Ph.D. Food technology

Program outcomes	PO 1: Substantive knowledge in an area of concentration that allows for application to a relevant area of food science. PO 2: Application of critical thinking to food components and complex food systems including experimental design and completion of experiments. PO 3: Produce and defend an original significant contribution to knowledge. PO 4: Demonstrate mastery of subject material through a thesis defense and preparation of one or more manuscripts for peer review in a scientific journal (s). PO 5: Conduct scholarly or professional activities in an ethical manner. PO 6: Develop teaching skill as a Teaching Assistant.
Program specific outcomes	PSO 1: To get research opportunities in multiple fields including Nutrition, Dietetics, Food Chemistry, Toxicology, etc. PSO 2: The research related to Food Science and Technology has a very high demand. With the growing health awareness, the demand for this research is expected to grow more in the future. PSO 3: The students get ample job opportunities in government research centers, food quality testing centers, etc. PSO 4: The candidates get opportunities to work as faculty members (professors and lecturers) in both government and private colleges and universities. PSO 5: The candidates with Ph.D. Food Technology gets opportunities to start their start-ups in the form of laboratories, Research Centres, Nutrition clinics, etc.

Course outcomes

Courses	Outcomes
Research Methodology (FT-609)	CO 1: Learning of different methodologies and techniques used in research work. CO 2: To know the basic computer skills necessary for the conduct of research. CO 3: To understand the basic function and working of analytical instruments used in research CO 4: Understanding of required numerical skills necessary to carry out research.
Advances in Food Analysis and Quality Control (FT-611)	CO 1: To develop an understanding of the advanced analytical and instrumental techniques. CO 2: To illustrate the principle and mechanism of analytical instruments.

	CO 3: To describe the bio-chemical analysis of food components.
Recent Advances in Cereals, Pulses & Oilseeds Processing (FT-612)	CO 1: To understand the storage and handling of food grains. CO 2: To illustrate quality testing of wheat grain and the milled product (flour, dough, etc.). CO 3: To acquaint with the milling techniques of cereals such as wheat, rice, maize, pseudocereals, and pulses and extraction of oil from oilseeds. CO 4: To identify the problems associated with the milling of grains and their solution. CO 5: To know the techniques for processing food grains into value-added products.
Recent Advances in Fruits & Vegetables Processing (FT-613)	CO 1: To illustrate the relationship of the Indian economy concerning the fresh and processed fruits and vegetables and their spoilages. CO 2: To acquaint with the post-harvest handling technologies of fruits and vegetables to reduce postharvest losses and their value addition. CO 3: To illustrate the technological advances in thermal processing of fruit and vegetable. CO 4: To acquaint with advances in byproduct utilization.
Recent advances in Food Processing and Technology (FT-614)	CO 1: To illustrate the techniques involved in food processing such as Microwave and Radio Frequency Processing, High-Pressure processing, Ultrasonic Processing, etc. CO 2: To acquaint with principles and applications of Hurdle Technology. CO 3: To illustrate the newer techniques such as high-intensity light, pulsed electric field, ohmic heating, IR heating, inductive heating, and pulsed X-rays in food processing and preservation.
Recent Advances in Dairy Science & Technology (FT-615)	CO 1: To illustrate the technologies of processing milk and milk products. CO 2: To describe the design and working of equipment used in dairy science & technology. CO 3: To elucidate the thermal processing of milk and quality changes therein. CO 4: To explain the manufacturing processes of dairy products, and by-products as well as the hygiene and sanitation practices in a milk plant.
Recent Advances in Food	CO 1: To describe the status of biotechnology in India about

Biotechnology (FT-616)	food technology and its general applications. CO 2: To illustrate the processes of fermentation and fermenter design as well as production of alcoholic beverages. CO 3: To acquaint with genetic engineering and genetically modified foods and their safety concerns.