सत्यमेव जयते

MOFPI

IIFPT

ACADEMIC PROSPECTUS

2021-2022

Moving Towards

Institute of National Importance

Status through Act of Parliament

B.Tech. Food Technology

Accredited by AICTE and affiliated with Tamil Nadu Agricultural University

Indian Institute of Food Processing Technology

FSSAI Referral & NABL Accredited Laboratory
(Ministry of Food Processing Industries,
Government of India)
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Preamble

Dr. C. Anandharamakrishnan
Director

Indian Institute of Food Processing Technology (IIFPT) is a renowned premier Institution in education and research in the field of food processing, functioning under the Ministry of Food Processing Industries (MoFPI), Government of India. The institute has its origin way back in 1967, as an R&D laboratory in the Modern Rice Mill complex of Thanjavur Co-operative Marketing Federation (TCMF) at Tiruvarur. During 2017, the institute rechristened as Indian Institute of Food Processing Technology (IIFPT). Over a period of 50 years, the institute has evolved in different dimensions like education, research, consultation, skill development, capacity building, business incubation, *etc*.

IIFPT mainly focus on inclusive and sustainable growth of post-harvest processing and value addition towards accomplishing economic thriving and prosperous food processing sector of the nation. The institute caters the needs of the country by developing skilled/technical manpower for achieving the targets like sustained food security for all, safe food supply at grass root levels, reduced food losses and economic prosperity of country.

Today, the institute is internationally well knowing among the academicians for its high-class education and superior research achievements. IIFPT offers one Under Graduate program, three super specialized post graduate program and two doctoral programs. Having more than 5 decades of experience in the field of food processing, the institute delivered more than 600 young professional to the core field and they are proving their phenomenal prudence in food processing domain both in India and aboard.

IIFPT is not mere graduating the students, it creates doyens in food processing.

IIFPT is a road to excellence; board into that for prosperous, promising and peaceful future

Vision

Focus on inclusive growth by accomplishing overall sustainability, safety and economic prosperity in the food sector

Mission

- Undertaking demand driven research; cater to the needs of the stakeholders in food sector
- Creating industry-academic interface for problem solving and ad-hoc researches
- Creating strong skilled human resource through value based education and training
- Enabling institutional collaborations for exchange of knowledge and human resources
- Serving the food sector stakeholders by providing analytical and consultancy services

Significance of Human Resource Management in Food Processing Sector

India is the third largest producer of all foods in the world and is behind only to China and USA. We produce more than 600 million tons of foods annually. We are the largest producers of pulses, milk, tea, all spices, first or second largest producer of fruits and vegetables, largest in live stock population, third largest in grains and oilseeds, fifth largest in poultry and seventh largest in fish productions. We have greater than 7000 km of marine landing where we can fish all around the year.

In spite of these superlative facts, the domestic food supply is inadequate at the receiving end and our export share in international markets is much less than 2%. The main reasons are due to lack of technical work force in food processing sector, fewer ventures in food processing businesses, huge losses, lack of technical knowhow and so on.

The food processing sector has greater scope globally. Skilled professionals are in great need, starting from food collection, transit, supply chain management, processing, value addition, cold chain management and up to consumer end.

The total value of food trade in the country is Rs.9,00,000 crores. Government of India has a target of achieving 3% of international food trade from current levels of 1.5% in the coming years. A meagre 1% growth rate in food processing industries will lead to 5 lakhs direct and 15 lakhs indirect employments.

Considering the importance of this vital sector, IIFPT offers the following academic programs which are affiliated to Tamil Nadu Agricultural University (TNAU), Coimbatore.

Academic Programmes

Undergraduate Programme

B.Tech. (Food Technology) – 4 years (8 semesters)

Postgraduate Programmes

M.Tech. (Food Technology) in Food Process Engineering – 2 years (4 semesters)
M.Tech. (Food Technology) in Food Process Technology – 2 years (4 semesters)
M.Tech. (Food Technology) in Food Safety & Quality Assurance – 2 years (4 semesters)

Doctoral Programmes

Ph.D. (Food Technology) in Food Process Engineering – 3 years (6 semesters)
Ph.D. (Food Technology) in Food Process Technology – 3 years (6 semesters)

Departments @ IIFPT

- Food Engineering
- Food Packaging & System Development
- Food Product Development
- Food Safety & Quality Testing
- Food Biotechnology
- Primary Processing, Storage & Handling
- Computational Modeling & Nanoscale Processing Unit
- Technology Dissemination
- Incubation Centre
- Workshop & Fabrication Unit
- Academics & Human Resource Development
- Centre for Excellence in Grain Science
- Industry Academia Cell
- Centre of Excellence in Non-Thermal Processing
- Computer Centre
- Planning & Monitoring Cell
- Administrative Office
- Supporting Unit

Laboratories & Facilities

The IIFPT is located at a distance of 2 km from the new Thanjavur bus terminus, 8 km from Thanjavur Railway Station and 50 km from Trichirappalli Airport and 300 km from Chennai. IIFPT has created world class research laboratories in its main campus at Thanjavur for conducting research in different areas of food processing technologies. IIFPT and its scientists are experts in different field of food processing. The institute has world class teaching and research facilities. The current facilities in the institute include the following:

World Class Teaching Laboratories

- Food Packaging Lab
- Food Chemistry and Safety Lab
- Food Engineering Lab
- Manufacturing Practices Lab
- Computation Modeling & Nanoscale Processing Lab
- Non Destructive Quality Measurement Lab
- 3D Food Printing Lab
- Crop Process Engineering Lab
- Spices Process Engineering Lab
- Dairy and Meat Sciences Lab
- Unit Operations Lab
- Engineering Properties Lab
- Heat Transfer Lab
- Refrigeration and Air-conditioning Lab
- Fluid Mechanics and Hydraulics Lab
- Strength of Materials Lab
- Theory of Machines and Engineering Mechanics Lab
- Electrical Engineering Lab
- Electronics and Instrumentation Lab
- Basic Sciences Lab
- Computer Lab
- Communications Lab
- Heat Power Engineering
- Electronics and Instrumentation Lab

Ice cream processing pilot plant


Bakery unit

State of the Art R&D Laboratories

- Food Science and Product Development Lab
- Food Microbiology Lab
- NABL Food Analysis Lab
- Food Packaging and Storage Lab
- ISO certified Food Processing Business cum Training Incubation Centre
- Soft X-ray Lab
- Acoustics Resonance Lab
- Modern Bakery Unit
- Food Engineering Workshop
- Computational Flow Modeling
- Bulk Storage Facilities
- Engineered Human Digestive System
- Centre for Glycemic Index Studies
- Nanoscale Processing
- Common instrumentation facility


Food microbiology lab


Fruit beverage pilot processing plant

Computational Modeling and Nanoscale Processing Unit

This recently launched unit focuses on the application of computational fluid dynamics in various agri-food processing applications. Modeling is a powerful tool for optimizing and improving process control over various unit operations by acquiring an in-depth understanding of the intricate transport phenomena in food systems. The unit uses advanced computing methods and undertakes industry and other external funded research projects in this field. Further, considering the potential of nanotechnology, the unit also conducts studies on nano-level food processing. This includes strategies for nanoencapulation, nanoemulsions, nano delivery systems, nanopackaging and other advanced applications. Research and development on various aspects of nanostructured foods, nanocarrier systems, nano food additives, nanocoatings, and development of nanosensors are under progress.

Food Product Development Laboratory

This laboratory focuses on the development of novel and functional foods from specific food grains, pulses, oilseeds, and fruits and vegetables. The food crop quality and its ingredient suitability for designing new food products suitable for target population of children, young adults, adults with lifestyle disorders and aged and ailing people are being studied by our scientists. Modern equipments including different types of extruders, texture analyzers, phase transition analyzer, rapid visco analyzer, milling machines and all accessories necessary for food product development are parts of this facility. Sensory lab is a unique lab to test the sensory characteristics of food and authenticate origin of food and chemical characters available in food.

Food Quality Testing Laboratory

Our FSSAI Referral & NABL accredited ISO/IEC 17025 Food Analysis Laboratory is equipped with modern equipments to carryout physico-chemical analysis of food, water and any organic samples. This laboratory has hi-tech analytical instruments like GCMS, ICPMS, LCMS, NMR, HPLC, HPTLC Amino acid analyzer, Iron chromatography for analyzing biochemical parameters, pesticides residual and nutrition *etc*. in samples related to food products. Ready reference books such as BIS, CODEX, PFA, AOAC and AACC for food analysis are available. The laboratory is constantly upgraded to meet international standards.

Food Microbiology Laboratory

Microbes play major roles in our foods, some plays a good role and some a bad role. Bad microbes must be controlled to save the food from spoilage and good microbes must be provided with conducing growing conditions.

Current Research Focuses include production of pigments from microbial origin, preparation and preservation of millet based Porridges for longer shelf life, beverage preservation, utilization of tapioca effluent for spirulina production, standardization of ethnic fermented food and beverages by rationalization of indigenous knowledge, probiotic food formulation using non dairy substrates and tannase enzyme production from agro wastes.

Food Engineering Laboratory

The ideas generated by other departments are given a shape in the food engineering laboratory. This laboratory consists of modern fabrication facilities with all manufacturing machines and tools. The food engineering division work, either independently or jointly with other divisions, help in creating new machines and processes for food processing industries. This laboratory provides direct linkage with the farm produce and the postharvest activities.

Some of the gadgets, technologies or accessories developed includes Fruit and Vegetable Washer, Grader, Destoner, Mobile Processing Unit, Multi Purpose Yard Drying Equipment, continuous rice puffing unit, thermal dis-infestation of paddy, low friction huller, improved parboiling unit, rice degermer, husk fired stove, small scale pulse de-husker, improved parboiling unit and pedal operated winnower. These technologies are popular among the farmers and entrepreneurs.

Food Processing Business Incubation Centre

The hi-tech and cottage level food processing incubation cum training centre at IIFPT has the following product lines:

- Canning fruits and vegetables or meat and meat products
- Ready to serve (RTS) or Ready to drink (RTD) fruit based beverages and jams and jelly manufacturing with bottling facility
- Ready to Cook (RTC) foods and Ready to eat (RTE) extruded food products making
- Instant mixes, masala and chutney powders production and sachet packaging
- Specialized packaging section with facilities for ordinary packaging and modified atmosphere packaging (MAP)
- Hands-on-training on different food processing technologies, renting facilities and other supports are offered all through the year to help the entrepreneurs to put in their innovative ideas for the development of new products
- Pilot scale fruit beverage processing plant
- Pilot scale ice cream processing plant
- Pilot scale virgin coconut oil processing plant
- Pilot scale spray dryer
- Pilot scale fluidized bed dryer
- Pilot scale freeze dryer

Knowledge Centre and Computing Facilities

The knowledge centre has exclusive collection of books and journals on food processing related areas. The knowledge centre having more than 45,000 books and regularly subscribe for more than 50 Indian and 15 International journals in food processing. We keep adding to our wealth of books and journals resources every year and soon expect the library to become reference point of national importance for food processing, preservation and value addition related subjects.

Industrial collaboration for R&D

Exposure to Industry

IIFPT students are send to related industries for taking up practical hands-on experience on the functions of an industry. This prepares them to be industry ready upon their graduation. In the past more than 80 industries have taken up students or short- to long-term in-house technology and hands-on training. Following are some industries in which our current graduating students have taken up such industrial internship trainings.

- Cadbury India Pvt. Ltd., Baddi
- Nestle, Chennai & Mysore
- ITC Foods, Bangalore
- Aachi, Chennai
- Eastern Pvt. Ltd., Kerala
- Hatsun Agro Product Ltd., Kanchipuram
- Hindustan Unilever Limited, Chennai
- Nilgiris Pvt Ltd., Bangalore
- Savorit Limited, Dindigul
- Moksha Foods Condiments & Beverages, Coimbatore
- Mother Dairy, Fruit & Vegetables Pvt Ltd, Bangalore & New Delhi
- MTR Foods Pvt. Ltd., Bangalore
- Paramount Nutrition India, Karnataka
- Rohini Foods, Chennai
- Ruchi Soya, Chennai
- Safal, Bangalore
- Britannia Industries Ltd., Rudrapur, Chennai & Bangalore
- Oceanic Tropical Fruits Pvt.Ltd., Villupuram
- Sri Anna Poorna Foods, Coimbatore
- Ninja Cart, Bangalore
- Perfetti Van Melle India Pvt Ltd., Chennai
- Parle Ltd., Nasik
- Vista Tools Pvt.Ltd.,Mumbai.
- Tata Smart Foods Pvt. Ltd., Sricity, Andhra Pradesh
- Aavin, Madurai
- Yellows and Greens, Hydrebad.
- India Food Park, Tumkur
- Pepsico, Bangalore

Common instrumentation facility

- Engineered model of gastro intestinal tract for glycemic index studies
- Powder X-ray diffraction
- Scanning electron microscope
- 3D Food Printer
- Differential scanning calorimeter
- High performance liquid chromatography
- Particle size analyzer
- Freeze dryer unit
- Electrospinning unit with dual pump
- Spray dryer

Food Safety and Quality Testing Facility

- Inductively coupled plasma-optical emission spectrophotometer (ICP-OES)
- Gas chromatography-mass spectrometer (GC-MS/MS)
- Texture Analyzer
- High performance thin layer chromatography (HPTLC)
- Rapid visco analyser
- Fermentor/Bioreactor
- Inductively coupled plasma-mass spectrometry (ICP-MS)
- Liquid chromatography mass spectrometry (LC-MS/MS)
- Nuclear magnetic resonance (NMR)
- Microbial Identification System
- Reverse transcription polymerase chain reaction
- DNA sequencer
- Fourier transform infrared (FTIR)

International collaborations

In the changing socio-economic and academic and research scenario, no institution can stand alone and deliver effectively the services to stake holders. IIFPT clearly understands this and knows of the beneficial effects of collaborations with international and national institutes.

IIFPT has international memorandum of understanding with the following reputed institutions

- University of Manitoba
- University of Nebraska-Lincoln
- University of Saskatchewan
- McGill University
- Colorado State University
- Illinois Institute of Technology
- Saskatoon Pulse Growers
- Kuraray-EVAL - Japan
- Oklahoma State University
- Kansas State University
- Auburn University
- Wageningen University
- Asian Institute of Technology
- Ambo University
- ONIRIS
- NRI, Greenwich

Hostels

IIFPT has separate hostels for boys and girls with well furnished rooms and equipped with state-of-the-art facilities, reading rooms, television, gym and music rooms. The hostel messes provide nutritionally balanced, wholesome and tasty food and the dining charges are based on a dividing system. The hostel is run by the students under the supervision of Wardens and Deputy Wardens for both boys and girls hostels. Hostel life at IIFPT is a mixture of fun and learning with Indoor and outdoor games facilities. New hostel facilities are being built-up to accommodate more students.

Placement process

Every year, IIFPT conduct On-campus interviews for the placements of final year students. Food processing firms/industries come to recruit the young professionals for their needs. Apart from the regular placements, the institute assists the students to get higher education opportunities in premier institutes of India and across the world. Periodically, institute organize special guest lectures of various experts from industries, academics and personality management to build up the students' ability and self-confidence to face their future confidently.

Major Recruiters

PEPSICO
Nestlé Good Food, Good Life
Reliance Industries Limited
Aachi The Mother of Good Taste
adani wilmar For a healthy growing India
ITC Enduring Value
naga
bigbasket
SYMEGA
HATSUN
BRITANNIA Eat Healthy, Think Better
CavinKare Making Lives Happier
MTR
ENERLIFE
APFPS
Printpack Converting Vision into Value
UniBourne Bringing the world to your doorstep
CONTINENTAL COFFEE
Capricorn
HungerBox
TATA Q Quick Cuisine
Jayanti
NUTRI PLANET HEALTH FOR LIFE
NECTAR FRESH
Genius
penver PRODUCTS LIMITED
MOTHER DAIRY
future group
Adyar Ananda Bhavan SWEETS & SNACKS
AVIOM FOODS SINCE 1995
Parisons
Parle Agro
Millet India Real Gift of Nature
South Indian Grains Corporation
paper boat drinks and memories
Spices N Chefs
food buddies your food technology partner

Scholarships and research assistantships

Merit scholarships are offered for the students to

- Attract meritorious students to IIFPT
- Encourage top ranking students for pursuing excel
- Boost the talents and knowledge of the students

Scholarships Offered

Scholarships	Details
B.Tech	
Institute Merit-cum-Means Scholarship	Available for 5 students from each batch @ Rs.1,000/- p.m. subject to a minimum GPA of 7.5 in the previous semester.
Institute Free Studentship	Available for 1 student per batch @ Rs.5000/- per semester subject to a minimum GPA of 7.5 in the previous semester.
Institute Notional Prize	A notional prize of Rs.5000/- (One time award) and a certificate of merit for each batch from 2nd to 4th year based on ranking in the previous year
Anil Adlakha Award Scholarship	Award to a IInd B.Tech. (FT) student for his/her outstanding performance in his/her first year @ Rs.10,000/-

B.Tech. (Food Technology) — Full Time

Duration:

Four years (8 semester) programme

Eligibility:

- **Only those candidates who have appeared in JEE (Main)-2021 (Paper-1) will be eligible for getting admission at IIFPT.**

Admission

- The admission is carryout in the Joint Seat Allocation Authority 2021 (JoSAA2021) through on line portal based on the JEE(Mains).
- The reservation policy is as per the government of India norms as below.
- Total No. of Seats: 90

Open	= 35;	Open-EWS	= 09;	Open-PwD	= 02
OBC (Non creamy layer)	= 24;	OBC-PwD	= 01;		
SC	= 12;	SC-PwD	= 01;	ST	= 06

*PwD = Persons with disabilities

Fees structure – B.Tech. (Food Technology)

2021–22 – ACADEMIC FEES

S. No.	Details	Fees (Rs.)
A.	**One Time Fees**	
1	Admission Fee	12600
2	ID Card Fee	400
3	Seminar/Thesis Fee	1350
4	Caution Deposit (Refundable)	4350
5	Library Deposit Fee (Refundable)	650
	Total (A)	**19350**
B.	**Semester Fees**	**Semester**
1	Tuition Fee*	38000
2	Lab Support Fee	6000
3	Library Fee	1900
4	Examination Fee	5500
5	Student Activities	5200
6	IT Support	4700
7	Medical and Insurance Fee$	400
	Total (B)	**61700**
	Total (A+B)	**81050**

Note: *SC/ST students will get full waiveoff for tuition fee; other category students will get tuition fee waiver based on their annual family income (Limited to 5% of the total intake strength).
$Subject to revision as per the actual premium cost.

HOSTEL FEES & MESS CHARGES

S. No.	Details	Fees
C.	**One Time Fees**	
1	Hostel Admission Fee	1100
2	Hostel Deposit (Refundable)	3500
	Total (C)	**4600**
D.	**Semester Fees**	**Semester**
1	Establishment charges, (Hostel room rent, Electricity & Water charges)	10050
2	Mess advance (dining charges on sharing basis)	15000
	Total (D)	**25050**
	Total (C+D)	**29650**

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For further information, contact:

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