Program Outcomes (POs) Programme Specific Outcomes (PSOs)

B.Sc.(H) Food Technology

Program Outcomes (POs)

1. Apply knowledge gained in food chemistry, microbiology, engineering, and sensory evaluation to the development, processing, and preservation of safe, nutritious, and high-quality food products.

2. Design food products that meet the various food regulations and laws.

3. Trained to use advanced instruments and technologies to process and analyze food products and to solve food safety problems.

4. Critically assess and analyze food science information available in the public domain in an innovative and ethical way.

5. Competencies in all aspects of production, processing, and management in food industries and other food-related sectors, including as entrepreneurs.

6. Communicate technical and other relevant information effectively in both oral and written format to a diverse audience including supervisors, colleagues, consumers and government institutions.

7. Commitment to professionalism and ethical values.

Programme Specific Outcomes

B.Sc. (H) Food Technology :

- Students learn the application of food science for the selection, preservation, processing, packaging, distribution, and use of safe, nutritious, and wholesome food.
- Designed to produce food technologist graduates with capabilities of working and performing well in food-related industries, or entrepreneurs.
- The graduates may take positions in the area of food production, food ingredient supply, food research and development, food process engineering, food quality, and safety system, food analysis, and quality control, regulatory affairs, food marketing, etc.
- Graduates of the Food Technology Study Program have competence in designing the process of adding value to food by applying the principles of food science, technology and management by integrating various operating units to produce safe and quality food products.
- Trained to work in teams, interact with others from different backgrounds, be skilled in organizing and leading in a variety of situations
- Food Technology Gradates also may continue his/her study to Master and Doctorate degree to work in higher educations or research institutions

Course Outcome (COs)of BSc (H) Food Science & Technology

BSc (FST) I year

1 General Biology -1041

a) **Students will able to describe living system including the nature organization and evolution.**
b) **Students will able to know the physiology, anatomy and metabolism of Plants and Animals.**
c) **Itwill provide students with the broad conceptual background in the biological sciences.**

2 General Chemistry – 1042

a) **Students will have understanding of basic fundamental concept, theoretical concept and experimental finding in chemistry.**
b) **Students will be able to demonstrate, solve andderive conclusions in experiments.**
c) **Students will develop an understanding of major concept in chemistry.**

3 Introductory Food Technology – 1043

a) **Student will able to understand about food and food pyramid.**
b) **Student will be exposed toelementary food processing and unit operations.**
c) **Students will know nutritional importance of different foods.**
d) **It will provideunderstandingand knowledge of recent advancement in the food sector also.**

4 Environment Science – 1044

The students will be able to know:

a) **Aspects of biological, physical and information relating to environment and solutions of these problems.**
b) **Able to understand the environmental problems such as- public health, Land Management, Waste Disposal, Over-pollution, water, deforestation, Ecosystem, Endangered species, Climate Change, etc.**
c) **Informed about biodiversity richness and the potential dangers to the species of animals, plants and microorganisms in the environment.**

BSc (FST) II year

1 Food Biochemistry – 2041

a) **Students will able to know the chemistry underline the properties and the reactions of various food components**
b) **Students will be able to know properties of food molecules and the interaction with other food constituents.**
c) **Students will gain knowledge of biochemical reaction responsible for quality of food.**
d) **They will acquire sufficient knowledge of food chemistry to control reactions in food.**

2 Gen Microbiology – 2042

The student will be able to:

a) **Understand history, scopeand relevance of microbiology.**
b) **Gain knowledge of various methods to grow and control microorganism in lab.**
c) **Understand the physiology, classification and metabolism in microbes.**
d) **Understand the role of microorganism in different industries.**

3 **Dairy Technology – 2043**

The students will be able to learn:

a) **About the production and consumption of milk and milk products in India and abroad.**
b) **About the milk, its composition, nutritive value and characteristics.**
c) **About the microbiology of milk, spoilage, preservation and its fermentation.**
d) **About the processing of fluid milk.**
e) **About the milk quality and its determination.**
f) **About the cleaning and sanitation of dairy plant.**
g) **Brief about the types of milk products, their definition, manufacturing, packaging and storage.**

4 Food Processing Principals – 2044

By the end of the course students can able to:

a) **To have basic knowledge of Food processing principles and various preservation methods.**
b) **To apply various processing methods in the manufacturing of different food materials.**
c) **To have knowledge of food properties & effect of different processing methods on food constituents.**
d) **To define various unit operations for food processing.**
e) **Understand/analyse the reasons of post-harvest losses and methods of their prevention.**

f) **Analyse the storage conditions suitable for different types of food materials.**

BSc (FST) III year

1 Food Evaluation – 3041

The student will be able to understand the:

a) **Testing and evaluation of various parameters of food quality.**
b) **Different techniques to perform sensory evaluation study of foods.**
c) **Hands on training on chemical analysis of specific food products.**
d) **The basic principles of technique used in food analysis for quality assurance.**

2 Technology of Plant Foods – 3042

a) **The student will able to understand regarding to nutritional value, classification of the plant foods.**
b) **To learn about the basic aspects of baking and various method of baking, techniques and use of instruments etc.**
c) **Method of processing, preservation of different kind of plant food products.**

3 Technology of Animal Foods – 3043

a) **Students came to know about the possibility of development of meat based industry**
b) **Students learned about different meat processing methods**
c) **Knowledge about different types of meat animals and their population in India was very fascinating for students**
d) **Visit of meat processing plant was a very good experience for the students**

4 Food Microbiology – 3044

The student will be able to:

a) **Understand microbiological analysis methods for food products**
b) **Analyze different food for presence of hazardous microorganism using food microbiology.**
c) **Describe the beneficial role of microorganism in fermented foods and in food processing.**
d) **Understand the principle involving food spoilage and preservation involving microorganism.**