

**SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE**

(An Autonomous Institution,

Affiliated to Madurai Kamaraj University

&

Re-Accredited with B Grade by NAAC)

T.V.R. NAGAR, ARUPPUKOTTAI ROAD, MADURAI-22



**Program Outcomes, Program Specific  
Outcomes & Course Outcomes**

**B.Sc FOOD SCIENCE AND PROCESSING  
MANAGEMENT**

(To be followed for the batch 2018 – 2021 from Semester I to VI from the  
academic Year 2018 -19)

**Department of Food Science and Processing Management**

**SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE**

An Autonomous Institution

T.V.R. NAGAR, MADURAI – 22

**DEPARTMENT OF FOOD SCIENCE AND PROCESSING MANAGEMENT**

**Programme Code :**

**Choice Based Credit System**

**ANNEXURE – I**

**REGULATIONS OF THE COURSE**

**SYLLABUS TO BE FOLLOWED FOR STUDENTS THOSE WHO JOINED IN  
THE ACADEMIC YEAR 2018-2019 (BATCH : 2018 - 2021)**

**Programme Outcomes (PO)**

The Programme Outcomes of the B.Sc Food Science and Processing Management degree are

1. To develop an understanding of the principles, practices and recent advancements in food preservation and in food processing techniques.
2. To develop a comprehensive understanding of the properties and relationships (chemical/ physical) of major food constituents and of the biohazards that are important in food processing with regard to product quality in the food industry.
3. To develop a comprehensive understanding of the nutritional properties of food constituents.
4. To provide the students with a comprehensive understanding and critical awareness of the principles and importance of cleaning and sanitation in food process operations.
5. To enable the students to recognize the impact of water and waste management in the Food Industry and become familiar with laws and regulations and costs regarding water and waste management.
6. To provide self-learning and practical proficiency and team work in food processing techniques to specific commodities and industrial plant unit operations.
7. Will be able to discuss and justify the ethical considerations in food production, processing and marketing in relation to the consumer.
8. To effectively communicate current issues and trends in the food industry and appreciate the dynamics and continued evolution of the Food Industry.
9. To provide an in depth understanding of the principles underlying the food processing methods and technologies used.
10. To provide a comprehensive understanding of the aspects required to be controlled during food processing.

## Programme Specific Outcomes (PSO)

The Programme Specific Outcomes of the B.Sc Food Science and Processing Management degree are to make the graduates to become

1. To develop an increased awareness of emerging technologies for processing, packaging and preservation of foods and beverages and its relevance to the future food industry.
2. To equip with the necessary technical knowledge, skills and attitudes required to successfully contribute to solving problems related to food safety during food processing.
3. To enable the students to apply scientific principles in solving food processing problems and improving product quality and safety.
4. To provide comprehensive knowledge and implement good manufacturing practices.
5. To develop long-life learning skills, and communication skills.

## Course Outcomes (CO)

### I SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: I</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18UE102</b>	<b>Subject</b>	<b>: English - I</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: I [Language]</b>	<b>Credits</b>	<b>: 3</b>

#### Course Outcomes:

- Demonstrate participative learning of English and to enable them acquire communication skills.
- Create writing habit and to develop effective writing skills.
- Prepare official letters to officers and editors effectively.
- Discuss basic grammar topics, as error free communication has become mandatory.

## Course Outcomes (CO)

### I SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: I</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF103</b>	<b>Subject</b>	<b>: Fundamentals of Nutrition</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 5</b>

#### Course Outcomes:

- Describe the basic terminology and several aspects of nutrition and the functions of food in healthy life sustenance.
- Classify food, nutrition during different conditions and role of special functional food.
- Identify and apply modern aspects of nutritional science and novel food usage.
- Identify the dietary allowance for various age groups and formulate diet based on requirements.
- Formulate a menu based on the nutritional requirements of the individual.

## Course Outcomes (CO)

### I SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: I</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:18BF104</b>	<b>Subject</b>	<b>: Principles of Food Science</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 5</b>

#### Course Outcomes:

- Describe the importance of food intake on health and wellbeing.
- Apply the guidelines for preparation of specific food components.

- Identify the relationship between dietary intake and disease and applying the knowledge gained to help prevent disease in the population.
- Identify menu forms and apply cost management principles involved in recipes used for the basic cooking techniques.

### **Course Outcomes (CO)**

#### **I SEMESTER**

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: I</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:18BF105</b>	<b>Subject</b>	<b>: Basic Food Preparation Practical</b>
<b>Internal Marks</b>	<b>:</b>	<b>External Marks</b>	<b>: 100</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 3</b>

#### **Course Outcomes:**

- Apply the knowledge of basic cookery methods and principles
- Compare the effect of different external factors on cooking quality and time
- Demonstrate the basic skills of culinary practice and application of theoretical knowledge into practice.
- Design menus and conduct sensory evaluation of foods and beverages.

### **Course Outcomes (CO)**

#### **I SEMESTER**

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: I</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:18BF107</b>	<b>Subject</b>	<b>: Principles of Food Science Practical</b>
<b>Internal Marks</b>	<b>:</b>	<b>External Marks</b>	<b>: 100</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 3</b>

#### **Course Outcomes:**

- Demonstrate standard laboratory practices and operating procedures of various laboratory equipments.
- Apply the knowledge of laboratory procedures of nutrient estimation in different food components and products.
- Demonstrate skills in food quality control and assessment procedures.
- Identify the safety and standards of the given food samples and grading them based on the standards.

### I SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: I</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF106</b>	<b>Subject</b>	<b>: Food Chemistry</b>
<b>Internal Marks</b>	<b>:25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 4</b>

#### Course Outcomes:

- Identify the classification and chemistry of major and minor components of food.
- Explain the relation between chemistry of food components and their functions.
- Revise the various changes that occur in food components naturally as well as due to processing and their good and ill effects.
- Discuss the presence and role of additives and toxic substances in food and ways to modify them.

### I SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: I</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:18VE107</b>	<b>Subject</b>	<b>: Value Education</b>
<b>Internal Marks</b>	<b>:25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: IV</b>	<b>Credits</b>	<b>: 2</b>

#### Course Outcomes:

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- Identify social values and ethics which have to be reflected in one's behavior
- Create opportunities for the continuous development of their Knowledge, Skills and Attitudes related to Human Values

## I SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: I</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:18PE10</b>	<b>Subject</b>	<b>: Physical Education</b>
<b>Internal Marks</b>	<b>:</b>	<b>External Marks</b>	<b>: 100</b>
<b>Part</b>	<b>: IV</b>	<b>Credits</b>	<b>: 1</b>

### Course Outcomes:

- Demonstrate and Reinforce Cooperative Behavior.
- Create Lifelong Fitness Goals.
- Communicate Developmental Appropriate Activities

## II SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: II</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:18UE202</b>	<b>Subject</b>	<b>: English II</b>
<b>Internal Marks</b>	<b>:25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: IV</b>	<b>Credits</b>	<b>: 3</b>

### Course Outcomes:

- Utilize the knowledge gained in sharpening skills and improving the ability to self-learn.
- Plan and speak effectively in English in real life situations.
- Formulate and send electronic Mails.
- Communicate comfortably with verbal ability.

## II SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: II</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:18BF203</b>	<b>Subject</b>	<b>: Food Processing and Preservation</b>
<b>Internal Marks</b>	<b>:25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 5</b>

### Course Outcomes:

- Compile different conventional and novel processing techniques involved in the processing of different food categories.
- Revise the importance, principles and methods of food preservation.
- Analyze and formulate measures to prevent post harvest food losses and apply effective preservation techniques.

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: II</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:18BF206</b>	<b>Subject</b>	<b>: Food Processing and Preservation Practical</b>
<b>Internal Marks</b>	<b>:</b>	<b>External Marks</b>	<b>: 100</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 5</b>

### Course Outcomes:

- Understanding the functions of food and classification of foods based on nutrients
- Learning the different methods of cooking on acceptability and nutritive value of foods
- To get an knowledge into fats, sugars and beverages. To become proficient for specialization in nutrition



## II SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: II</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:18BF204</b>	<b>Subject</b>	<b>: Food Microbiology</b>
<b>Internal Marks</b>	<b>:25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 5</b>

### Course Outcomes:

- Identify the types of microorganisms and their morphology.
- Apply knowledge in the understanding of how various types of food processing affect the micro flora of food products.
- Revise the procedures and techniques used in detecting and enumerating microorganisms in foods.

## II SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: II</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:18BF207</b>	<b>Subject</b>	<b>: Food Microbiology Practical</b>
<b>Internal Marks</b>	<b>:</b>	<b>External Marks</b>	<b>: 100</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 3</b>

### Course Outcomes:

- Identify the basic microbiological laboratory equipments and techniques.
- Identify various types of food contaminations and food infestations.
- Demonstrate skill in determining the edibility of food products and their levels of adulteration.

## II SEMESTER

I B.Sc Food Science and Processing Management

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<b>Semester</b>	<b>: II</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:18BF205</b>	<b>Subject</b>	<b>: Principles of financial operation</b>
<b>Internal Marks</b>	<b>:25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 3</b>

### Course Outcomes:

- Compile the different traditional and modern techniques of food preservation.
- Apply the skills learnt in managing effectively, the farm produce to develop various value added foods.
- Demonstrate skills in food technology and novel techniques of food preservation
- Create new food preserves from the skills learnt and compare their merits and demerits

## II SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: II</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:18BF208</b>	<b>Subject</b>	<b>: Computer Application Practical</b>
<b>Internal Marks</b>	<b>:</b>	<b>External Marks</b>	<b>: 100</b>
<b>Part</b>	<b>: IV</b>	<b>Credits</b>	<b>: 2</b>

### Course Outcomes:

- Apply the basic computer skills such as power point. Word format and xl sheet in different concepts.
- Identify and understand of technologies and protocols used on the Internet, and how to effectively use Internet tools technologies including current web-based applications, e-mail, and social networking tools.
- Prepare payslips, bills, charts using formulas and built in functions.
- Create presentation using animation and slide navigation.

## II SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: I</b>	<b>Batch</b>	<b>: 2018-2021</b>
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<b>Subject code</b>	<b>:18ES207</b>	<b>Subject</b>	<b>: Environmental Studies</b>
<b>Internal Marks</b>	<b>:25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: IV</b>	<b>Credits</b>	<b>: 2</b>

### Course Outcomes:

- Apply the knowledge of environmental resources in their effective utilization
- Identify the individual role in conservation of resources for sustainable development.
- Outline the role of individual in prevention of pollution in different ecosystems.
- Critique the threats to biodiversity and endangered species in India.

## Course Outcomes (CO)

### III SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: III</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:18BF301</b>	<b>Subject</b>	<b>: Cereals, Pulses, &amp; Oilseeds Processing</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 5</b>

### Course Outcomes:

- Understand basic composition & structure of food grain.
- Understand the basics of milling operations.
- Learn processing of food grains into value added products.
- Manage production, distribution & storage of grains.
- Manage by products utilization.
- understand the principle of alcoholic beverage preparation

## Course Outcomes (CO)

### III SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: III</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF303</b>	<b>Subject</b>	<b>: Bakery and confectioneries</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 2</b>

**Course Outcomes:**

- Understand the basic concepts of bakery and food preservation.
- Familiarize with baking processes and operations.
- Develop skills and techniques in food preservation.

### Course Outcomes (CO)

### III SEMESTER

II B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: III</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF307</b>	<b>Subject</b>	<b>: Bakery and confectioneries Practical</b>
<b>Internal Marks</b>	<b>:</b>	<b>External Marks</b>	<b>: 100</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 2</b>

**Course Outcomes:**

### Course Outcomes (CO)

### III SEMESTER

II B.Sc Food Science and Processing Management

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<b>Semester</b>	<b>: III</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF306</b>	<b>Subject</b>	<b>: Cereals and Pulses Practical</b>
<b>Internal Marks</b>	<b>:</b>	<b>External Marks</b>	<b>: 100</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 2</b>

### Course Outcomes:

- Learning composition and nutritive value of cereal, pulses
- Understanding the composition and nutritive value of foods
- Learning the different methods of cooking on acceptability and nutritive value of foods

## Course Outcomes (CO)

### III SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: III</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF304</b>	<b>Subject</b>	<b>: Food Additives</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 2</b>

### Course Outcomes:

- Chemistry of the additives added to a food
- Importance of additives in maintaining or improving food quality
- Know the limits of addition as prescribed by FAO/WHO and PFA
- Develop newer additives with improved safety standards

## Course Outcomes (CO)

### III SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: III</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF308</b>	<b>Subject</b>	<b>: Meal Planning and Balanced Diet</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: IV</b>	<b>Credits</b>	<b>: 2</b>

**Course Outcomes:**

- Understand the functions of foods in relation to health.
- Be familiar with the different methods of cooking, their advantages and disadvantages.
- Understand the functions and sources of nutrients.
- Apply the knowledge in maintenance of good health.

### Course Outcomes (CO)

### III SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: III</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF308</b>	<b>Subject</b>	<b>: Campus Recruitment Training practical</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: IV</b>	<b>Credits</b>	<b>: 2</b>

**Course Outcomes:**

- To encourage the students to involve actively in participative learning of English and to enable them acquire communication skills.
- To enable the students prepare themselves as professionals.
- To help them gain confidence in facing the Competitive World.

## Course Outcomes (CO)

### III SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: III</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF302</b>	<b>Subject</b>	<b>: Fruit and Vegetable Processing</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 5</b>

#### Course Outcomes:

- Detailed knowledge on the chemical, biological and nutritional properties of fruits and vegetables
- Knowledge on the various methods involved in the processing of fruits and vegetables
- Have detailed knowledge on the technology and effect of processing on the quality of the products

## Course Outcomes (CO)

### IV SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: IV</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF402</b>	<b>Subject</b>	<b>: Basic and Therapeutic Nutrition</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: IV</b>	<b>Credits</b>	<b>: 2</b>

#### Course Outcomes:

- Be aware about the principles of diet therapy.
- Understand the recent trends in diet therapy and planning and preparation of therapeutic diets.
- To develop attitude towards the profession as dietitian.

## Course Outcomes (CO)

## IV SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: IV</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:18BF405</b>	<b>Subject</b>	<b>: Therapeutic Nutrition Practical</b>
<b>Internal Marks</b>	<b>:</b>	<b>External Marks</b>	<b>: 100</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 3</b>

### Course Outcomes:

- Introduction to Clinical and Therapeutic Nutrition
- Mechanism of Nutritional care and its importance
- Nutritional management in Gastro Intestinal Diseases
- Nutritional management in Weight Imbalance
- Nutritional management in Allergy, Nervous System and Bone health disorders

## Course Outcomes (CO)

## IV SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: IV</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF403</b>	<b>Subject</b>	<b>: Exercise and fitness management</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 2</b>

### Course Outcomes:



- To introduce a career oriented and skill enhancing course on nutrition for fitness
- To impart knowledge regarding importance of nutrition and exercise for physical, psychological, social and spiritual fitness of an individual.
- To impart and develop intellectual as well as physical skills among the students in the planning and execution of exercise and nutritional principles for fitness management

### Course Outcomes (CO)

#### IV SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: IV</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF406</b>	<b>Subject</b>	<b>: Exercise and Fitness Management Practical</b>
<b>Internal Marks</b>	<b>:</b>	<b>External Marks</b>	<b>: 100</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 2</b>

#### Course Outcomes:

- Demonstrate competency in skills and abilities relating to stress management, chronic disease prevention, anatomy, exercise physiology, appraising health and fitness
- To build scientific understanding and managerial skills that will set up as a professional in fitness management, personal training or nutrition.

### Course Outcomes (CO)

#### IV SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: IV</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF401</b>	<b>Subject</b>	<b>: Dairy, Meat and Poultry Processing</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 4</b>

#### Course Outcomes:

- To provide up to date knowledge on dairy processing methods and developments.
- To provide a thorough knowledge on the processing methods of non vegetarian foods.

To equip the students for employability in dairy, meat and poultry industry

## Course Outcomes (CO)

### IV SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: IV</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF408</b>	<b>Subject</b>	<b>: Food preservation</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 2</b>

#### Course Outcomes:

- Understand the importance of microorganisms in food preservation.
- Understanding of the concept of different processing and preservation technologies
- Important application of various preservation methods in food industries

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: IV</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF404</b>	<b>Subject</b>	<b>: Fish and sea food processing</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 3</b>

#### Course Outcomes:

- Understand the importance of dairy and fishery industry, the techniques that can be used for preservation of fish and manufacturing of various value added fish products.
- Understand cold preservation , Freezer types and functioning.
- Understand Dehydration, Dryer types and functioning.
- Understand the Packaging requirements of food categories.
- Able to measure consumer perception and acceptance of food products.

## Course Outcomes (CO)

## IV SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: IV</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF407</b>	<b>Subject</b>	<b>: Food Packaging Management</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: IV</b>	<b>Credits</b>	<b>: 2</b>

### Course Outcomes:

- To provide an overall knowledge about food packaging materials and technologies
- To describe about the various technologies used in packaging of food to extend its shelf life
- To explain about the deteriorative reactions in food and factors stimulating it
- To discuss about the specific requirements of various types of food products

## Course Outcomes (CO)

## IV SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: IV</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>: 18BF409</b>	<b>Subject</b>	<b>: Campus Recruitment Training II practical</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: IV</b>	<b>Credits</b>	<b>: 2</b>

### Course Outcomes:

- To encourage the students to involve actively in participative learning of English and to enable them acquire communication skills.
- To enable the students prepare themselves as professionals.
- To help them gain confidence in facing the Competitive World.
- To inculcate Social Etiquette.

## Course Outcomes (CO)

### V SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: V</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:</b>	<b>Subject</b>	<b>: Food Design</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 5</b>

#### Course Outcomes:

- To understand the concept of development of a new product
- To develop the capability to prepare new products based on special dietary requirements, functionality, convenience and improvisation of existing traditional Indian foods.

## Course Outcomes (CO)

### V SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: V</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:</b>	<b>Subject</b>	<b>: Food Entrepreneurship</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: V</b>	<b>Credits</b>	<b>: 5</b>

#### Course Outcomes:

- To develop entrepreneurial skills and competitive attitude
- To provide the knowledge required in the various steps in business development.
- To teach steps and strategies in product marketing and trade

## Course Outcomes (CO)

### V SEMESTER

I B.Sc Food Science and Processing Management

## Department of Food Science and Processing Management

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<b>Semester</b>	<b>: V</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:</b>	<b>Subject</b>	<b>: Food Design Practical</b>
<b>Internal Marks</b>	<b>:</b>	<b>External Marks</b>	<b>: 100</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 3</b>

### Course Outcomes:

- Understand and describe the general chemical structures of the major components of foods (water, proteins, carbohydrates, and lipids).
- Give a molecular rationalization for the observed physical properties and reactivity of major food components.
- Provide a theoretical explanation for observed extent and rates of reactions that are common to foods.
- Predict how processing conditions are likely to change the reactivity of food components.
- To predict how changes in overall composition are likely to change the reactivity of individual food.

## Course Outcomes (CO)

### V SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: V</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:</b>	<b>Subject</b>	<b>: Food Regulations and Plant Management</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: IV</b>	<b>Credits</b>	<b>: 2</b>

### Course Outcomes:

- To provide insight on the procedures of industrial quality assessment and management.
- To develop skills in good manufacturing and hygiene practices in handling food commodities of commercial value.
- To provide a bird's eye view on the Industrial Organization structure and legislative procedures for food trade and marketing.

## Course Outcomes (CO)

### V SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: V</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:</b>	<b>Subject</b>	<b>: Marketing and Consumer Behavior</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: III</b>	<b>Credits</b>	<b>: 2</b>

#### Course Outcomes:

To provide practical applications that give students a basic understanding of the scope of marketing research

To equip the students with thorough knowledge and skill in assessing market trends

To provide essential skill in product analysis and consumerism

## Course Outcomes (CO)

### V SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: V</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:</b>	<b>Subject</b>	<b>: Project</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: IV</b>	<b>Credits</b>	<b>: 2</b>

#### Course Outcomes:

- To enable the students to gain practical experience in any food related commercial outlet of their own choice.
- To inculcate the skills of report writing and documentation of results.

## Course Outcomes (CO)

### V SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: V</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:</b>	<b>Subject</b>	<b>: Campus Recruitment Training</b>
<b>Internal Marks</b>	<b>: 25</b>	<b>External Marks</b>	<b>: 75</b>
<b>Part</b>	<b>: IV</b>	<b>Credits</b>	<b>: 2</b>

#### Course Outcomes:

- To encourage the students to involve actively in participative learning of English and to enable them acquire communication skills.
- To enable the students prepare themselves as professionals.
- To help them gain confidence in facing the Competitive World.
- To inculcate Social Etiquette.
- To be comfortable participating in GD's and facing Interviews

## Course Outcomes (CO)

### VI SEMESTER

I B.Sc Food Science and Processing Management

<b>Semester</b>	<b>: VI</b>	<b>Batch</b>	<b>: 2018-2021</b>
<b>Subject code</b>	<b>:</b>	<b>Subject</b>	<b>: Internship Training in Food Processing/ Dietetics</b>
<b>Internal Marks</b>	<b>:</b>	<b>External Marks</b>	<b>: 100</b>

# Department of Food Science and Processing Management

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**Part**

**: III**

**Credits**

**: 15**

**Course Outcomes:**

- To expose the students to 'real' working environment administrative functions.
- To have hands-on experience in the students' related field so that they can relate and reinforce what has been taught.
- To promote cooperation and to develop synergetic collaboration between industry and the university in promoting a knowledgeable society.
- To set the stage for future recruitment by potential employers.