

**AGRICULTURAL ENGINEERING
NEWSLETTER 2022-2023
VOLUME 2 (OCTOMBER-DECEMBER)**

**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.

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
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

The Program Conducted For Taking Pledge Regarding To Celebration Of “Gandhi Jayanthi Day”.

Department of Agricultural Engineering, Excel Engineering College (Autonomous) has Planned and Conducted program for students awareness and the pledge has been taken by our Agricultural students on (08.10.2022).

The main part of the pledge was to reflect Gandhi’s teachings and aim to inspire students to integrate his principles into their daily lives.

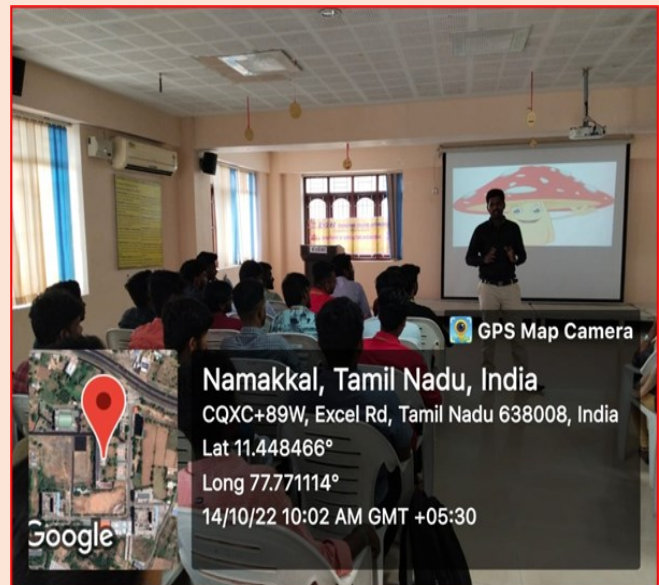


The Gandhi Jayanthi’s Day Celebration was adjourned at 10.00 am with vote of thanks by Dr.G.Vijayakumar, HoD., and faculty members of Department of Agriculture Engineering, Excel Engineering College (Autonomous).

DEPARTMENT EVENTS

Value added course on “Spawn Development and Mushroom Cultivation Techniques”

Department of Agriculture Engineering, Excel Engineering College (Autonomous) has organized Four days Value Added Course on “Spawn Development and Mushroom Cultivation Techniques ”on (14.10.2022,15.10.2022,21.10.2022,29.10.2022) Chief guest Mr.M.Tamilselvan,M.Sc., (Agri) External faculty.



DAY-1: Studying the general characters of mushrooms. Different types of mushrooms and their morphology. Equipment's required for culture media preparation, tissue culture and spawn preparation -their operation.

DAY-2: Preparation of different types of culture media-potato dextrose agar (PDA), oats meal agar (OMA), Malt extract agar medium (MEA). Sub culturing of fungal cultures and maintenance. Spawn preparation and their usage.

DAY-3: Abiotic disorders, pest and disease management in mushrooms. Short term and long term post nutritional value, recipe and value added products from mushrooms. Mushrooms production and cost estimation.

DAY-4: Visited star mushroom farm

(spawn lab and mushroom farm)

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KOMARAPALAYAM – 637303

PARTICIPATION IN INTER-INSTITUTE EVENTS BY STUDENTS

CAY (2022-23)

PARTICIPATION IN EVENTS (ORAL/POSTER/TECHNICAL EVENTS/TRAINING
(EVENTS WITHIN THE STATE)

S.No	Name of the Student	Year	Name of the College	Name of the Event	Date
1	KALAIYARASAN.T	II	Sri Shanmuga College of Engineering and Technology, Salem.	Workshop on Drone Technology in Agriculture	21.04.2023
2	DHARANI.R	II	The Institute of Engineer's (India), Trichy.	All India Workshop on “Renewable Energy Integration with Energy Storage Systems”	08.02.2023 & 09.02.2023
3	KARTHIGA DEVI.G	II	The Institute of Engineer's (India), Trichy.	All India Workshop on “Renewable Energy Integration with Energy Storage Systems”	08.02.2023 & 09.02.2023
4	NIRMALA KUMARI	II	National Institute of Technology (NIT), Trichy.	Workshop on “Current Trends in Energy Storage and Electric Vehicle Technologies”	06.02.2023 & 10.02.2023
5	RUPESH KUMAR GUPTA	II	National Institute of Technology (NIT), Trichy.	Workshop on “Current Trends in Energy Storage and Electric Vehicle Technologies”	06.02.2023 & 10.02.2023
6	RAMYA.K	II	Karpagam College of Engineering, Coimbatore.	One Day National Level Workshop on “Robotic Process Automation – Data Science Technologies in Block Chain”	03.02.2023
7	SWEATHA.R	II	Kongu Engineering College, Perundurai, Erode (Dt).	One Day Basic Training Programme on Human Rights	20.10.2022