS.
- REGULAR EXPERT TALKS, NATIONAL & INTERNATIONAL SEMINARS, CONFERENCES WITH RENOWNED SPEAKERS FROM INDUSTRY AND ACADEMIA.
- THE ONLY PRIVATE INSTITUTE IN WHOLE ELURU DISTRICT TO RECEIVE NEW GENERATION INNOVATION & ENTREPRENEURSHIP DEVELOPMENT CENTRE SUPPORTED BY DST, GOVT OF INDIA
- RCE IS RECOGNIZED IN THE BAND PROMISING UNDER THE CATEGORY COLLEGE/ INSTITUTES (PRIVATE/SELF FINANCED)(TECHNICAL) IN ATAL RANKING OF INSTITUTIONS ON INNOVATION ACHIEVEMENT ( ARIIA) ANNOUNCED BY THE MINISTRY OF EDUCATION GOVERNMENT OF INDIA.
- RCE-STUDENT R&D FACILITATION CENTRE SUPPORTS TO TURN STUDENTS IN TO INNOVATOR AND ENTREPRENEUR



# HIGHLIGHTS MECHANICAL ENGINEERING

**Innovation and Technological Advancement:** Mechanical engineering is at the forefront of technological innovation and advancement. It encompasses various fields such as robotics, automation, materials science, thermodynamics, and fluid mechanics. Mechanical engineers develop new technologies, improve existing systems, and drive innovation in industries like automotive, aerospace, energy, manufacturing, and many others.

**Design and Manufacturing:** Mechanical engineers are responsible for designing and manufacturing a wide range of products, from small consumer goods to large-scale industrial machinery. Their knowledge of mechanics, materials, and production processes enables them to create efficient, reliable, and cost-effective designs.

**Energy and Sustainability:** Mechanical engineers play a critical role in addressing global energy challenges and promoting sustainability. They design and optimize energy systems, including renewable energy technologies, such as wind turbines and solar panels.

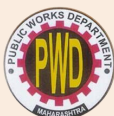
**Infrastructure Development:** Mechanical engineers are involved in the design, construction, and maintenance of infrastructure projects like bridges, buildings, tunnels, and transportation networks. They ensure that these structures are safe, durable, and functional.

**Interdisciplinary Collaboration:** Mechanical engineering is a versatile field that often requires collaboration with professionals from various disciplines. Mechanical engineers work closely with electrical engineers, computer scientists, civil engineers, and other specialists to develop complex systems and integrated technologies.

**Job Opportunities and Economic Growth:** Mechanical engineering offers a wide range of career opportunities. Graduates can work in diverse industries, including automotive, aerospace, energy, manufacturing, biomedical, consulting, and research. The demand for skilled mechanical engineers is consistently high, both in developed and emerging economies. The growth of the mechanical engineering sector contributes to job creation, economic stability, and technological progress.

# MECHANICAL ENGINEERING CAREER PERSPECTIVES

## GOVT JOBS



सेंट्रल इलेक्ट्रॉनिक्स लिमिटेड  
CENTRAL ELECTRONICS LTD.

INDIAN ENGINEERING  
SERVICES



**Braithwaite & Co. Limited**

(A Govt. of India Undertaking)  
Ministry of Railways



## CORE JOBS



**Mahindra**



**Reliance**  
Industries Limited



## SOFTWARE JOBS



**accenture**



The Next Applied



**Tech Mahindra**



## HIGHER STUDIES

**M-TECH**

**M.S**

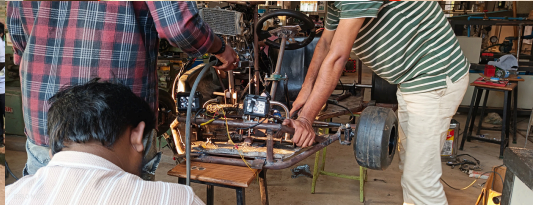
**MBA**

**JRF**

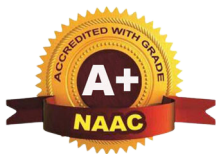
**ETC.,**



# CAMPUS LIFE







**AAA+**  
**CAREERS360**

First time in  
**ELURU** District

we are  
**AUTONOMOUS**

(And can chart our path with more profundity!)



EXCELLENCE  
IN **ENGINEERING**  
EDUCATION

**NH-16 Bypass Road, Vatluru (V), Eluru - 534007, Eluru Dt., A.P.**

Web: [www.rcee.ac.in](http://www.rcee.ac.in) E-Mail: [rce\\_elr@yahoo.com](mailto:rce_elr@yahoo.com)

[/rcee\\_official](https://www.youtube.com/rcee_official) [/RCEMEDIA](https://www.facebook.com/RCEMEDIA)

# MECH CONNECT EDITORIAL BOARD

## Faculty Members



**Dr. Bazani Shaik**  
Professor  
Editor In Chlef



**Mr. B. Sudhakara Rao**  
Associate Professor  
Editor



**Dr. Raffi Mohammad**  
Professor  
Editor

## Student Members



**Mr. Mohammed Shafi**  
22ME5A0312  
Final Year



**Mr. P. Vijay Babu**  
21ME1A0318  
Final Year



**Mr. K. Satish Babu**  
22ME1A0315  
Third Year



**Mr. B. Gnaneswar**  
22ME1A0304  
Third Year



**Mr. G. Rajesh**  
24ME5A0304  
Second Year



**Mr. B. H. Vardhan**  
23ME1A0331  
Second Year



**Mr. T. H. R. Krishna**  
24ME1A0356  
First Year



**MS. G. Varsha**  
24ME1A0319  
First Year