

Nandha Engineering College

Erode – 638 052

2020-21

VISION

To foster academic excellence by imparting knowledge in Agricultural Engineering to meet the ever-growing needs of the society.

MISSION

To provide quality education to produce agricultural engineers with social responsibility.

To excel in the thrust areas of agricultural engineering to identify and solve the real-world problems.

To create a learner-centric environment by upgrading knowledge and skills to cater the needs and challenges of the society.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: Core Competency: Successful professional with core competency and inter-disciplinary skills to satisfy the Industrial needs.

PEO2: Research, Innovation and Life-long Learning: Capable of identifying technological requirements for the society and providing innovative solutions to real time problems.

PEO3: Ethics, Human values, and Entrepreneurship: Able to demonstrate ethical practices and managerial skills through continuous learning



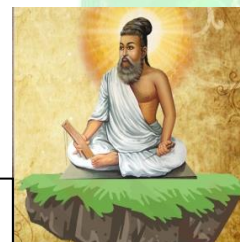
Dr. N. RENGARAJAN, Ph.D.,
Principal - NEC.

It is a matter of great pride and satisfaction to bring out the Newsletter for the period of June 2020 to May 2021. This newsletter is a forum to expose the events, happenings and achievements in the department. It provides a platform to exhibit the talents of the budding engineers and the faculty. I congratulate the effort taken by the Department of Agriculture Engineering for the publication of the newsletter.



Dr. M. DHANANIVETHA, Ph.D.,
HoD - Agri.

It is my pleasure to congratulate the students and the faculty members of Agriculture Engineering Department for the publication of this newsletter. I hope this initiative builds team work and inspires young minds by providing a larger visibility and dimension to our department. It also provides a platform to recognize and congratulate department's achievers. It will be helpful for their overall and individual development. I hope this culture of releasing newsletter continues forever.



சுழன்றும் ஏர்ப் பின்னது உலகம் அதனால்
உழந்தும் உழவே தலை.

குறள் 1031

DEPARTMENT OF AGRICULTURE ENGINEERING 2020-21

ABOUT AGRO CLIKZ'21 NEWS

The AGRO CLIKZ'21 News is the voice of Agriculture Engineering; it is a newsletter from the Department of Agriculture Engineering which mainly focuses on the day-to-day happenings in the department. It speaks and visualizes the events happening in the department and the participation of students in various inter and intra college events. It encourages and brings out the talents of students in various fields.

ABOUT DEPARTMENT OF AGRICULTURE ENGINEERING









Agricultural Engineering is started in the year 2017 with an intake of 60 students. Agricultural Engineering is a branch of engineering that deals with the design of farm machinery, location and planning of farm structures, farm drainage, soil management, erosion control, irrigation, rural electrification and processing of farm products.

Agricultural Engineering is to find out the solution of the problems in the field of agriculture for increasing agricultural productivity, increasing the standard of living of the farmers. It is a technologically sophisticated field that offers bright career prospects and opportunity in any country around the world and in various sectors. Agricultural Engineers utilize engineering principles to all activities related to agriculture and horticulture.

Hands on training on crop production using tractor operated farm implements is offered in the farm. Our students are undergoing internships and trainings in farm machinery manufacturing industries, drip irrigation companies, food processing industries, dairy industry, renewable energy industries, etc. The Department has signed MOUs with various allied agriculture industries through which Students get Placements with good packages in Modern Dairy, processing Industries, Roots Irrigation Ltd., Shri Pachaiammal Agro Industry and many more.

INFRASTRUCTURE

The following laboratories have been established and students are being given hands-on training.

LABORATORY FACILITIES	
<ul style="list-style-type: none">  Soil Science Laboratory  Crop Production and Husbandry Laboratory  Farm Tractors Laboratory  Maintenance of Farm Machinery Laboratory 	<ul style="list-style-type: none">  Farm Implements Laboratory  Unit Operations Laboratory  Irrigation and Drainage Laboratory  Food and Dairy Laboratory, etc.,

ASSOCIATION INAUGURAL FUNCTION

The inaugural function of Agro Tech Warriors Association for the academic year 2020 - 21 was held on 28.01.2021. The chief guest of the function was Dr. S. Gangadharan, Subject Matter Specialist (Agro-Meteorology), Krishi Vigya Kendra, ICAR, Kattupakam, Kattankolathur, Chengalpatu.

The Presidential address was given by Thiru. V. Shanmugan, Chairman, Sri Nandha Educational Trust. Principal Address was given by Dr. N. Rengarajan, Principal, Nandha Engineering College. Felicitation address was given by Dr.S.Arumugam, CEO, Nandha Educational Institutions, Thiru. S. Nandhakumar Pradeep, Secretary, Sri Nandha Educational Trust, Thiru. S. Thirumoorthi, Secretary, Nandha Educational Institutions and Dr. S. Senthil Director, Tech Campus. Dr. E. K. Mohanraj Professor and Head of the agriculture department , delivered welcome address. Office barriers of Agro Tech Warriors was introduced by Mr. A. Karthy . The chief guest in his lecture highlighted the scope of Agriculture in future India.

VIRTUAL LABORATORY

Virtual Laboratory on “Remote sensing and GIS for Agriculture Engineers” [from 16.11.2020 to 25.11.2020] was organized by

Department of Agriculture Engineering, NEC, Erode. The session was delivered by Ms. Pavithra Priyadharshini, M. Tech (Remote sensing), Assistant Professor, Department of Civil Engineering from Sethu Institute of Technology, Virudhunagar. She discussed about the various aspects of Remote Sensing and GIS for Agriculture Engineers. It includes measurement of relief displacement using parallex bar, stereoscopic vision test – visual, aerial photo interpretation – visual, satellite images interpretation – visual, database Management systems, spatial data input and editing , Raster analysis problem – Database query, GIS application in watershed analysis, GIS application in rainfall – runoff modeling and GIS application in Soil erosion modeling. Students found it interesting to learn the various concepts of remote sensing.

ACADEMIC SEMINAR

Food preservation is the process in which, food is not only processed but also its desirable attributes (sensorial and nutritional) are sustained up to the maximum possible time duration. Principle of food preservation constitutes removal of water and subsequent reduction in water activity. Academic seminar on “Principles of Food Processing” was organized by Department of Agriculture Engineering, NEC, Erode on 15.05.2021 through online mode. The

session was engaged by Dr. S. Anuradha, Associate Professor, Department of Nutrition and Dietetics, Vellalar College for women, Erode. She has 26 of years Teaching experience in Food Science and Nutrition Department at Vellalar College for women. She discussed about the basic Principles of Food Processing such as

(1) The preservation of foods by

(a) Modern methods such as refrigeration, Canning and irradiation,

(b) Traditional methods such as drying, salting, smoking .

(2) The development of protein - rich foods

(3) Food additives.

மழை தொழில் உதவ மாதிரம் கொழுக்க

தொடுப்பின் ஆயிரம் வித்தியது விளைய

நிலனும் மரனும் பயன் எதிர்பு நந்த

-(மதுரைக்காஞ்சி 10 – 12)

INDUSTRIAL SEMINAR

Livestock sector is more likely to emerge as an important component of agricultural growth in the years to come. It provides food security to the farmers, draught power, organic manure and bio-gas to agriculture sector, wool, hair/feather, hide/leather, skin, bones, blood and fat to the industrial and pharmaceutical sector. Livestock sector also provides large self-employment opportunities. Industrial seminar on “Introduction to Livestock farming and Cattle Management” was organized by Department of Agriculture Engineering, NEC, Erode on

21.05.2021 through online mode. The resource person was Dr. K.Sangli Vickram Kumar, Managing director and Chief Veterinarian, Animal Veterinary Care, Rajapalayam. He highlighted about the importance of livestock in agriculture, Animal Husbandry: Breeding; Feeding; Weeding; the production parameters, NABARD schemes and also the scheme activities of Tamilnadu. He also highlighted the importance of house layout for cattle green fodder, composition of milk and processing technique.

INTRA DEPARTMENT SYMPOSIUM - COCURRICULAR

“ Intra Department Symposium” was organized with events like Paper presentation, Poster Presentation and Technical Quiz on Precision Farming, IOT in Agriculture, Smart Farming on 15.05.2021. Students from all the academic years actively participated in all the events. Presentation on the paper titled “Precision Farming” secured first place in Paper Presentation category, was given by M.Karpagam and S.Kamalakaran of Third year M.R.Tharshiny from Second year presented a paper titled “Precision Agriculture” secured second place and S.Sindhu, S.Haripriya got Third place in Paper Presentation. K. Kamali from Third year was awarded First Prize for presenting Poster entitled “IOT in Agriculture”. R.Aswin and

P.Ramanathan from Third year were awarded First prize for Technical Quiz Competition. E-Certificates for were issued all the registered Participants.

INTRA DEPARTMENT SYMPOSIUM - EXTRACURRICULAR

Department of Agriculture Engineering, NEC has organized a "Intra Department Symposium" with events like Poetry Competition, Arts (Face Painting, Rangoli, Mehndi, Crafts) ,Logo design. Students from the all the years showed active participation in all the events. S.Nivashini from first secured first place and Poornima N from second year secured second place in Poetry competition (tamil) category. Sree Hariharan from Third year got First prize in Poetry competition (English). In Mehndi Competition, Vidhyashree G. from First year was awarded by First prize Abirami Meenakshi K. from Third year secured first prize in Rangoli category, In Painting, Magesh A. from first year got first prize followed by Poornima N from second year. Poornima N from Second year secured First prize in Miniature crafts category Karthikeyan K. from third year received first prize in Logo design contest followed by Bhavan Hari Karthi from second year. E-Certificates were issued for all the registered Participants.

**"Our greatest ability
as humans
is not to change the
world,
but to change
ourselves."**



- Mahatma Gandhi

ACADEMIC SEMINAR

Department of Agriculture Engineering and Institution Innovation council (IIC) jointly organized a Orientation program on "Innovation and Intellectual Property rights (IPRs)" on 17.03.2021. The IPR session was delivered Dr. M. Easwaramoorthi, Professor & Dean, IIC Innovation Ambassador, Department of Mechanical Engineering from NEC. Innovation session was taken over by Mr. P. Krishna Gandhi, Assistant Professor, EEE, IIC Innovation Ambassador, NEC. This seminar focused on Intellectual property and focusing patents. The talk was followed by an extensive Q&A sessions where the students clarified their doubts related to patents and copyright

PLACEMENT AND CAREER GUIDANCE

The Placement and Training centre of our institution is headed by Thiru. S.Thirumoorthi, Secretary. The centre organizes various training programs like mock interviews, personality development courses, seminars, group

discussions, invited talks and road shows of prospective employers. This will help students to achieve success in the placement.

The placement drive for the academic year (2020-21) have set an astounding record in the Placement history of Agriculture Engineering Department. Over the duration of 10 months, the institute have invited and hosted a plethora of various reputed companies.

Hundred percent of the placed willing of Agriculture Engineering students have been selected through various placement drive. Some of the top companies that recruited our students are CTS, Roots Irrigation System, Shri Pachaimal Agro Company, Covai Classical Engineering, MobiTech, etc. The average package offered was around 2.8 lakhs per annum, with the highest being 4.5 lakhs per annum. Such an impressive streak of placements even during the times of demonetization only goes on to prove the quality of the engineers taking shape at NEC Agri.

INTERNSHIP RECRUITMENT

Students are eligible to pursue internship for duration of one year in the industry starting from June to May. Internship stipend paid by these companies range from Rs. 10,000 to 20,000 per Month. Based on the performance of the students in the internship the students will be absorbed and offered full time employment

option by the end of their internship period. This year companies like Roots Irrigation System, Aavin Dairy Milk , Jain Irrigation Netafilm, Tamilnadu Irrigation Equipment, Pasumai Irrigation Ltd, etc

IN-PLANT TRAINING

The industrial visit is considered as one of the most tactical methods of teaching. It provides students an opportunity to learn practically through interaction, working methods and employment practices. Moreover, it gives exposure from an academic point of view. In-Plant training is being made compulsory for Mechanical Engineering students during summer vacations. This is not only helps the students in acquiring knowledge about new technologies but also acts as an insight into management aspects. Students are expected to undergo training for a period ranging from 28 days to 40 days in an industry and submit a detailed report for evaluation after completion of their training in the following companies. Green Global Water Management, AGS Irrigation Pvt. Ltd., Alpha Irrigation P Ltd, Hatsun agro, Jayanthi spices, Aavin, Sakthi sugars, Saptarishi Agro Industries, Ikon Coconut Extractions Private Limited, Adhitya Agro Products, Mahindra and Mahindra, John Deere, New Holland, TAFE, Swaraj Tractors, Escots, Kubota Agricultural Machinery India Pvt. Ltd, Indo Farm Equipment

Limited, Preet Tractors Captain tractor, Massey Ferguson, Fendt, Caterpillar Inc, Claws Tractor etc.,

PAPER PUBLICATION DETAILS

+ R. Jeya Prakash, B. Soundara, S. Christian Johnson "Sustainability of no-fine concrete with fibre reinforcement", Journal of Environmental Protection and Ecology, P. No. 2131-2143

+ Vanitha.S, V.Ravikumar and T.sherene Jenita Rajamma, "Ammonia volatilization from flooded rice soil using CAS and OSC methods", Journal of Soil and Water Conservation ISSN.No : 0022-457X

+ Vanitha Subramani, Dhanabal K, Kuppusamy C, Ruban K, Surendar A, "Design and Development of Grain Storage Moisture Regulator", International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET). Volume 10, Issue 3, March 2021.

+ K. Pradeep Kumar, Vaishali. V, Lakshmi Priya.B, Mohamudha Jumana Hasin. A, Logeshwaren.T, "Hydraulic Cassava Harvester", International Journal of Engineering and Technology (IJET), Volume;08, Issue:03, March 2021.

+ K.Pradeep Kumar, V.Jeevitha, S.Kanishka, K.Mohanapriya,

M.Sowbarnika, "Isolating Copra Machine", International journal of All Research Education and Scientific Methods (IJARESM), Volume 9, Issue 3, March 2021.

+ K.Pradeep Kumar, S.Gokul, M.Gomathi, N.Muthukumar, M.M.Pujara, "Review on Flooding System Using Solar Power", International Journal for Scientific Research & Development, Volume 8, Issue 10, 2020.

+ K.Pradeep Kumar, M.M.Pujara, S.Gokul, M.Gomathi, N.Muthukumar, "SOLAR POWERED SMART IRRIGATION SYSTEM", International Journal of Advances in Agricultural Science and Technology, Vol.8 Issue.3, March-2021.

+ R.Jeya Prakash, R.Arun, V.Kamali,S.Rachel, S.Vishnu Durga, "A Review of pectin from muskmelon peel and addition of pectin to jam", International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET). Volume 10, Issue 3, March 2021.

+ Nandhakumar, Santhosh, Sowmiya, Sridharshini, Subramanian, "Automatic Irrigation and Fertigation System", International Journal of Innovative Research in Science, Engineering and

Technology (IJIRSET). Volume 10, Issue 3, March 2021.

✚ Sandhiyadevi P, Dineshkumar P, Gomathi S, Prasanth M, Subhiksha R, "A Review on Groundnut POD Separator", International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET). Volume 10, Issue 3, March 2021.

✚ Sandhiyadevi P, Abul Kalam Azad S, Kavin Kumar D, Logu P, Naveen Kumar P, "Nutritional Analysis of Palmyra Tuber", International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET). Volume 10, Issue 3, March 2021.

✚ A.Karthy, M.Nithis Kumar, S.Boobalan, M.Naveen Kumar, P.Tamilselvan, "A Review on Fabrication of Smart Solar Dryer by Using IoT", International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET). Volume 10, Issue 3, March 2021.

✚ R.Jeya Prakash, S.Rachel, S.Vishnu Durga, V.Kamali, R.Arun, "Extraction of Pectin from Muskmelon Peel and Addition of Pectin to Jam", International Journal of All Research Education and



Scientific Methods (IJARESM), Volume 3, Issue 3, March-2021.

STUDENTS ACHIEVEMENTS

In Anna University Zonal Cricket match S.Sakthi vignesh of Third year Agriculture Engineering won second prize.

Second place in Anna University Zonal kabaddi match was won by S. Ashok Kumar, P.Pravin and S. Thillai Arasan.



Prize winners with our physical director

Longest duration to perform Silambam stick rotation for 5 hours and 30 minutes was achieved by Ms. R. Parvathy of second year Agriculture Engineering in Tirupur, Tamilnadu India, on 14-03-2021. Her

achievement is considered as world record breaking and registered in Nobel world records registry. Record No. NWR/2021/89.

**People throw stones at you
and
you convert them into
milestones**



-Sachin Tendulkar

Ms. R. Parvathy receiving the world record certificate from the dignitaries

S. Thillai Arasan was presented a paper entitled “Living Modified Organism” which and secured second prize during the National level symposium Eureka destrea 2020 inter college meet organized by AMPLICOS Association, Department of Biotechnology K.S. Rangasamy



college of Arts and Science.

S. Thillai Arasan received the prize from dignitaries

AWARDS & ACHIVEMENTS

Department of Agriculture Engineering received Gold Medal Award by NGO.

Dr. S. Vanitha got “Best Young Scientist Award” organized By PEARL-A Foundation for Educational Excellence awards to Higher Education in India.

Dr. S. Vanitha received “Best Presenter award” organized By 6th National Youth Convention on Innovation and Agricultural Reforms towards Farmers Prosperity, Professor Jayashanker telangana state Agricultural University.

Dr. S. Vanitha got “Emerging Scientist award” organized by Science and Medicine. VDGGOOD Technology Factory.

MEMORANDUM OF UNDERSTANDING

The general purpose of the MoU is to facilitate industry and institute interaction in terms of visits student projects, sharing the knowledge of expertise, research and consultancy cooperation between the parties



Bhavan Hari Karthi S. S, II year

DRAWING COMPETITION

MoU with Escorts tractors at bangalore

STUDENT ACTIVITIES IN EXTRA CURRICULAR EVENTS:



Poornima N , II year

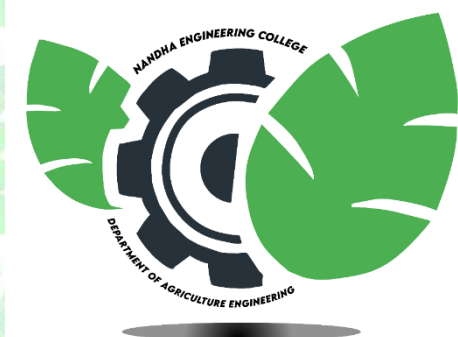


Magesh A, I year



Vidhyashree G ,I year

LOGO DESIGNING COMPETITION



Karthikeyan K , III year



Sree Hariharan , III year (English Poetry)



PLACED STUDENTS (Batch 2017-21)





ABUL

BOOBALAN .S

DHANABAL .K

GOKUL .S

KALAM AZAD .S



KALAIKABILAN.S



KANISHKA .S



KISHORE .S.P



KUPPUSAMY .C



LOGU .P



MADHAN PRAKASH .M



MOHAMUDHA JUMANA .A



MOHANAPRIYA .K



PRASANTH .M



RACHEL .S



SABAREESH .P

NITHISKUMAR .M



SANDHOSH S



GOMATHI M



LIVANESH SASTHA S. R



MUTHUKUMAR .N



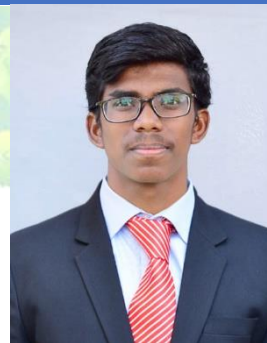
SARASWATHAN .S



SURENDAR .A



TAMILSELVAN.P



VIGNESH .A



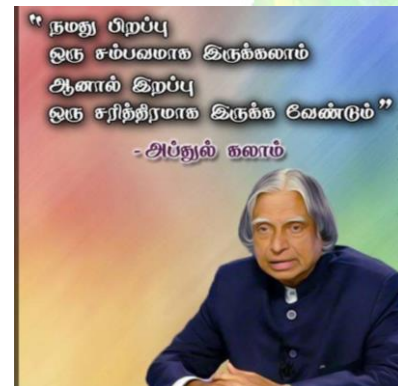
VISHNU DURGA .S



VISHNU.G



VISHAL .S



FIELD AND LAB GALLERY



ACADEMIC TOPPERS

BACHELOR OF ENGINEERING (AGRICULTURE ENGINEERING)

(2020-2024 Batch)



PREETHA A R



NOUVSHIKA E T



MANORANJANI P

(2019-2023 Batch)



SINDHU S



RAKESH A



MADHUMITHA R

(2018-2022 Batch)



EINDHUJA M



NITHYA DEVI K.R



VANISHA S

(2017-2021 Batch)



PUJARA .M.M



RACHEL .S



ARSHA.A.J



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Nandha Engineering College

(An Autonomous Institution Affiliated to Anna University, Chennai & Approved by AICTE, New Delhi)

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