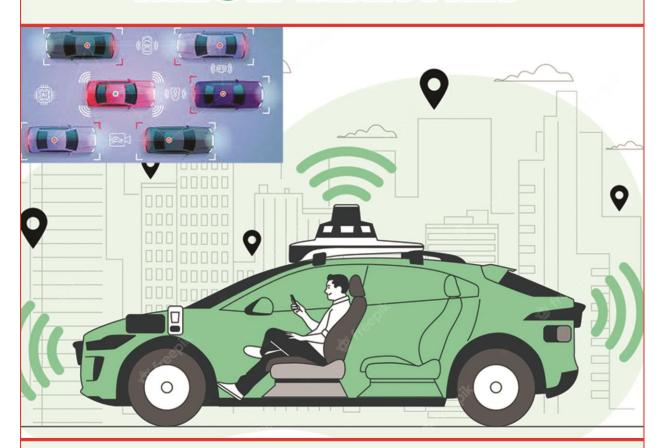


# NARASARAOPETA ENGINEERING COLLEGE





# TECHNICAL MAGAZINE MECH MANTRA



JANUARY TO JUNE 2022 VOLUME : 13

Department of MECHANICAL ENGINEERING

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# Technical Magazine – Mech Mantra



# Jan to June 2022

Department of Mechanical Engineering



Narasaraopet-522601, Andhra Pradesh, India

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Ms. Y.Hemalatha Meghana, II Year, ME

#### **MESSAGES**



#### Chairman's message

It gives me great happiness to note that the department of Mechanical Engineering, NEC is bringing out the volume-13 of the department technical magazine, "Mech Mantra". From the first edition, I understand

that this magazine is intended to bring out the hidden literary talents in the students and also to inculcate leadershipskills among them. The newsletter has served as a platform for the students to share their knowledge and ideas. I expect the contributions to this magazine to be of high standard and quality. I wish all the success for this venture.



#### Vice Chairman's message

I feel extremely delighted to observe that the department of Mechanical Engineering is coming out with a magazine this year also with the dedicated and committed efforts of the faculty and the students of the Editorial Board. The activity depicts the commitment and involvement of students and their thirst for knowledge.

I congratulate the efforts of the members of the Editorial Board in bringing out the volume-13 of the magazine. It is because of their selfless and untiring efforts that we see the magazine enriched with variety of articles.



#### Principal's message

The magazine of the department is the reflection of the creativity of the students, involved in multifarious activities. It speaks about their imaginative creativity through the medium of a language given in literary and artistic shape.

I feel gratified to see that the department is doing its best in carrying out the mission of grooming the students as such professionals who are not only competent enough to combat the challenges in their life but also become good human beings with moral excellence and social sensitivity



**HOD's message** 

I feel privileged in presenting the volume-13 of our department association magazine. Iwould like to place my sincere and heartfelt thanks to all those who have contributed tomake this effort a success. My special thanks to the Management, for their guidance which enabled us to bring out this volume.

The magazine has a variety of articles endowed with different subjects contributed by the students of our department and their participation in various activities round the year.

I extend my gratitude to the entire team of the Editorial Board for their constant exertion, revision and supportin bringing out the magazine in the present form.

# **INDEX**

| S.No | TOPIC  | Page No. |
|------|--|----------|
|      | FABRICATION OF ELECTRICAL BYCYCLE  |          |
| 1    | J.Sandleya, IV Year ME   | 1        |
| 2    | PORTABLE WATER SERVICING MACHINE B.Jagadeesh, IV Year ME   | 2        |
| 3    | MOTORISED ELECTRIC SCOOTER<br>M.S.Williams, IVYear ME  | 3        |
| 4    | DESIGN AND FABRICATION OF ON ROAD VEHICLE SAFETY SYSTEM  | 4        |
|      | J.Prasad, III Year ME<br>FACULTY PUBLICATIONS  |          |
| 5    |  | 5        |
| 6    | FACULTY ACHIEVEMENTS   | 6-7      |
| 7    | DEPARMENT ACTIVITIES (Workshops/FDPs)  | 8-18     |
| 7    | STUDENT ACHIEVEMENTS (Certifications /Workshops/ Co Circular Activities/NSS Activities / Alumni Talk/ Industrial Visits) | 19-29    |
| 8    | CAMPUS PLACEMENTS  | 30       |
| 9    | STUDENT TOPPERS  | 31-32    |
| 10   | MOUs   | 33-34    |

#### FABRICATION OF ELECTRICAL BYCYCLE

In this project an electric bicycle was fabricated which is powered by a 24watt motor and 22watt dual lithium-ion battery. The bicycle has a range of 10km and a load carrying capacity of 75-80kgs. Depending upon the load and speed the control box is used to adjust the speed. With the presence of an electrical component, the human power that is expended can be minimized and make the efforts of human simple.



J.Sandleya IV Year ME

#### Portable water servicing machine

In industries, there are large numbers of huge machines, being used for various purposes. These machines are taken for maintenance according to its maintenance period. These machines are washed using high pressure washer to remove the dirt, grease or any other lubricants or rust from its surface before they are being worked on for maintenance. These pressure washers removes large amount of dirt. Washing the buses in our institute is a tedious job for the driver. Nowadays there are pressure washers available which are used for domestic purpose. The technique used in this pressure washer will be used to fabricate a portable car wash which can be used to wash the buses of the institute. so that the whole machine becomes portable to be carried anywhere.



B.Jagadeesh, IV Year ME

#### MOTORISED ELECTRIC SCOOTER

In today's world, the infrastructure of College and Industries are becoming large so if one has to travel or visit from one place to another he has to walk a long distance and sometimes it becomes very hasty and inconvenient. So to travel these distances mini electric motorised scooters were introduced. But these are very costly and difficult to handle when we drive the first time. So in alternate to this product, we developed whole newly designed product and this is reliable, Eco-friendly, a compact vehicle for the utilities like college campus, Airports, Industries, Parks etc. This product is a battery powered and motor driven vehicle. The complete body looks like a scooter bicycle in which platform is provided for standing and driving the powered scooter.



M.S.Williams, IV Year ME

#### DESIGN AND FABRICATION OF ON ROAD VEHICLE SAFETY SYSTEM

The project demonstrates an IOT based on "ON ROAD VECHILE SAFETY SYSTEM". On road vehicle safety system is a setup which is used to alert the driver when the vehicle is nearer to the divider, other vehicle or any obstacles, when the vehicle is in motion or in rest position. It is an effective way to prevent accident in night journeys with effective set- up cost. This device consists of a sensor called Ultrasonic Sensor which measures the distance between the vehicle and divider/obstacles.

The Ultrasonic Sensors works on the basis of sound wave frequency "Measures the distance of a target object by emitting ultrasonic sound waves, and converts the reflected sound into an electrical signal". This Ultrasonic Sensor give signals to the Arduino MEGA board, this Arduino MEGA board receive the signals and when the distance between the vehicle and divider is decreasing it gives a Buzzer sound and LED indicator alert, so the driver be alerted and drive carefully without striking the divider.



J.Prasad III Year ME Mech Mantra Page No. -5 Faculty Publications

#### **FACULTY PUBLICATIONS:**

Dr.B. Venkatasiva, HOD ME published a Journal paper entitled "Modelling and Analysis of Car Wheel Rim using CAD/CAE Tools", INTERNATIONAL Journal Of Mechanical Engineering, ISSN: 0974-5823, Vol.7 5may 2022.

ISSN: 0974-5823

Vol. 7 No. 5 May, 2022

International Journal of Mechanical Engineering

# MODELLING AND ANALYSIS OF CAR WHEEL RIM USING CAD/CAE TOOLS

Y. VARA PRASAD RAM

Dr. B. VENKATA SIVA

M.Tech, student,

Professor & HOD,

Department of Mechanical Engineering, Narasaraopeta Engineering College Department of Mechanical Engineering, Narasaraopeta Engineering College

#### Abstract

The rim is the "outer edge of a wheel, holding the tire". It makes up the outer circular design of the wheel on which the inside edge of the tire is mounted on vehicles such as automobiles. In this work Kia carnival prestige vehicle wheel rim modelling and analyzing with CAD/CAE tools, here object developed with the help of solid works and then analyzed with structural and dynamic boundary conditions, and also the best material is suggested can withstand high speed maximum load boundary conditions. Here, Al-7075 and Al-7068 materials were chosen to analyze the properties.

Kia carnival prestige vehicle was chosen and analyzed with minimum load to maximum load boundary conditions i.e., for 3, 5 and 7 members load.

From result analysis it is observed that Al-7068 material is suitable for both conditions like structural and dynamic, and it has strength to weight ratio values, and also less in weight compare to Al-7075 material. This Al-7068 has very good natural frequency range values, and which withstand more vibrations than Al-7075, and also Al-7068 material has high safety factor values with least stress values, and this can increase the vehicle performance in terms of less fuel consumption due to less in weight and increase the durability of the object. Finally, it is concluded that Al-7068 material is best when compared to Al-7075 material.

#### 1.0 Introduction

#### 1.1 Wheel rim

The rim is the "outer edge of a wheel, holding the tire". It makes up the outer circular design of the wheel on which the inside edge of the tire is mounted on vehicles such as automobiles. For example, on a bicycle wheel the rim is a large hoop attached to the outer ends of the spokes of the wheel that holds the tire and tube. In cross-section, the rim is deep in the center and shallow at the outer edges,

#### 2.0 LITERATURE REVIEW

- Kisshan, JL Miren, et al. "arranged and performed static and Eigenvalue Buckling examination on fabricated steel wheel rim
  and aluminum wheel rim. In both examination of made steel wheel edge and aluminum wheel edge, von-mises stresses are
  less diverged from outrageous strength. Redirections got more in aluminum edge than delivered steel edge. They wrapped up
  and leaned toward that delivered steel edge gave better results when appeared differently in relation to aluminum wheel edge.
- Ashok Kumar, G., et al. arranged a composite wheel in CATIA and performed examination by using ANSYS programming
  on wheel edge of TATA Indica. The static fundamental examination was proceeded with composite wheel by applying the
  three unmistakable materials specifically aluminum (AL 6061), zinc (ZA 21) and Magnesium (Mg). They saw similar
  weights and complete turning of compound wheels, and construed that most noteworthy outright misshapening and
  indistinguishable nerves are procured least for ZA 21 stood out from aluminum and magnesium.

#### **FACULTYACHIEVEMENTS:**

#### WORKSHOPS/CONFERENCES/ WEBINARS/FDPS/QUIZ/ATTENDED:

- ➤ Mr. M. Venkaiah, Assistant Professor attended one week FDP on "Emerging Trends in Thermal Engineering", through online mode conducted by PVPSIT in Association with ISHRAE Vijayawada Chapter.
- ➤ Dr.B.Venkatasiva, HOD ME acted as a Peer Reviewer in "Advances in Mechanical Engineering and Material Science ICAMEMS-2022", Conference Organised by VIT AP University during 22/01/2022 to 24/01/2022.
- ➤ Dr D.Jagadish, Professor ME got Outstanding Reviewer Award for 2022 acting as reviewer of Journal GRET "Engineering Aerospace Technologies in Aerodynamics, propulsion and Materials".
- ➤ Dr.M.Sreenivasa Kumar Principal NEC participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ Dr D.Sunil Vice Principal NEC participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ Dr B.Venkatasiva HOD ME participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ Dr D.Jagadish Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ Dr P.Suresh babu Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ Ch.Sekhar Associate Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- N.Vijay Sekhar Assistant Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- T.Ashok Kumar Assistant Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ K.Kirachand Associate Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ K.John babu Assistant Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ A.Pavan Kumar Assistant Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ M.Venkanna babu Assistant Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ SK.Bajan Assistant Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.

- ➤ P.Sravani Assistant Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ K.Raghavendra Assistant Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ P.Srinivasarao Assistant Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ B.Rambabu Assistant Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ B.Rajiv Assistant Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ SK.Nagul Meera vali Assistant Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ M.Venkai Assistant Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ M.Mahesh babu Assistant Professor participated in a Webinar on "Intellectual Property Rights and its Protection", Organized by Institution Innovation Council (IIC 4.0), Narasaraopeta Engineering College (Autonomous), Narasaraopet on 14/02/2022.
- ➤ Dr.B.Venkatasiva, Professor HOD ME participated in ARC Faculty development program on "
  FESTO PLC Training " Organized by Indo-Euro Synchronization ARC, Germany during 10/02/2022 to 11/02/2022.
- ➤ CH.Sekhar, Associate Professor participated in ARC Faculty development program on "FESTO PLC Training " Organized by Indo-Euro Synchronization ARC, Germany during 10/02/2022 to 11/02/2022.
- ➤ Dr.Penugonda Suresh Babu, Associate Professor participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Robotics and Artificial Intelligence" from 07/02/2022 to 11/02/2022 at Lakireddy Bali Reddy College Of Engineering, Mylavaram.
- ➤ Dr B.Venkatasiva HOD ME attended for Ratification of faculty at Jawaharlal Nehru Technological University, Kakinada (JNTU Kakinada) East Godavari district, Andhra Pradesh on 23/02/2022
- ➤ Dr D.Jagadish Professor attended for Ratification of faculty at Jawaharlal Nehru Technological University, Kakinada (JNTU Kakinada) East Godavari district, Andhra Pradesh on 23/02/2022.
- T.Ashok Kumar Assistant Professor attended FDP on "Artificial Intelligence/Machine learning for Mechanical Engineering Problems", organized by Shri Vishnu Engineering College for women ,Bhimavaram West Godavari A.P., during 21/03/2022 to 26/03/2022.
- ➤ Bachali Rambabu Assistant Professor applied for patent on "An Alphabetic Rotating Toy", in Intellectual Property India Patents Designs Trade Marks Geographical Indications with application number 354790-001 and Cbr number 210806.
- ➤ Dr.B.Venkata Siva, Professor HOD-ME acted as a Manuscript reviewer for "Estimation of Effect of Cold Forging Deformational Behavior on Al-2024 Alloy Reinforced with Fly-Ash Particulates", in 1st International Conference on Mechanical Engineering and Emerging Technologies, Bapatla Engineering College, Bapatla.

#### **DEPARTMENT ACTIVITIES**

> Department has organized "CRT Training", for third and final year students during 03/01/2022 to 08/01/2022 T.V Rao, Kokila.Lakshmi and N.Vishnu acted as Resource persons.



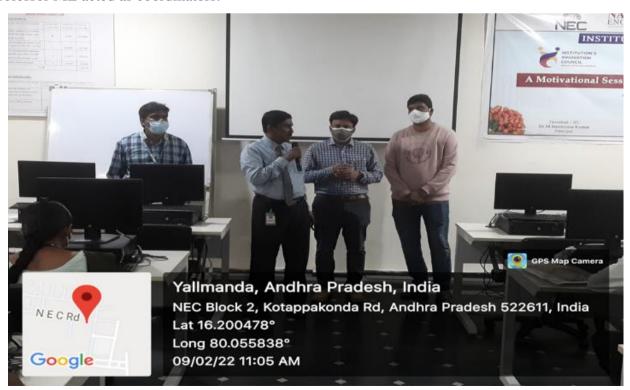
➤ Department has organized short term course on "3D and 4D Printing Applications", through ICT online mode for faculty in association with NITTTR Chandigarh during 17/01/2022 to 21/01/2022.



➤ Department has organized Competition on "ICT-Autodesk India Design Week - 2022 Competition", for third and final year students in association with NITTR Chandigarh on 22/01/2022.



➤ Department has organized motivational speech "Successful Entrepreneurs/Startup Founders", Program for first and Second year students on 09/02/2022, Mr.M.Venkatesh, Director of 'Durga Vaibhav Platics pvt acted as a Resource person, Dr B.Venkatasiva, HOD ME, Dr D.Jagadish, Professor ME acted as coordinators.



Mech Mantra Page No. -10 Department Activities

➤ Department has organized a Two Week Workshop for final year students on "INDUSTRIAL AUTOMATION USING PLC & HMI", in Association with AGIIT, Chennai during 03/03/2022 to 17/03/2022, For this Workshop R.Vignesh, Senior Application Engineer, S.Venkateshan, Senior Application Engineer acted as Resource persons.



➤ Department has organized a one week TCS Codevita Training Program for third year students during 28/02/2022 to 05/03/2022, in Association with BYTEXL training Hyderabad For this Training Program Mr.Akhilesh, Trainer (82777 19428), acted as a Resource person.



#### Mech Mantra Page No. -11 Department Activities

➤ Department has organized "PYTHON", Training Program for second year students on 22/03/2022 and 31/03/2022, in Association with BYTEXL training Hyderabad For this Training Program Mr. Subba rao, Trainer acted as a Resource person.



➤ Department has organized a APSSDC program on "Student Interaction & Industry Internship Certificate Distribution To Meritorious Students", for this program Mr.Konduru Ajay Reddy, Chairman APSSDC, Mr.V.V.N.Raj, CEO Indo Euro synchronization, are acted as a resource persons on 29/04/2022.



➤ Department has organized a Webinar on "Applications Of CAD Tools In Aeronautical And Automotive Industries", for this webinar Mr. B. Hanumantha rao - MD (Tirumala Cadd Centre), Narasaraopet acted as a resource person on 30/04/2022.



➤ Department has organized a project review for final year students on 30/04/2022, Dr.D.Jagadish, Professor Ch.Sekhar, Associate Professor are acted as Coordinators.



➤ Department has organized a project review on 07/05/2022 for third year students, Dr.D.Jagadish, Professor Ch.Sekhar, Associate Professor are acted as Coordinators.



➤ Department has organized JUBILATION 2k22 Event "NATIONAL LEVEL STUDENT TECH FEST", in Association with The Institute of Engineers (India) ,Indian Society For Technical Education(ISTE) on 07/05/2022. The Event is Inaugurated by M.Koteswrarao garu (Honrable chairman ) and Dr.M.Sreenivasa kumar, Principal NEC.Total 200 Students were enrolled for different activities.



> Students participated in Engine Assembly and Disassembly on 07/05/2022.



> Students participated in Technical Paper Presentation on 07/05/2022.



> Prizes were distributed for Engine Assembly and Disassembly on 14/05/2022.



➤ Prizes were distributed for Technical Paper Presentation on 14/05/2022.



> Prizes were distributed for Technical quiz on 14/05/2022.



➤ Prizes were distributed for Project Expo on 14/05/2022.



➤ Department has organized a project review for final year students on 21/05/2022, Dr.D.Jagadish, Professor, M.Venkanna Babu Associate Professor, Ch.Sekhar ,Associate Professor are acted as Coordinators.



➤ Department has organized Farewell Celebrations for final year students Mr.B.Anil kumar, Vehicle Inspecter ((RTO Department)acted as a chief guest for this program.



➤ Department has organized a one Week workshop for third year students on "3D Printing with Fusion 3600", in Association with Indian Institute of Engineers (Indian) Indian Society for Technical Education(ISTE) during 27/05/2022 to 02/06/2022, For this workshop Mr.Kopunuru Rakesh CEO KOPP3D Innovations POC PVT Limited acted as resource person.



➤ Department has organized a project review for third year students on 28/05/2022, Dr.D.Jagadish, Professor ,M.Venkanna Babu Associate Professor, Ch.Sekhar ,Associate Professor are acted as Coordinators.



Mech Mantra Page No. -19 Student Activities

# STUDENT CERTIFICATIONS /PARTICIPATIONS IN WORKSHOPS /CONFERENCES/NSS PROGRAMS:

- Shaik Mahaboob Subani third year mechanical student completed certification course on "30 Days Machine Learning Master Class", from Pantech e learning online certification program.
- > Shaik sadhik second year mechanical student completed certification course on "Introduction to Electro Magnetism", from Skill link online certification program.
- D. Veeranji Reddy second year mechanical student completed certification course on "5 Days EV
   Design Master Class", from SKILL-AP APSSDC online certification program.
- ➤ D.Veeranji Reddy second year mechanical student completed certification course on "Introduction to Thermal Fluid Sciences", from SKILL-AP APSSDC online certification program
- ➤ K.Sasi Kumar second year mechanical student completed certification course on "Introduction to Fluid Mechanics", from Skill link online certification program.
- ➤ K.Sasi Kumar second year mechanical student completed certification course on "Introduction to Thermal Fluid Sciences", from Skill link online certification program.
- ➤ D Pardhu Ganesh second year mechanical student completed certification course on "Introduction to Fluid Mechanics", from Skill link online certification program.
- ➤ D Pardhu Ganesh second year mechanical student completed certification course on "Applied Strength Of Materials Using Ansys Work Bench", from Skill link online certification program.
- ➤ S.Ranendra vamshi second year mechanical student completed certification course on "Introduction to Fluid Mechanics", from Skill link online certification program.
- > S.Ranendra vamshi second year mechanical student completed certification course on "Applied Strength Of Materials Using Ansys Work Bench", from Skill link online certification program.
- ➤ P.Purna Chandra Rao second year mechanical student completed certification course on "Introduction to Fluid Mechanics", from Skill link online certification program.
- > J.Nagendra babu third year mechanical student completed certification course on "Introduction to Fluid Mecahnics", from Skill link online certification program.
- ➤ Gangavarapu sri chandra sekhar third year mechanical student completed certification course on "Communication Skills", from TCS ION online certification program .
- ➤ Gangavarapu sri Chandrasekhar third year mechanical student completed certification course on "Culture and E-mail Writing", from TCS ION online certification program.
- ➤ Gangavarapu sri chandra sekhar third year mechanical student completed certification course on "Group Discussion", from TCS ION online certification program.
- ➤ P.Gopinadh third year mechanical student completed certification course on "Communication Skills", from TCS ION online certification program.
- ➤ M.sambasivarao Second year mechanical student completed certification course on "Digital Transformation", from Great learning online certification program.

- ➤ G Anil third year mechanical student completed certification course on "Artificial Intelligence", from Future Learn learning online certification program.
- ➤ Gangavarapu Sri Chandra Sekhar Reddy third year mechanical student completed certification course on "Resume Writing and Cover Letter", from TCS -ION learning online certification program
- ➤ K Prudhvi Yashwanth Reddy third year mechanical student completed certification course on "Virtual Internship program", from Microsoft learning online certification program.
- ➤ U.Shanmukha rao third year mechanical student completed certification course on "National Engineering olympaid", from NEO learning online certification program.
- ➤ U.Shanmukha rao third year mechanical student completed certification Quiz on "Natural Farming", from Department of Agriculture and farmers welfare program.
- ➤ U.Shanmukha rao third year mechanical student completed certification Quiz on "Surya Namaskar", from Minister of AYUSH Govt of India program.
- ➤ U.Shanmukha rao third year mechanical student completed certification Quiz on "Cyber Awareness", from Minister of Home affairs Govt of India program.
- ➤ U.Shanmukha rao third year mechanical student completed certification Quiz on "Water", from National Water Mission Govt of India program.
- ➤ U.Shanmukha rao third year mechanical student completed certification Quiz on "Union Budget", from My Government Congragulates program.
- ➤ U.Shanmukha rao third year mechanical student completed certification Quiz on "Say no to drugs", from My Minister of Home affairs Govt of India program.
- ➤ Chava Ashok third year mechanical student completed certification on "Fundamentals of Fluid Mechanics", from SKILL LINK learning online certification program.
- ➤ Daddanala. Veeranji Reddy Second year mechanical student completed certification on "Fundamentals of Meshing and Hyper Mesh", from SKILL LINK learning online certification program.
- ➤ M Santosh Kumar and M Charan Teja Second year mechanical students got third prize in "3D Art Competition", Organized by our college as a part of sankranti celebrations.
- ➤ U.Shanmukha rao third year mechanical student completed certification on "Indian Constitution", from Department of Legal Affairs-NALSAR learning online certification program.
- ➤ D Joseph second year mechanical student enrolled "International Association of Engineers IAENG", membership.
- ➤ Ch venkatramaiah second year mechanical student enrolled "International Association of Engineers –IAENG", membership.
- ➤ B srinivas second year mechanical student enrolled "International Association of Engineers IAENG", membership.

- ➤ B.Chandra Bose, G.Prem Kumar, K.G.N.D.V.Prashanth, T.Avinashkumar Reddy are qualified for "**Design now challenge**", conducted by ICT Academy in association with Autodesk India, finals will be scheduled on 10<sup>th</sup> & 11<sup>th</sup> March 2022 at Sairam Institutions, Chennai.
- ➤ M.Sashank second year mechanical student participated in "4.O Technologies", program conducted by CCBP 4. O academy online learning platform NxtWave Disruptive Technologies Private Limited.
- ➤ B.Ramanjaneyulu second year mechanical student participated in "4.O Technologies", program conducted by CCBP 4. O academy online learning platform NxtWave Disruptive Technologies Private Limited.
- ➤ Daddanala. Veeranji Reddy Second year mechanical student completed certification on "Introduction to CATIA", from SKILL LINK learning online certification program.
- ➤ Daddanala. Veeranji Reddy Second year mechanical completed certification on "Frugal innovation of optical imaging Techniques", from SKILL LINK learning online certification program
- ➤ Daddanala. Veeranji Reddy Second year mechanical completed certification on "Frugal innovation of optical imaging Techniques", from SKILL LINK learning online certification program
- ➤ Daddanala. Veeranji Reddy Second year mechanical completed certification on "Basic concepts of Solid Mechanics", from SKILL LINK learning online certification program.
- ➤ Pilli Pedda Raju final year mechanical student completed certification on "6 Technology in 1 Introduction: Interview Preparation", from Learn Empower Evolvelearning online certification program.
- ➤ Pilli Pedda Raju final year mechanical student attended workshop on "Power BI", from LUDUFI learning online certification program.
- ➤ Pilli Pedda Raju final year mechanical student attended workshop on "Power Python", from LUDUFI learning online certification program.
- ➤ Pilli Pedda Rajufinal year mechanical student attended workshop on "Career Guidance", from Easy BTech learning online certification program.
- ➤ J.Dayakumar final year mechanical student attended workshop on "Career Guidance", from Easy BTech learning online certification program.
- ➤ Kikkuru Prudhvi Yashwanth Reddy third year mechanical engineering student Successfully completed six months of training on "Google Data Analyst", from Coursera learning online certification program.

#### **CO CIRCULAR ACTIVITIES (SPORTS):**

> Students from Mechanical Engineering Department participated in cricket won first prize in Jubilation sports events during 09/03/2022 to 20/03/2022.



➤ Students from Mechanical Engineering Department participated in Khabbadi as a part of Jubilation sports events during 09/03/2022 to 20/03/2022.



> Students from Mechanical Engineering Department participated in Kho Kho as a part of Jubilation sports events during 09/03/2022 to 20/03/2022.



➤ Students from Mechanical Engineering Department participated in Volley ball as a part of Jubilation sports events during 09/03/2022 to 20/03/2022.



#### **NSS ACTIVITIES**

➤ Department has organized NSS Unit program "Blood Grouping Test", for first Year and Lateral Students in Coordination with NRT Blood Centre – Narasaraopet during 19/01/2022 to 20/01/2022.



> Department has organized NSS Unit program "Environment day", for mechanical Students on 05/06/2022.



#### **ALUMNI TALK**

Department has organized a one day Alumni talk on "Carrier Guidance", on 20/01/2021, For this program Mr.Adapa Bala Chandra Sekhar (7989484515), Senior Test Engineer Assistant TECH MAHINDRA, Hyderabad acted as Resource person.



➤ Department has organized a one day Alumni talk to final year students on "Career Opportunities in Amazon Web Service", on 03/03/2022, For this program Mr. Muppineni.Ravi Teja (9491128496),Junior Devops Engineer, Digient Technologies,Chennai acted as a Resource person.



Department has organized a one day Alumni talk to final year students on "Career Opportunities in Software Industry", on 12/03/2022, For this program MR. Bhavanam Mahether Reddy (9966699348), CASS Executive Engineer, Colruyt IT Consultancy India Pvt Ltd,Hyderabad acted as a Resource person.



➤ Department has organized a one day Alumni talk to final year students on "Career Guidance", on 23/03/2022, For this program Mr. P.Anvesh (8096031855), Python Developer, Infosys, Hyderabad acted as a Resource person.



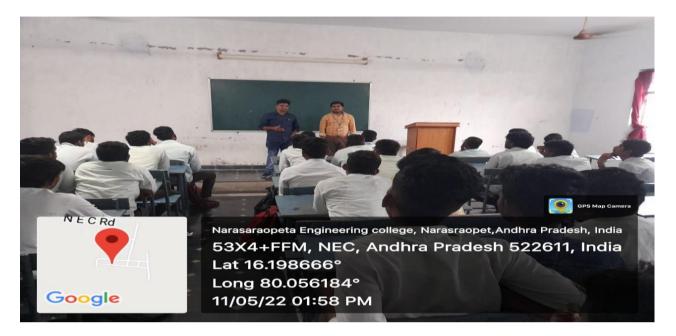
➤ Department has organized a one day Alumni talk to final year students on "Career Guidance", on 18/04/2022, For this program Mr.G.Anil kumar (8297553216) Traine EngineerZealous quality inside Hyd acted as a Resource person.



➤ Department has organized a one day Alumni talk to final year students on "Career Guidance", on 06/05/2022, For this program Mr.R.Siva kumar (8297553216) S2 engineering industries pvt Ltd. Deg design trainee Loc Hyderabad acted as a Resource person.



➤ Department has organized a one day Alumni talk to final year students on "Career Guidance", on 06/05/2022, For this program Mr. K.Vedadri Sai(7288826334) Soc Analyst company: ESF Labs, Vijayawada. (2014-18 batch). acted as a Resource person.



➤ Department has organized a one day Alumni talk to final year students on "Career opportunities in Automobile Industry", on 18/05/2022, For this program Mr. J.Nasaraiah (8297553216) Kia Motors, Engineer Trainee Ananthapur (2016-2020 batch) acted as a Resource person.



#### INDUSTRIAL VISITS

➤ Students from third year Visited "Central Institute of Petrochemicals Engineering & Technology (CPIET", Vijayawada as a part of Industrial visit on 18/03/2022, faculty coordinators namely SK.Bajan, SK. Meeravali, B.Rajiv Kumar & M.Venkaiah attended to this visit.



➤ Department has organized a one day Alumni talk to final year students on "Career Guidance", on 19/03/2022, For this program Mr.K.Naresh (8096031855), Quality Analyst, Cognizant, Chennai acted as a Resource person.



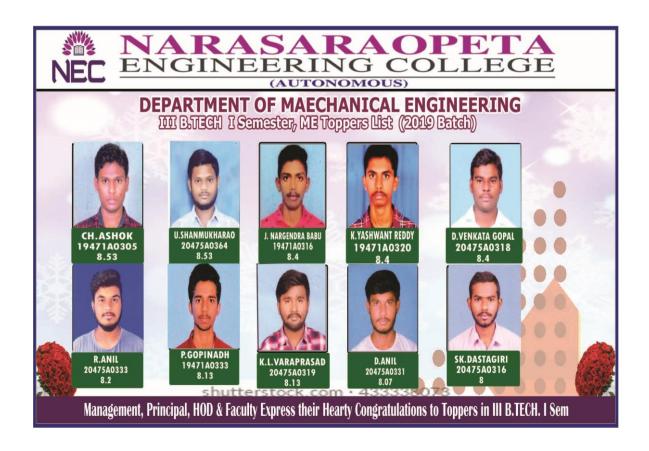
# **CAMPUS PLACEMENTS**

25 students of Mechanical got selected in various companies listed below.

| Roll No    | Name of the students                       | Name of the<br>Company | Date of drive | Salary |
|------------|--|------------------------|---------------|--------|
| 18471A0309 | Venkata Lakshmi Janardhan<br>Chinthalapudi | INFOSYS SE             | 23-Jan-22     | 360000 |
| 18471A0315 | Balaji Guptha Gopu                         | INFOSYS SE             | 23-Jan-22     | 360000 |
| 18471A0316 | Prem Kumar Gundabathini                    | INFOSYS SE             | 23-Jan-22     | 360000 |
| 18471A0328 | Venkata Sai Rajesh Malisetty               | INFOSYS SE             | 23-Jan-22     | 360000 |
| 18471A0346 | Shabbeer Shaik                             | INFOSYS SE             | 23-Jan-22     | 360000 |
| 18471A0347 | Kiran Kumar Somisetti                      | INFOSYS SE             | 23-Jan-22     | 360000 |
| 19475A0302 | Gopichand Kondepi                          | WIPRO                  | 22-Feb-22     | 350000 |
| 19475A0324 | Joshva Kakumanu                            | WIPRO                  | 22-Feb-22     | 350000 |
| 19475A0336 | Paari Srinu                                | WIPRO                  | 22-Feb-22     | 350000 |
| 19475A0347 | Pallapu Tirumala Venakt<br>Rammohan        | WIPRO                  | 22-Feb-22     | 350000 |
| 19475A0317 | J.Dayakumar                                | COGENT E-<br>SERVICES  | 23-May-22     | 252000 |
| 18471A0343 | Sk.khaleel basha                           | AGI GLASSPAC           | 30-05-2022    | 222000 |
| 18471A0344 | Sk. Mansur                                 | AGI GLASSPAC           | 30-05-2022    | 222000 |
| 18471A0345 | Sk.Nayeem                                  | AGI GLASSPAC           | 30-05-2022    | 222000 |
| 19471A0309 | D.venkatewsararao                          | AGI GLASSPAC           | 30-05-2022    | 222000 |
| 19471A0310 | M.Pushparaju                               | AGI GLASSPAC           | 30-05-2022    | 222000 |
| 19471A0311 | P.Pedda Raju                               | AGI GLASSPAC           | 30-05-2022    | 222000 |
| 19471A0317 | J.DAYAKUMAR                                | AGI GLASSPAC           | 30-05-2022    | 222000 |
| 19471A0321 | M.Anil Raju                                | AGI GLASSPAC           | 30-05-2022    | 222000 |
| 19471A0328 | P.Siva Gopi                                | AGI GLASSPAC           | 30-05-2022    | 222000 |
| 18471A0343 | Sk.khaleel basha                           | SAVANTIS               | 04-06-2022    | 216000 |

#### STUDENT TOPPERS







# **MOUs**

➤ Department has made an exchange of MOU with "Central Institute of Petrochemicals Engineering & Technology (CPIET)", for this exchange of MOU Dr.M.Sreenivasa kumar, Principal NEC, Dr.D.Suneel & Vice Principal, Dr B.Venkatasiva, HOD-ME attended on 17/03/2022.



#### MEMORANDUM OF UNDERSTANDING

BETWEEN



#### DEPARTMENT OF MECHANICAL ENGINEERING

NARASARAOPETA ENGINEERING COLLEGE (Autonomous) Kotappakonda Road, Yellamanda (Post), Narasaraopet – 522601, Guntur District, AP

AND



# CENTRAL INSTITUTE OF PETROCHEMICALS ENGINEERING AND TECHNOLOGY

#### CENTRE FOR SKILLING AND TECHNICAL SUPPORT

Enikepadu, Vijayawada 520 007, A.P. Phone: +91 - 866 - 6548777

Email: Vijayawada@cipet.gov.in

March 2022

#### 6. Effective Date:

This agreement is effective from the date signed by both the parties shall be valid for a period of three years until determined, suspended or terminated earlier.

IN WITNESS WHEREOF, the parties hereto, each acting under due and proper authority have executed 'this mutually binding Memorandum of Understanding as of the date first written above.

AUTOMOASOL

#### AGREED:

Dr. M. SREENIVASA KUMAR Principal NARASARAOPETA ENGINEERING COLLEGE (Autonomous),

Kotappakonda Road,

Narasaraopet, Guntur (Dist.),

Andhra Pradesh - 522 601

(Authorized Signatory)

Mr. D. ANJANEYA SHARMA

CIPET: CSTS, Vijavawada Survey No.: 377, Surampain

Andhra Pradesh - 521 212

EMICALS.

CIPET

Govt. of India

Sr. Technical Officer

Gannavaram (M),

Krishna (Dist.)

Seal

Witness:

Mr. Balu. J.

Asst. Technical Officer,

CIPET:CSTS, Vijayawada

(ASEEDNOMOUS)

NARASARAOPET - 522 601. Witnessan (Dist.), A.P.

Dr.D.Sunee

Vice Principal,

NARASARAOPETA ENGINEERING

COLLEGE (Autonomous),

#### **COURSES**



#### **UG-B.TECH**

Computer Science and Engineering CSE - AI (Artificial Intelligence) Information Technology

CSE (AI & ML)

CSE - DS (Data Science)

CSE - CS (Cyber Secutiry)

Electronics & Communication Engineering

Electrical & Electronics Engineering

Mechanical Engineering

Civil Engineering



# **PG-M.TECH**

Computer Science and Engineering

**Digital Systems and Computer Electronics** 

**Digital Electronics and Communication Systems** 

Power and Industrial Drives

Thermal Engineering

Machine Design

Structural Engineering



#### PG: MBA, MCA

Master of Business Administration (Dual Specialization)

Master of Computer Applications (Two Years Programme)







# NARASARAOPETA **ENGINEERING COLLEGE**

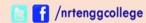
(AUTONOMOUS)

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EAPCET CODE: NSPE

