

M. Sc. Food Science and Technology	
Programme outcomes	The students get a systematic or coherent understanding of the fundamental concepts, principles, and processes underlying the academic field of food science and technology, its different subfields (food chemistry, nutrition, processing, engineering, etc.), and its linkages with related disciplinary areas/subjects; procedural knowledge that creates different types of professionals in the field of food science and technology and related fields such as food industry, teaching, research, product quality, consumer goods industry, food products, etc.; skills related to specialization areas within food science and technology, and other related fields of study, including broader interdisciplinary subfields (biotechnology, nanotechnology, etc.). Students will get the ability to recognize and appreciate the importance of the food sciences and their application in academic, industrial, economic, environmental, and social contexts.
Programme specific outcomes	The students acquire technical knowledge in post-harvest handling of food for its processing and storage. They will develop an ability to develop food products as well as their analysis in the context to quality and its safety. The students develop sufficient technical knowledge to start up a food business.

Course Outcomes

M. Sc. 1st semester	
Courses	Outcomes
Food Chemistry & Nutrition (FST 501)	CO 1: To acquaint with properties and role of various constituents in foods, interaction and changes during processing. CO 2: Importance of various foods and nutrients in human nutrition.
Food Microbiology (FST 502)	CO 1: To acquaint with different groups of micro-organisms associated with food, their activities, destruction and detection in food. CO 2: Description of food hygiene and sanitation, food fermentations.
Principles of Food Processing (FST 504)	CO 1: To acquaint with Scope of food processing; historical developments and principles of food processing and preservation. CO 2: Description of processing and preservation by non-thermal methods. CO 3: Use and application of enzymes and microorganisms in processing and preservation of foods.
Technology of Fruits and Vegetable Processing (FST 512)	CO 1: To acquaint with principles and methods of preservation of fruits and vegetables into various products

	CO 2: Description of technology for processed products, dehydration of fruits and vegetables using various drying technologies.
Mathematics (FST 451)	CO 1: To provide basic knowledge and fundamentals of mathematics to provide a sound foundation for engineering-related subjects. CO 2: Differential calculus, integral calculus, trigonometry, and two-dimensional geometry.
General Microbiology (FST 452)	CO 1: To provide basic knowledge about growth, reproduction, requirements of different groups of microorganisms. CO 2: Learning of techniques of isolation, identification, and enumeration of microorganisms.
M. Sc. 2nd semester	
Food Packaging Technology (FST 505)	CO 1: To acquaint the students with packaging methods, packaging materials, packaging machinery, modern packaging techniques, etc. CO 2: Description of properties of materials, Packaging equipment, and machinery.
Food Quality Systems & Management (FST 506)	CO 1: To acquaint with food quality parameters and control systems, food standards, regulations, specifications. CO 2: Description of Indian & International quality systems and standards like ISO and Food Codex.
Techniques in Food Analysis (FST 507)	CO 1: To acquaint with food quality parameters and control systems, food standards, regulations, specifications. CO 2: Sampling techniques, Chromatographic techniques, and Separation techniques.
Technology of Milk and Milk Products (FST 516)	CO 1: To acquaint with techniques and technologies of testing and processing of milk into various products and by-products. CO 2: Technology of condensed milk, cream, ice cream, cheese, and Indigenous milk products.
Statistical Methods for Food Science (FST 531)	CO 1: Exposure of students to various statistical tools required to analyze the experimental data in food research and industry. CO 2: Descriptive statistics, estimation, and confidence intervals hypothesis testing.
M. Sc. 3rd semester	
Food Engineering (FST 503)	CO 1: To acquaint with the basic principle of food engineering and its processes, with the importance of various food processes and their evaluation. CO 2: Description of a method for thermal process evaluation, food chilling and freezing, and process heat transfer.

Technology of Cereals, Pulses, and Oilseeds (FST 513)	CO 1: To acquaint with production and consumption trends, structure, composition, quality evaluation, and processing technologies for product development. CO 2: Description of the value addition of various cereals, pulses, and oilseeds.
Applied Nutrition (FST 534)	CO 1: To acquaint the students with the importance of nutrition, balanced diets, therapeutic diets for health. CO 2: Description of the role of food and nutraceuticals in health.
Master's seminar (FST 591)	CO 1: To develop presentation skills among students. CO 2: Presentation and discussion by each student on current topics/interests in Food Processing Technology.
Crop Production: Concepts and Practices (FST 553)	CO 1: To impart theoretical and practical knowledge about crop production under different agro-ecological conditions. CO 1: Quality of good seed, crop rotations, rain-fed agriculture, and dry farming.
M. Sc. 4th semester	
Industrial Training (FST 590)	CO 1: In-plant training is intended to expose the students to an environment in which they are expected to be associated in their future careers. CO 2: The students will gain hands-on experience in one or more commercial establishments.
Master Research (FST 599)	CO 1: To investigate selected problems of special interests in Food Technology by individual students. CO 2: The work includes library work, field or laboratory research, recording data, analyzing data, and writing a dissertation.