



NARAYANA ENGINEERING COLLEGE::NELLORE

*(Approved by AICTE and Permanent affiliation to JNT University, Anathapuramu)
An ISO 9001:2008 Certified Institution, Recognised by UGC U/S 2(f) and 12(B) &
"A" grade by Govt. of A.P*

Muthukur Road, Nellore – 524004

Website: www.necnellore.com

E-Mail: mechhodnecn@narayanagroup.com

DEPARTMENT OF MECHANICAL ENGINEERING

NEWSLETTER: JULY-2017 TO NOV-2017



VISION:

To be a centre of excellence in the field of Mechanical Engineering in the areas of teaching, learning and research. Synchronizing all the three activities to produce high quality mechanical engineers.

MISSION:

The Mechanical Engineering Department is committed to

- Generate able and responsible Graduate Mechanical Engineers for global requirements by providing effective quality education.
- Respond to the ever changing needs of the industry and corporate world.
- Conduct basic and applied research and to generate intellectual property.
- Provide consultancy to the neighborhood industries and committed to the spirit of entrepreneurship.
- Highlight the importance of Interpersonal communication skills to excel in higher studies and competitive examinations to secure jobs in reputed public and corporate companies.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS):

The Educational Objectives (EOs) of the under-graduate program- Bachelor of Technology (B. Tech.) in Mechanical Engineering offered by Narayana Engineering College, Nellore is:

- Graduates will be successful mechanical engineers in the industry or professional careers.
- Graduates will continue to learn the latest emerging technology and advanced field of study.

PROGRAMME OUTCOMES (POS):

On successful completion of the under-graduate program- B.Tech. Mechanical Engineering, the Mechanical Engineering graduates will,

- Apply knowledge of mathematics, science and engineering to arrive optimal solutions.
- Identify, formulate and analyze engineering problems through technical literature.
- Design a component, a process and a system to meet desired needs considering financial, environmental, social, ethical, health and safety, manufacturability and sustainability.
- Conduct experiment, analyze and interpret data to arrive valid conclusions.
- Use the techniques, skills, and modern engineering tools for modeling and prediction of problems by understanding the limitations.
- Recognize the importance of health and safety, social, cultural responsibility in the design and implementation of engineering projects.
- Apply the standards and professional ethics in engineering practice.
- Function effectively as a member or leader of a team.
- Become Successful in competitive examination such as GATE, GRE, GMAT, CAT.

PROGRAM SPECIFIC OUTCOMES (PSOS)

Graduates will be able to design, develop and operate or document newer mechanical systems or processes using modern practices and newer tools enhancing the productivity.

Graduates will be able to find sustainable, Cost effective and environmental friendly measures to existing technology.

DEPARTMENT PROFILE

The Department of Mechanical Engineering was established in the year 2011 and offers undergraduate program (B.Tech.) in Mechanical Engineering with intake of 60. The department has well equipped laboratory facilities and highly qualified faculty members having rich experience in teaching and industry.

The Department is committed to produce the top class engineering professionals through academic excellence and quality education. This department has dedicated and competent faculty members to impart quality education, project guidance, personality development to enable them to be placed in reputed Multi National Organizations.

The program is designed in order to facilitate the students with the practical knowledge of design and to concatenate the gap between the manufacturing and design sector. The pillars constituting the mechanical department are Engineering Design, Manufacturing Science and Thermal Engineering. With the knowledge of these areas, the students are able to excel themselves in their post-graduate studies and take up research projects related to their field.

The department provides spacious laboratories, lecture halls and seminar rooms. The staff members use LCD projectors and Video clips, making the teaching more interactive, and thereby learning process is made easier for the students.

The department has sufficient and efficient faculty members whose areas of expertise and research includes Design, Thermal, Product design, Manufacturing, CAD, Computer Integrated Manufacturing (CIM), Automobile engineering etc.

PROGRAMME:

Our Department has highly qualified and experienced faculty members.

Average Teaching Experience in the department is 10 years (ranging from 20 yrs. To 2yrs.)

Staff Retention Factor is excellent in the department. 2 staff members serving for more than 15 years and 3 staff members serving for more than 6 years.

Dedicated staff strength (including 5 professors) with good team spirit exhibits involvement of the department in all the college activities.

The department has one UG Programme for which sanctioned intake is increased from 60 to 72 from the academic year (2014-15)

Our department having excellent infrastructure, Laboratory facilities, Departmental library, Smart Class rooms and Seminar Hall.

FACULTY:

One of our Faculty members has completed their Ph.D. programme in Jawaharlal Nehru University Anantapur during 2014-2015.

Two of our Faculty Members pursuing their Ph.D (one of the faculty members in VIT-Vellore and of the other faculty members in Nagarajuna University- Guntur)

Our faculty members are periodically submitting their project proposal to various funding agencies.

The faculty members are attending/organizing various National/ International Conferences, Workshop, Seminar, Short term training programme and FDP periodically.

Our department faculty is regularly monitoring the student's attendance and their discipline.

Our Faculty members and students are members in various Professional Societies like MISTE, ISTE, ISRD, IAENG and UAME etc.

Our Faculty members and students are periodically counseled by senior professors and motivating them to register for higher studies.

STUDENTS:

Teaching-Learning:

Our Faculty members and students are effectively utilizing IEEE and updating their knowledge by downloading and reading various International Journal articles.

Our Faculty members and students are gaining more subject knowledge by viewing the NPTEL videos.

Implementation of 3-D teaching in our department.

The faculty members are providing the lecture notes, Lab manuals and structured Assignment book (for analytical subjects) to the students at the beginning of the semester itself.

Industry Interaction:

Subject Experts from VANI GATE Coaching Center- Chennai and from other leading institution are delivering guest lecture to our students in various specialization.

Industrial Experts are often visiting our department and delivering Technical Lectures and training to our faculties and students about the recent development in the industries.

Our students are periodically visiting the industries to enhance their knowledge.

Our students are attending in plant training and internship training during summer and winter holidays

Our students are attending various National/ International Conferences, Workshop, Seminar, Project Expo and symposium periodically.

Majority of the Final year students are participating mini projects and research oriented Projects are carried out in-College.

Our department Final year students are publishing their project work in the conferences, Journals.

Extra/Co-curricular Activities:

Our department students are Volunteers in various social activities like NSS and NCC

Our students have won many awards and prizes in participating various sports event and presenting technical papers, ppt's at NITE, University Compition and various institutions.

Our students are trained with the latest techniques / software by attending value added programme.

Value-added course on Automobiles, FEM, ANSYS and servicing in association with NSDC for the benefit of the students have been conducted.

Value-added course on Robotics in association with Accord Robo Tech Care for the III rd and IV year students has been conducted.

Value-added training on CAD modeling software is also in the offering.

Placement/Training programme:

The department is providing various training programme to get the placement in various leading companies Like Shapoorji Pallongji, CYIENT etc.

Our department motivates our students to come up as good entrepreneur.

Our Alumni are periodically visiting our department; they are motivating and encouraging their juniors to enhance their technical knowledge.

One of Our Alumni received the "Best alumni" award. Mr. M.Venkatesh (2016 passed out), Assistant Supervisor, SPROUD Pvt.Ltd SINGAPORE.

Professional Activities:

Our Final Year Students are Involving project AIREAL TRAM LINE National Level Competition at NIT –Warangal.

Some of the students are members of ISTE, ISRD, and IAENG.

BEST PRACTICES

Students absentees and follow- up procedures
Conducting coaching classes for slow learners/
NSLB/Remedial Classes.

Micro Analysis and band Width Analysis.

Structured Assignment and tutorial Note Book.

Students' participation in club activities.

Value added Training programme NSDC.

National skill development corporation programme.

Personality development program and
communication skill development program and
aptitude training for all students.

Aptitude Training Classes Conducted For All
Students

VALUE ADDED COURSE (2017 - 18)

AUTO CAD:

The AutoCAD software helps designer in visualizing the final product that is to be made, its subassemblies and the constituent parts. Mechanical engineers who have CAD skills are employed in many manufacturing industries including automobiles, aeronautical engineering, heavy industries, locomotives, and marine. Second year students undergo training in AutoCAD software for their future career to survive in the core industries.

CREO:

Creo is a complete suite of concept design, 2D, 3D, simulation & analysis engineering software. Benefits of learning CREO is faster time-to-market, product quality, design efficiency, minimum errors, less scrap and rework. Students will know how to validate a design with engineering simulation and check whether the product design can meet the functional requirements. Our third year Mechanical Engineering students were benefited from this Creo Software training for their future career to survive in the core industries.

Solid Works

Solid Works is one of the widely used 3D CAD tools in the industry. Solid Works is a 3D CAD software tool that transports all tasks involved in product development into the visual and electronic 3D world for better collaboration. Solid Works can help you convert your ideas into product designs quickly, and effectively. Our third year Mechanical Engineering students were benefited from this Ansys Software training for their future career to survive in the core industries.

ANSYS

ANSYS is a general purpose software, used to simulate interactions of all disciplines of structural, vibration, fluid dynamics, heat transfer and electromagnetic for engineers. ANSYS enables to simulate tests or working conditions, enables to test in virtual environment before manufacturing prototypes of products. This training, where our Mechanical final year engineering students, to find their dream job and also they get trained and gain industrial knowledge and experience.

Guest Lecture/Symposium:

Department of Mechanical has organized the Guest Lecture on **“Thermodynamics & Thermal engineering concepts in power plants by Sri M.Penchal Reddy. 18-08-2017.** The purpose of this Guest lecture is to present recent developments and applications in Thermodynamic Analysis.



The guest lecture will cover a variety of topics such as study of tyres, suspension, brakes, steering, power train, etc. in ground vehicles.

This lecture will allow students look at vehicles from a Technical point of view. It would help students from deciding a topic for their final year project.

The Narayana Engineering College Nellore. Department of Mechanical Engineering organized by One Day National Level Symposium **“Advances in Mechanical Engineering”** on 14th October 2017. The chief guest of the gathering was Sri. S. K. Apsar, Head, Operations, TVS Training Services, Sri City, Tada.



SAMYANTRANA-2K17 is a platform for UG, PG students, Research aspirants, Industry Professionals Academia. It gives an ample opportunity to exchange their ideas, share the upcoming technologies & advances in various areas in mechanical Engineering.

INDUSTRIAL VISIT

Industrial visit for third year students to **Nippo**, today Indo National Limited with its corporate office at Chennai, is the first Indian dry battery company to have been certified with ISO 9001 and ISO 14001 international standards and has the ISI mark of quality on all its batteries. Nippo has 35 depots across India and has excellent distribution network with over 4000 stockiest pan India is a household name in India. A name synonymous with batteries, manufactured by Indo National Limited. Since its inception in 1972, Nippo has been providing millions of its customers with a quality and performance that is second to none. Nippo also markets various range of LED torch lights to cater to customer requirements. Nippo recently launched LED Emergency Power Backup range products. It has got wide acceptance across the country for its unique products which help in solving the power needs.

Indo National Limited with its corporate office at Chennai, is the first Indian dry battery company to have been certified with ISO 9001 and ISO 14001 international standards and has the ISI mark of quality on all its batteries. Nippo has 35 depots across India and has excellent distribution network with over 4000 stockiest pan India.



Industrial visit for final year students to (SHAR) students with three faculty members (Mr. M Chandrasekhar and Mr. K Ramesh and Mr. T Rajeshwar Rao) went on an industrial visit to the **Satish Dhawan Space Centre (SDSC)** on 08-08-17. We all assembled at the college at 6:00a.m. and left the college in a bus. We reached the SHAR at 10 o'clock. An engineer-in-charge of SHAR received us at the entrance and gave a brief introduction about shar in Auditorium with the help of 30 minutes video, later we assembled at MACHINE CONTROL CENTER(MCC) and It is part of the ground segment of spacecraft operations. A staff of flight controllers and other support personnel monitor all aspects of the mission using telemetry, and send commands to the vehicle using ground stations.

The POLAR SATELLITE LAUNCH VEHICLE(PSLV). PSLV launch complex was commissioned during 1990. It has a 3,000 tonne, 76.5 m high Mobile Service Tower (MST) which provides the SP-3 payload clean room. The solid propellant motors for the PSLV are processed by SHAR, which also carries out launch operations. The first launch of the PSLV took place on 20 September 1993

PLACE :
SATHISH DHAWAN SPACE CENTRE,
SRIHARIKOTA HIGHER ALTITUDE RANGE.

DATE : 08-08-2017

MECHANICAL ENGINEERING



NARAYANA ENGINEERING :: COLLEGE

STUDENT ACTIVITY



NARAYANA ENGINEERING COLLEGE :: NELLORE

Approved by AICTE and Permanently Affiliated to JNTUA, Ananthapuramu,
An ISO 9001:2008 Certified Institution, Recognized by UGC U/S 2(f) & 12(B) and "A" grade by Govt. of AP





To

THE FIRST PRIZE WINNING TEAM

Winners
R.Anand
IV BTech-Mech
Roll No-14711A0303
D.Siva Kumar
IV BTech-Mech
Roll No-14711A0331
A.Vishnu Teja
IV BTech-EEE
Roll No-14711A0255



TECHNOZION

ISO 9001:2008
ANNUAL TECHFEST OF NIT WARANGAL

At NATIONAL INSTITUTE OF TECHNOLOGY, Warangal
Held on 27-29 Oct 2017
In Association with



United Nations
Educational, Scientific and
Cultural Organization

Management, Director, Principal, Staff & Students



Wonderful moments of our Final Year Mechanical Engineering Students participated & OWN the First Prize in ARIAL TRAMLINE organized by Mech Dept of NIT-Warangal.

An aerial tramway, sky tram, cable car, ropeway or aerial tram is a type of aerial lift which uses one or two stationary ropes for support while a third moving rope provides propulsion.

We know that rope ways are needed for crossing over large spans of land or huge masses of water. The design and construction of such ropeways is a necessity. In this event one has to design and make a model of a ropeway. It tests your technical skills and application of them in practical life. Here what you need to know is simple laws of mechanics. Cable car or tram system is one of the examples for this type of rope way systems. Come and show skills in designing the structure using simple things.



Receiving Winning certificate at NIT-WARANGAL



Management, Director, Principal and HOD appreciated and felicitated the prize winning students.

Our Second Year Mechanical Engineering Student participated & OWN the third Prize in NCC Ship Modeling Competition organized by NCC IGC-7 Camp New Gajuvaka Vishakapatnam.



NSS ACTIVITY

On the occasion of Gandhi Jayanthi, the students of ME Department organized a Swachch Bharat program under the banner of Association of Mechanical Engineers, ME Department. Faculty members and students of ME department participated in the program to spread awareness of keeping the surroundings clean and green. The event was well received by the students of Sarvodaya Government College and inspired them to keeping the surroundings clean.



Participant students and faculty members at the venue



Participants who witnessed the Event

Extension Activity

World space week was organized in Narayana Engineering College, Nellore from 05-10-2017 to 7-10-2017 as by SDSC-SHAR in association with Narayana Engineering College Nellore. Students from various Schools, Junior colleges and Engineering colleges throughout Nellore were invited to be educate about Space Research. Students from the ME department volunteered in conducting various competitions like quiz, eloquence and essay writing for the participants of the event. There was abundant response for the event. Participants gained a lot of knowledge and exposure to the field of space research and its scope.



School Students curiously listening to a demonstration



School Students watching exhibited models

A Rally was organized by Narayana Engineering College as part of the World Space Week event from 7:30 am to 8:30 am on 7th October 2017. The Rally was aimed to bring awareness to the general populace about Indian Space Research and related opportunities. Students and Faculty members of the Department of Mechanical Engineering actively participated in the Rally to benefit the public.



EDITORIAL BOARD

Department of Mechanical Engineering

NEC-NELLORE.