



Excel[®]

ENGINEERING COLLEGE

(AUTONOMOUS)



Department of Agricultural Engineering

NEWS LETTER 2023-2024

VOLUME 2 (JULY – SEPTEMBER)

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
Accredited by NBA (AERO, CSE, ECE, MECH), NAAC with "A+" and
Recognised by UGC (2f & 12B)

KOMARAPALAYAM

DEPARTMENT VISION MISSION

VISION

To be a global leader in Agricultural Engineering, pioneering innovative solutions, fostering creativity and inspiring lifelong learning, all while embracing social responsibility to enhance agricultural sustainability and nourish the world.

MISSION

1. Provide an exceptional teaching and learning experience that integrates Experimental learning with practical skills and knowledge in agriculture engineering.
2. Advance cutting-edge research and comprehensive training, stringing to be at the forefront of innovations and knowledge dissemination in our field.
3. Emphasis on skill development, value addition and hand-on field work, to make students academically proficient.
4. Foster technological advancements and create abundant career opportunities, to ensure graduates are well prepared for successful careers and become industry leaders.

PROGRAMME EDUCATIONAL OBJECTIVES

- Graduates will demonstrate comprehensive technical proficiency as agricultural engineers, applying knowledge and skills to design, implement, and manage innovative agricultural systems effectively
- Graduates will cultivate an entrepreneurial mindset, showcasing the ability to identify, evaluate, and implement sustainable agricultural solutions, contributing to the growth and viability of agricultural enterprises.
- Graduates will champion sustainable development in agriculture by integrating environmentally conscious practices, promoting resource efficiency, and engaging in initiatives that address the socio-economic needs of communities
- Graduates will embrace a culture of creative learning, continuously adapting to emerging technologies and contributing to the advancement of agricultural sciences. Furthermore, they will actively serve society by applying their expertise to address agricultural challenges and promote community well-being.

PROGRAMME SPECIFIC OUTCOMES

- PS01: To develop the skills in the field of Agriculture Engineering to become well versed in farm Mechanization, Food and Dairy Processing, Soil and Water Conservation, Bio Energy and IoT in Agriculture.
- PS02: To imbibe the skills on supervising, coordinating, guiding, leading and decision making in the minds of Agriculture Engineering students for completing crop production projects in time

MESSAGES

CHAIRMAN'S MESSAGE



Prof. Dr. A.K. Natesan

Agricultural Engineering is one of the essential branches of Engineering which demands innovation. With the rapid advancement of technology, Agricultural Engineering is becoming more important to tackle challenges in the global food market. The future of Agricultural Engineering is to integrate technology with biology and the social aspects of agriculture to create sustainable environment. I congratulate the Department of Agricultural Engineering for their initiatives to introduce department newsletter and also I wish the students to shine in their career.

VICE CHAIRMAN'S MESSAGE



**DR. N. MATHAN
KARTHICK, M.B.B.S.,
M.H.SC.
(DIABETOLOGY), AKS**

Agricultural engineers' main role is to solve problems found in agricultural production. Goals may include designing safer equipment for food processing. Agricultural engineers must creatively apply the principles of engineering. Agricultural engineer solve problems concerning power supplies, machine efficiency, the use of structures and facilities, pollution and environmental issues, and the storage and processing of agricultural products. I congratulate the Department of Agricultural Engineering for their initiatives to introduce department newsletter.



**DR. K. BOMMANNA
RAJU, PH.D.**

Agricultural Engineering is highly job oriented discipline especially in India where agriculture plays a major role in the economy of the country. I congratulate all the students and faculty members in publishing the department newsletter portraying the academic activities, student and faculty participation and achievements.



**DR. K.P. VISHALAKSHI,
M.E., PH.O.,**

The Department of Agriculture Engineering started during the Academic Year 2018-19 with an intake of 60 students. We have well established laboratories, well qualified and multi-disciplinary faculty members from various specializations such as Soil and Water Conservation Engineering, Farm Machinery and Power, Bio Energy Resources and ToT in Agriculture, Agricultural Process Engineering, Food and Dairy Engineering, Water Resources Engineering. Since agriculture started from ancient period, nowadays modern methods are being used. Also it requires much contribution from engineers to improve the economic wellbeing of the farmers through efficient mechanization. We are proud to create the entrepreneurs in agriculture field. I congratulate all the students also members of GRAES association to launch the newsletter for the Academic year 2022-2023.

DEPARTMENT EVENTS

“Millet Innovations: Entrepreneurship Opportunities in Agro Millets and Food Products “

(Global Millets year of 2023)

Department of Agriculture Engineering, Excel Engineering College (Autonomous) has organized one day National Level Workshop on “Millet innovations: Entrepreneurship Opportunities in Agro Millets and Food Products” on 22.08.2023.

Chief guest Dr.R.Ravikesavan Professor & Head Department of Millets Tamil Nadu Agricultural University (TNAU), Dr. Karthikeyan Subburamu Professor and Head cum Quality Manager Food Quality Testing Laboratory (NABL Accredited) Centre for Post Harvest Technology Tamil Nadu Agricultural University (TNAU) Coimbatore. External Faculty has delivered Workshop on “Millet Innovations: Entrepreneurship Opportunities in Agro Millets and Food Products” (Global Millets year of 2023) to our Agricultural Engineering students.

With growing recognition of millets’ nutritional benefits and gluten-free properties, entrepreneurs can capitalize on this trend by developing innovative products and marketing strategies. Processing organic millets into Ready-to-Cook (RTC) and Ready-to-Eat (RTE) products offers a profitable business opportunity for MSMEs. The “Millet Challenge” initiative by the Indian government provides grants for startups to design and develop innovative solutions for the millet value chain, encouraging entrepreneurship in this space.



DEPARTMENT EVENTS

“IoT in Agriculture”

Department of Agriculture Engineering, Excel Engineering College (Autonomous) has organized one day Seminar “IoT in Agriculture” on 23.09.2023.

Chief guest Mr.K.Dhevendiran, HR Manager Mobitech Wireless Solution Private Limited, External Faculty has delivered Seminar on “IOT in Agricultural” to our Agricultural Engineering students.

Benefitted Participants are 60 students and 7 faculty members.

IoT (Internet of Things) technology is transforming the agriculture industry by improving crop yields, reducing costs, and promoting sustainability. With the exponential growth of world population, according to the UN Food and Agriculture Organization, the world will need to produce 70% more food in 2050, shrinking agricultural lands, and depletion of finite natural resources, the need to enhance farm yield has become critical.



“Electric –Powered Vehicles on Farms”

Department of Agriculture Engineering, Excel Engineering College (Autonomous) has organized one day Seminar on “Electric –Powered Vehicles on Farms” on 23.09.2023.

Chief guest Mr.S.Ravichandran Assistant Manager (HR Training & Safety Neel Metal Private Limited (JBM Group) Harita, Hosur, External Faculty has delivered Seminar on “Electric –Powered Vehicles on Farms” to our Agricultural Engineering students.

Benefitted Participants are 60 students and 7 faculty members.

DEPARTMENT EVENTS

Electric farm vehicles are gaining popularity as a sustainable and eco- friendly alternative To traditional gasoline- powered equipment. Electric tractors, forklifts, skid- steer loaders, compact excavators, and utility vehicles are Zero emissions, reduced noise pollution, lower operating costs, and increased productivity. The agricultural industry is undergoing a significant transformation with the adoption of Electric Farm UTVs. These electric utility vehicles are revolutionizing farming practices by offering numerous benefits, including lower maintenance, minimal noise pollution and reduced carbon emissions.



“Stress Management-Benefits of Yoga”

Department of Agriculture Engineering, Excel Engineering College (Autonomous) has organized off day Literature for “Stress Management-Benefits of Yoga” on 16.03.2024.

Chief guest Dr.Monisha.S.N. BNYS, Dr Rekha. M BNYS Lecturer cum Medical Officers internal Faculty has delivered Literature on Stress Management-Benefits of Yoga to our Agricultural Engineering students.

Benefitted Participants are 60 students and 7 faculty members.

Yoga is a holistic practice that combines physical postures (asanas), breathing techniques (pranayama), and meditation to promote relaxation, reduce stress, and improve overall well-being. oga increases the production of neurotransmitters like serotonin, dopamine, and endorphins, which help regulate mood and reduce symptoms of depression and anxiety.

