

ABOUT THE COLLEGE

The College of Food and Dairy Technology (CFDT) a constituent unit of Tamilnadu Veterinary and Animal Sciences University was initially established as Institute of Dairying in 19.11.1991. This institute is situated in Tiruvallur District at Koduvveli spanning an area of 82.12 acres in the outskirts of Chennai on Redhills to Tiruvallur highway. To cater to the rising demand in professional manpower requirement in Food Processing sector, a degree programme in B.Tech (Food Technology) was started in the year 2006 at this Institute. In the year 2012 this Institute was renamed as the College of Food and Dairy Technology (CFDT). The college is recognized by All India Council for Technical Education (AICTE), New Delhi for the degree programmes in B.Tech (Food Technology), B.Tech (Dairy Technology) and accredited to Indian Council of Agricultural Research (ICAR), New Delhi with the adoption of National syllabus framed by Department of Agricultural Research and Education (DARE), Government of India. Subsequently over the years, Post Graduation programmes viz, M.Tech- Food Technology, Dairy Technology, Dairy Chemistry and Ph.D in Food Technology were initiated. The mandate of the college is to offer academic programmes in Food Technology/Dairy Technology, to take up the need based research programmes in Food Technology / Dairy Technology and to create strong linkage with food industries and in extension education programmes. The College encompasses Technology business incubation scheme with well equipped food processing plants for pilot and commercial scale production of Pasteurized milk, Ice cream, Fruit & Vegetable products, Shelf stable food products, Meat and Egg products. This college has implemented 14 numbers of Research and Extension Development projects funded by the various Ministries under Government of India and State Government, which has carved a niche in the area of its expertise developed through schemes with the involvement of Teaching faculties and Research Scientists. CFDT is identified as one of the premier organizations in translating novel food ideas and novel technology through R&D projects and post graduate research.

OBJECTIVES OF THE PROGRAMME

- To impart training to faculties, research scholars and PG students in digital transformation in food process engineering, including Industry 4.0 concepts such as IoT, AI, automation and smart manufacturing.
- To acquaint the participants with the concepts of digital revolution and its impact on food Industry auditing
- To familiarize participants with smart, sustainable and advance techniques in food processing with emphasis on energy efficiency, waste minimization and resource optimization.
- To bridge the gap between academia and industry by exposing participants to real-time applications of digital and sustainable practices in food industries.
- To promote interdisciplinary research and innovation in digital food processing and sustainable engineering solutions.

CORE TOPICS OF THE PROGRAMME

- ❖ Industry 4.0 concepts in Food Processing
- ❖ Digital transformation in food industry using Machine Learning
- ❖ Smart manufacturing and automation
- ❖ Digital integration in unit operations
- ❖ Spray drying, evaporation and sustainability aspects of emerging technologies
- ❖ Digital auditing systems and e – documentation
- ❖ Artificial Intelligence and Machine learning in Food processing
- ❖ Next – Gen active and Intelligent food Packaging
- ❖ Research Methodology/ Stress management tools

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Chennai – 600 051

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Koduvveli, Chennai – 600 052

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Professor and Head, Dept. of Food Process Engineering
College of Food and Dairy Technology
Koduvveli, Chennai – 600 052

Coordinator

Dr. G. SUJATHA, M. E., Ph. D.,
Professor, Dept. of Food Process Engineering
College of Food and Dairy Technology
Koduvveli, Chennai – 600 052

Co – Coordinator

Dr. V. NITHYALAKSHMI, M. E., Ph. D.,
Assistant Professor, Dept. of Food Process Engineering
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Organising Committee

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Dr. A. Karthiayani
Professor

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Dr. R. Marx Nirmal
Assistant Professor

Dr. M. Alagappan
Assistant Professor

Department of Food Process Engineering
College of Food and Dairy Technology, Koduvveli, Chennai – 600 052

No Registration fees

For more details and any queries, please contact

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Programme Coordinator & Professor, DFPE
COLLEGE OF FOOD AND DAIRY TECHNOLOGY
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DIGITALISATION AND SUSTAINABLE INNOVATIONS IN
FOOD PROCESS ENGINEERING: EMERGING TECHNOLOGIES
AND RESEARCH ADVANCEMENTS

Six days Offline Faculty Development Programme (8 hours/Day)

17. 08. 2026 to 22. 08. 2026

Funded by
All India Council for Technical Education (AICTE) Training and
Learning (ATAL) Academy
Govt. of India, New Delhi.



Organised by

Department of Food Process Engineering
COLLEGE OF FOOD AND DAIRY TECHNOLOGY
Koduvveli, Chennai – 600 052

Tamil Nadu Veterinary and Animal Sciences University

OUTCOME OF THE PROGRAMME

The Participants attending this Faculty Development Programme will be able to understand and apply digital tools and technologies in food processing systems. Participants will gain in – depth knowledge of the digital revolution and its impact on Food Industry Auditing. Participants will develop skills to integrate smart technologies including Artificial intelligence and IoT – based sensors, into food processing operations. This programme would identify the research gaps and propose innovative solutions in digitalization and sustainable food processing. It would pave a way to enhance their ability to collaborate with industry and adopt modern practices in teaching, research, and consultancy.

TARGET PARTICIPANTS

ATAL FDP has been specially designed for Associate Professors/Assistant Professors/Ph. D. Scholars/PG Students from the Higher Education/ AICTE approved Institutions in the field of Food Science/ Food Technology/Dairy Technology/Bio Technology/Food Process Engineering/ Dairy Engineering/ Chemical Engineering/ Fisheries Engineering/Packaging Technology/ Food Business Management/Food Nutrition/Poultry Technology/ Agricultural Sciences and Engineering. Only 30 -50 candidates (Max) will be selected for this programme and the selection will be based on **FIRST COME FIRST SERVE** basis. **Participants should be nominated by the respective Heads of Institutions**

FOOD AND ACCOMODATION

Free shared accommodation will be provided in CFDT/ Trainees or Teachers Hostel at Madras veterinary College campus. Free boarding will be provided during the training programme to the selected candidates. The participants are requested not to bring their family members during the training period. Only outstation participants will be provided to and fro fare by rail (restricted to AC - II tier) or by bus as per their entitlement. Actual TA for the shortest route will be paid on submission of the original tickets. The local candidates are not eligible for lodging but they will be provided with local hospitality (lunch, tea and snacks etc.)

PEDAGOGY

The Programme content has been designed to have a collaborative, experiential and outcome based teaching and learning by conducting both theory and practical sessions by subject matter specialists and experts from relevant industries. The sessions are planned to have 25 hours of teaching in ten equal sessions, 05 hours of practical/labs/experiential learning sessions of one hour each. 04 hours of article discussion on one hour each, 04 hours for industrial visit and 03 hours for MCQ's. article, summary and feedback.

HOW TO APPLY

Click <https://atalacademy.aicte-india.org/login>

- ✓ Participants need to register with basic details and choose Role as Participant.
- ✓ Participants are requested to go through the portal guide before logging in for Registration

[Click here to download NOC](#)

LEAD SPEAKERS

Digital transformation in Food industry using Machine learning

Dr. S. Neelavathy Pari, Ph. D.,
Assistant Professor (Sr. Grade)

Department of Computer Technology, Anna University,
MIT Campus, Chennai

Date:17.08.2026

Time: 9.30 to 12.00 noon



Future trends and Scope of Process Automation in Food Processing Industry

Er. D. A. Anand, B. E.,
Regional Technical Head

IPCS Global, Chennai

Date:17.08.2026

Time: 2.00 to 4.30 pm



Role of AI in sustainable Fish Processing

Dr. N. Manimehalai, Ph. D.,
Dean i/c.,

College of Fisheries Engineering
TNJFU, Nagapattinam

Date:18.08.2026

Time: 9.30 to 12.00 noon



Digital revolution and its impact on Food Industry Auditing

Er.J.Jakir Hussain,B. Tech, PGD.FSQMS
Operation Head

Gulftic Certification (South India Branch)
Gulftic Certification LLC, Chennai

Date:18.08.2026

Time:2.00 to 4.30 pm



Sustainable Extraction and Circular Valorisation of Bioactive Compounds for Next – Generation Active and Intelligent Food Packaging

Dr. V. Sivakumar, Ph. D.,
Professor

Dept of Chemical Engineering, A.C. Tech Campus,
Anna University, Chennai

Date:19.08. 2026

Time:9.30 to 12.00 noon



Automation in document control and audit readiness

Ms. R. Mehveen Naaz
Supervisor 1, Global religious Lead

IFF - SKCL triton square 2
Guindy Industrial Estate, Chennai

Date: 19. 08. 2026

Time:2.00 to 4.30 pm



Industry 4. 0 – Enabled Spray Drying and Evaporation Technologies for Dairy and Food Process Engineering

Dr. G. Mahesh Kumar, Ph. D.,
Professor and Head

Dept of Dairy Engineering, Dairy Science College
KVASU, Hebbal, Bengaluru

Date:20.08.2026

Time:9.30 to 12.00 noon



Smart and Sustainable Innovations in Poultry Processing: Emerging Digital Technologies

Dr. P. Shamsudeen, Ph. D.,
Dean

College of Food and Dairy Technology, Chennai

Date:20.08.2026

Time: 2.00 to 3.00 pm



Energy Auditing in Food & Dairy Industry

Er. P. Chitra, M.E.,
Director – II & BEE Certified Accredited Energy Auditor

National Productivity Council, Dr. Ambedkar Institute
of Productivity, Chennai

Date:20.08.2026

Time:3. 00 to 4. 30 pm



Advance Techniques in Food Process Engineering for Novel product development

Dr. P. Azhagu Saravana Babu, Ph. D.,
Professor and Head

Dept of Bio Technology
Vel Tech Rangarajan Dr. Sagunthala R & D
Institute of Science and technology, Chennai

Date: 21.08.2026

Time: 2.00 to 3.00 pm



Engineering Microbial Platforms for Functional Ingredients: Role of Precision Fermentation in Sustainable Food Processing

Dr. Tarjan. K
Senior Scientist

Kemin Industries, Chennai

Date:21.08.2026

Time:3.00 to 4.30 pm



Mindfulness and Mental Health in Academia: Tools for effective Stress Management

Dr. R. Kavitha Ph. D.,
Assistant Professor

Department of Social Work
PSG College of Arts & Science, Coimbatore

Date:22.08.2026

Time:9.30 to 12.00 noon

Schedule of BASIC FDP

FDP Application Number : 1775472574

Title of the FDP: Digitalisation and Sustainable Innovations in Food Process Engineering: Emerging Technologies and Research advancements

FDP Start Date : 17. 08. 2026

FDP End Date: 22. 08. 2026

17. 08. 2026	18. 08. 2026	19. 08. 2026	20. 08. 2026	21. 08. 2026	22. 08. 2026
9:00 – 9:30 Inauguration					
9:30 – 12:00 Session 1 Dr. S. Neelavathy Pari, Ph. D., Assistant Professor (Sr. Grade) Department of Computer Technology, Anna University, MIT Campus, Chennai Experience in Years: 18 years Topic to be taught: Digital transformation in Food industry using Machine learning	9:30 – 12:00 Session 3 Dr. N. Manimehalai, Ph. D., Dean i/c., College of Fisheries Engineering, Tamil Nadu Dr. J. Jayalalitha Fisheries University, Nagapattinam Experience in Years: 25 years Topic to be taught: Role of AI in sustainable Fish Processing	9:30 – 12:00 Session 5 Dr. V. Sivakumar, Ph. D., Professor, Dept of Chemical Engineering, A.C. Tech Campus, Anna University, Chennai Experience in Years: 25 years Topic to be taught: Sustainable Extraction and Circular Valorisation of Bioactive Compounds for Next – Generation Active and Intelligent Food Packaging	9:30 – 12:00 Session 7 Dr. G. Mahesh Kumar, Ph. D., Professor and Head, Dept of Dairy Engineering, Dairy Science College Karnataka Veterinary, Animal and fisheries Sciences University, Hebbal, Bengaluru Experience in Years: 36 years Topic to be taught: Industry 4. 0 – Enabled Spray Drying and Evaporation Technologies for Dairy and Food Process Engineering	9:00 – 1:00 Industrial visit Food Corporation of India Food Storage Depot, Avadi, IAF Road, Thandurai Village, Pattabiram, Chennai 600 054 OR M/s. The Creamline Dairy Products Limited (Jersey) Factory/ Depot in Sholavaram No. 9/1, Orakkadu Village, Sholavaram Post, Ponneri Taluk, Chennai, Thiruvallur District, Tamil Nadu – Chennai 600 067	9:30 – 12:00 Session 10 Dr. R. Kavitha Ph. D., Assistant Professor Department of Social Work PSG College of Arts & Science Avinashi Road, Coimbatore Experience in Years: 20 Topic to be taught: Mindfulness and Mental Health in Academia: Tools for effective Stress Management
12:00 – 1:00 pm Article Discussion Title of the Research Paper: Machine Learning in Transforming the Food Industry Name of the Journal: Foods Year of Publication: 2025	12:00 – 1:00 pm Article Discussion Title of the Research Paper: Detection of fish freshness using artificial intelligence methods Name of the Journal: European Food Research and Technology Year of Publication: 2023	12:00 – 1:00 pm Article Discussion Title of the Research Paper: Smart and sustainable food packaging: recent advances in active/intelligent technologies and future directions Name of the Journal: Scifood Year of Publication: 2026	12:00 – 1:00 pm Article Discussion Title of the Research Paper: Design and development of sub-baric thermal processer for frying of Gulab jamun: A deep-fat fried dairy product Name of the Journal: Journal of Food Process Engineering Year of Publication: 2021		12:00 – 1:00 Article Summary
1:00 – 2:00 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch
2:00 – 4:30 Session 2 Er. D. A. Anand, B. E., Regional Technical Head IPCS Global, Raahat Plaza, Kannikapuram, Vadapalani, Chennai – 600 026 Experience in Years: 15 years Topic to be taught: Future trends and Scope of Process Automation in Food Processing Industry	2:00 – 4:30 Session 4 Er.J.Jakir Hussain,B. Tech, PGD.FSQMS Operation Head, Gulfitic Certification (South India Branch), Gulfitic Certification LLC, Kilpauk, Chennai – 600 010 Experience: 13 years Topic to be taught: Digital revolution and its impact on Food Industry Auditing	2:00 – 4:30 Session 6 Ms. R. Mehveen Naaz Supervisor 1, Global religious Lead IFF - SKCL triton square 2 Guindy Industrial Estate, Chennai Experience in Years: 11 years Topic to be taught: Automation in document control and audit readiness	2:00 – 4:30 Session 8 Dr. P. Shamsudeen, Ph. D., Dean, College of Food and Dairy Technology, Koduveli, Chennai Experience in Years: 30 years Topic to be taught: Smart and Sustainable Innovations in Poultry Processing: Emerging Digital Technologies	2:00 – 4:30 Session 9 Dr.P. Azhagu Saravana Babu, Ph. D., Professor and Head, Dept of Bio Technology, Vel Tech Rangarajan Dr. Sagunthala, R & D, Institute of Science and technology, Chennai Experience in Years: 15 years Topic to be taught: Advance Techniques in Food Process Engineering for Novel product development	2:00 – 4:00 MCQ & Reflection Journal
			Er. P. Chitra, M.E., Director – II National Productivity Council, (Under DPIIT, Ministry of Commerce & Industry, GoI), Dr. Ambedkar Institute of Productivity, Ambattur, Chennai Experience in Years: 18 years Topic to be taught: Energy Auditing in Food & Dairy Industry	Dr. Tarjan. K Senior Scientist Kemin Industries, Chennai Experience in Years: 12 years Topic to be taught: Engineering Microbial Platforms for Functional Ingredients: Role of Precision Fermentation in Sustainable Food Processing	
4:30 – 5:30 pm Hands on training /Labs (Food Engineering/Automation)	4:30 – 5:30 pm Hands on training /Labs (Food Technology Lab)	4:30 – 5:30 pm Hands on training /Labs (Food Plant Operations Lab)	4:30 – 5:30 pm Hands on training /Labs (Energy auditing of Dairy Plant)	4:30 – 5:30 pm Hands on training /Labs (Novel Food Processing Technology Lab)	4:00 – 5:00 pm Valedictory Session
Hands on training by CFDT Faculty					