

**AGRICULTURAL ENGINEERING  
NEWSLETTER 2022-2023  
VOLUME 4 (APRIL -JUNE)**

**EXCEL ENGINEERING COLLEGE  
(AUTONOMOUS)**

**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

- PSO1: 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.
- PSO2: 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.



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

### VICE CHAIRMAN'S MESSAGE

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  
RAJA, 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. G. VIJAYAKUMAR,  
M.E., PH.D.,**

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 IoT 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

### “Emerging Trends in Agricultural Engineering & Renewable Energy Resources ”

Department of Agricultural Engineering, Excel Engineering College (Autonomous) organized an guest lecture on (02.04.2023). The Chief Guest. Prof.Dr.P.Venkatachalam Ph.D., Former professor & Head (Department of Bio Energy) Tamil Nadu Agricultural University (TNAU), Delivered the Guest lecture to the students. Benefitted participants are 145 students and 6 faculty members.



The Guest Lecture was adjourned at 10.30 am with vote of thanks by Prof.Dr.P.Venkatachalam Ph.D., Former professor & Head (Department of Bio Energy) Tamil Nadu Agricultural University (TNAU) . Final year, Department of Agriculture Engineering, Excel Engineering College (Autonomous). Benefitted Participants are 145 students and 6 faculty members.

## DEPARTMENT EVENTS

### EXCEL ENGINEERING COLLEGE (Autonomous)

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 - 637303

Department of Agricultural Engineering

5.5. Research & Development

Details of Journal, conference publications




ACADEMIC YEAR 2022-23

S · N o	Name of the Faculty	Title of the Paper	Journal Name	Volume No.	Issue No.	DOIs	Citations
1	Mr.S.Rameshkumar	An Investigation on the Optimal Production of Biofuel through the Valuation of Food Waste	European Chemical Bulletin	11	2	10.53555	
3	Mrs.M.Vaijyanthi	Sand Mining of the Kaveri River, South India: Consequences for Flooding Risk and the Long-Term Viability of the Natural Fluvial System	European Chemical Bulletin	11	6	10.53555	
4	Mr.V.Bharath	Thermal, Optical and Structural Characteristics of (PEG/PAA: MnO <sub>2</sub> ) Nanocomposite Materials	Neuroquantology	20	5	10.48047	
5	Mr.C.Manoj Prabhu	Research on the Nutrient-Rich Vermicompost that Earthworms Produce Through Bioconversion of Municipal (Organic) Solid Waste	Neuroquantology	20	8	10.48047	
6	Mr.D.Logachandran	Research on the Nutrient-Rich Vermicompost that Earthworms Produce Through Bioconversion of Municipal (Organic) Solid Waste	Neuroquantology	20	8	10.48047	

## DEPARTMENT EVENTS

### “Faculty Internship”

Department of Agricultural Engineering, Excel Engineering College (Autonomous)

S. No	Name of the Faculty	Designation	Course Name	Elite or Certificate	Photo
1	Mr.D.LOGACHANDRAN	Assistant Professor	Micro Irrigation Engineering	Elite	
2	Mr.M.TAMILSELVAN	Assistant Professor	Natural Resource Management	Elite	
3	Mrs.M.VAIJAYANTHI	Assistant Professor	Wastewater Treatment and Recycling	Elite	
4	Mr.S.RAMESH KUMAR	Assistant Professor	Energy Resources, Economics and Sustainability	Certificate	
5	Mr.V.BHARATH	Assistant Professor	Thermal Engineering: Basics and Applied	Certificate	

## DEPARTMENT EVENTS

### “Alumni Testimonials”

Department of Agricultural Engineering, Excel Engineering College (Autonomous)



**V.JAGATH**

**Batch: 2019-2023**

**Mobi Tech Wireless Solution Private Limited**

**Quality Analyst**

I am V. Jagath, a proud alumnus of Excel Engineering College, where I graduated with a degree in Agriculture Engineering as part of the 2019-2023 batch. My time at Excel Engineering College was an enriching experience that laid a solid foundation for my professional journey. The education and experiences I gained in the Department of Agriculture Engineering have been pivotal in helping me secure my current role as a Quality Analyst at Mobi Tech Wireless Solution Private Limited. The knowledge, skills, and support I received from my professors and peers at Excel Engineering College have been instrumental in my success. I am deeply grateful to the faculty and my fellow students who made my time at Excel memorable and meaningful. I look forward to maintaining a strong connection with the college and contributing to its continued success.