

**SCHOOL OF VOCATIONAL
STUDIES & APPLIED SCIENCES**

Programme and Course Objectives

***DEPARTMENT OF FOOD PROCESSING &
TECHNOLOGY***

Department of Food Processing & Technology

NUMBER OF PROGRAMMES OFFERED : 05

M.Tech Food Processing & Technology

M. Sc. Food Science

B.Tech Food Processing & Technology

Post Graduate Diploma in Food Safety & Quality Management (FSQM)

Post Graduate Diploma in Food Science & Technology (FST)

PROGRAMME – M.TECH FOOD PROCESSING & TECHNOLOGY

PROGRAM OBJECTIVE:

The objective of this course is to make the student aware about the basics of developing new varieties of crops and foods products.

Semester- I			
S.No	Code	Subject Name	
1.	MA-505	Statistical methods	
Objectives: to explain some concepts regarding data analysis in Food Science and Technology			
2.	FT-503	Engineering Properties of Biomaterials and Applications	
Objectives: 1. To understand the basics of Food engineering and its applications 2. To elaborate the basic concepts of material and energy balance, fluid dynamics, thermal process calculations etc.			
3.	FT-505	Advances in Food Process Technology	3
Objectives: 1. The course aim is to introduce the students to the area of food processing. This is necessary for effective understanding of a detailed study of food processing and technology subjects.			
4.	FT-507	Food Safety and Standards	3
Objectives: 1. To characterize different type of food hazards, physical, chemical and biological in the industry and food service establishments 2. To help become skilled in systems for food safety surveillance 3. To be aware of the regulatory and statutory bodies in India and the world			
5.	FT- 518	Advanced Food Chemistry and Microbiology	3
Objectives: The course is targeted to develop the knowledge of students in Food Chemistry at advanced level. This is necessary for effective understanding of food processing and technology subjects. This course will enable students to appreciate the similarities and complexities of the chemical components in foods.			
6.	FT-511	Food Beverages	3
Objectives: To provide an understanding of the science and technology for processing different types of beverages			
PRACTICALS			
7.	FT-551	Advance Food Processing Lab-I*	4
Total Contact Hours			27
Semester- II			
1.	FT-502	Processing of Meat, Fish and Poultry Products	3
Objectives: The course aims to develop the knowledge of students in the area of animal product processing and technology. • This course will enable students to appreciate the application of scientific principles in the processing of these materials.			
2.	FT-504	Nutraceutical and functional Foods	3

Objectives: 1.To understand the basic concepts of Nutraceuticals and functional food, their chemical nature and methods of extraction. 2.To understand the role of Nutraceuticals and functional food in health and disease			
3.	FT-508	Advances in Cereal and Pulse Processing	3
Objectives: This is necessary for effective understanding specific aspects of food processing related to these foods.			
4.		DSE-I	3
	FT- 506	Food Texture and Rheology	
Objectives: To expose the students to the fundamental knowledge of food, its properties and different methods of food processing			
	FT-501	Cryogenic Systems In Food Processing	
Objectives: 1. To teach about the mechanism and operation of freezing. 2. To teach about various equipment and process used in freezing. 3. To impart knowledge about quality and safety aspect of various frozen products.			
5.		DSE-II	3
	FT- 500	Post-Harvest Processing Of Fruits & Vegetables	
Objectives: The course aims to develop the knowledge of students in the area of vegetable and fruit processing and technology. This course will enable students to appreciate the application of scientific principles in the processing of these materials.			
	FT-509	Food Supply Chain Management	
Objectives: To provide an introduction to the concepts and tools of supply chain management in the food and beverage industry			
6.		Generic Elective	3
	FT- 514	Functional Foods and Ingredients	
Objectives: To impart the concept of nutraceuticals, functional ingredients and foods and their role in health and disease			
	FT- 512	Food Additives, contamination and Toxicology	
Objectives: Food toxicology is concerned with assessing the injurious effects on living systems of chemicals present in foods. The chemical agents can be man-made (e.g., pesticide residues, food additives, contaminants originating with processing machinery, or packaging materials) or of natural origin (e.g., microbial, animal or plant toxins)			
		PRACTICALS	
7.	FT-552	Advance Food Processing Lab II*	4
8.	FT-554	Seminar I	1
		Total Contact Hours	28

Semester- III			
1.	FT-601	Advanced Food Packaging	3
Objectives: The course aims to develop the knowledge of students in the area of packaging of foods and the related technology used. This course will enable students to appreciate the application of scientific principles in the packaging of foods.			
2	FT-603	Instrumental Techniques in Food Analysis	3
Objectives: To enable the students to understand the principles and methods of advanced techniques in the analysis of foods			
3.	FT-611	Flavour Technology	3
Objectives: This course aims to explain the flavour, Spice and Plantation crops application in food industry			
4.		DSE III	3
	FT- 605	Frozen Foods And Cold Chain Management	
Objectives: To provide an introduction to the concepts and tools of supply chain management in the food and beverage industry			
	FT- 607	Advances in Dairy Engineering and Technology	
Objectives: To provide in-depth knowledge in various unit operations and basic concepts in dairy processing			
5.		DSE-IV	3
	FT 609	Food Industry Waste Management	
Objectives: To create awareness about environmental issues in food industry			
	FT-617	Therapeutic Foods	
Objectives: To impart the concept of nutraceuticals, functional ingredients and foods and their role in health and disease			
6.		DSE-V	3
	FT 613	Fermented Foods and Bioprocess Engg.	
Objectives: 1.To understand the Enzyme kinetics, Inhibition kinetics, Immobilization 2. To understand the concept of basic fermentation processes and its control systems etc. 3. To help students acquire a sound knowledge on diversities of foods, food habits and patterns in India with focus on traditional foods.			
	FT-615	IPR and Patenting in Food technology	
Objectives: 1.Follow research ethics 2. Understand relevance and significance of IPR			
		PRACTICALS	
	FT- 651	Seminar II	1
	FT-653	Dissertation-I	

Objectives: The main objective of the dissertation work is to enhance practical and professional skills of the students thus providing an edge over others in finding desired professional roles and career advancement		
	Total Contact Hours	24
Semester- IV		
FT654	Dissertation-II	20
Objectives: The main objective of the dissertation work is to enhance practical and professional skills of the students thus providing an edge over others in finding desired professional roles and career advancement		
	Total credits for all semester	90

PROGRAMME – M.SC. FOOD SCIENCE

PROGRAM OBJECTIVE: It is an inclusive program whose mission is to provide quality and best opportunities in the areas of research in food science and food service management.

Semester- I		
S.No	Code	Subject Name
1.	FS-401	FoodprocessTechnology
Objectives: 1. Tounderstandtheareaof Foodengineering 1. Toelaboratethebasicconceptsofmaterialandenergybalance,fluidynamics,thermalprocess calculationsetc.		
2.	FS-403	FoodMicrobiology
Objectives: 1.Toprovideawareness aboutnutritionandgrowthofmicroorganisms. 2. Toimpartknowledge about roleofmicroorganisms inair,waterandsoil. 3. Tounderstandtheroleofmicroorganismsinfermentedfoods,foodspoilage,foodinfectionsandintoxication		
3.	FS-405	FoodChemistryandnutrition
Objectives: 1.Thecourseaimsto developtheknowledgeofstudentsin thebasic areaofFoodChemistry. 2.Thiscoursewillenablestudentstoappreciatethesimilaritiesandcomplexitiesofthechemicalcomponents in foods.		
4.	FS-407	TechnologyofFoodProcessing&Preservation
Objectives: Toexposethestudentstotheprinciplesanddifferentmethodsoffoodprocessingand preservation.		
5.	FS-409	FoodSafetyandQuality
Objectives: 1.To characterize different type of food hazards, physical, chemical and biological theindustryandfoodserviceestablishments 2.Tohelpbecomeskilledinsystemsforfoodsafetysurveillance		
6.		GenericElective
	ES-507	WasteManagement
Objectives: Waste reduction would avoid putting additional pressure on scarce natural resources, improve security and reduce environmental impacts generated by agriculture		
	CH-407	Characterization Techniques-I
Objectives: To characterize food products in terms of chemical composition		
PRACTICALS		
1.	FS-411	FoodChemistryLab
2.	FS-413	FoodMicrobiologyLab
		Total Contact Hours
Semester- II		
1.	FS-404	Cereal,LegumeandOilCropTechnology
Objectives: 1.Thecourseaimstodeveloptheknowledgeofstudentsintheareaofpulseandoilseedprocessingandtechnolo 2. Thisisnecessaryforeffectiveunderstandingspecificaspectsoffoodprocessingrelatedtothesefoods.		
2.	FS-406	Fruitsand VegetableTechnology
Objectives: 1.Thecourseaimstodeveloptheknowledgeofstudentsintheareaofvegetableandfruitprocessingandtechno 2.Thiscoursewillenablestudentstoappreciatetheapplicationofscientificprinciplesintheprocessingoffruitsandv		

3.	FS-408	Technology of Meat, Fish and Poultry Products
<p>Objectives: 1. The course aims to develop the knowledge of students in the area of animal product processing and technology.</p> <p>2. This course will enable students to appreciate the application of scientific principles in the processing of these materials.</p>		
4.	FS-410	Technology of Functional Foods and Nutraceuticals
<p>Objectives:</p> <p>1. To understand the basic concepts of Nutraceuticals and functional food, their chemical nature and methods of extraction.</p> <p>3. To understand the role of Nutraceuticals and functional food in health and disease.</p>		
5.	FS-424	Post-Harvest Technology
<p>Objectives: To develop knowledge regarding biochemistry and physiology of fruits and vegetables and their role in pre-harvest changes in product quality.</p>		
6.		DSE-I
	FS-412	Food Additives
<p>Objectives: 1. To get an insight into additives that are relevant to processed food industry for shelf life extension, processing aids and sensory appeal.</p> <p>1. To explain about role of food additives in food quality control.</p> <p>2. To explain the techniques of best use of food additives.</p> <p>3. To describe the role of food additives in health maintenance and cure of diseases.</p>		
	FS-414	Technology of Plantation Crops and Spices
<p>Objectives: 1. To acquaint students with the types of plantation crops and their processing techniques.</p> <p>1. To familiarize students with the processing of spices and condiments.</p>		
	FS-416	Snack Food Technology
<p>Objectives: To impart knowledge related to various snack foods and their manufacturing techniques.</p>		
7.		DSE-II
	FS-418	Technology of Oilseeds and Fats
<p>Objectives: 1. The course aims to develop the knowledge of students in the area of pulse and oilseed processing and technology.</p> <p>2. This course will enable students to appreciate the application of scientific principles in the processing of these materials.</p>		
	FS-420	Innovative Techniques in Food Processing
<p>Objectives: 1. The course aims to develop the knowledge of students in the area of emerging or alternative technologies to food processing.</p> <p>2. This course will enable students to understand the advantages and disadvantages over existing technologies.</p>		
	FS-422	Food Supply Chain Management
<p>Objectives: To provide an introduction to the concepts and tools of supply chain management in the food and beverage industry.</p>		
PRACTICALS		
1.	FS-517	Cereal, Legume and Oilseeds analysis Lab
2.	FS-519	Fruits and Veg. Tech Lab
3.	FS-515	Seminar
Total Contact Hours		
Semester- III		
1.	FS-501	Advances in Food Process Technology

<p>Objectives: 1.The course aims to develop the knowledge of students in the area of emerging alternative technologies applied to food processing.</p> <p>2.This course will enable students to understand the advantages and disadvantages over existing technologies.</p>		
2.	FS-503	Food Packaging Technology
<p>Objectives: 1.The course aims to develop the knowledge of students in the area of packaging of foods and technology used.</p> <p>2.This course will enable students to appreciate the application of scientific principles in the packaging of foods.</p>		
3.	FS-505	Techniques in Food Analysis
<p>Objectives: To enable the students to understand the principles and methods of advanced techniques in the analysis of food.</p>		
4.	FS-507	Technology of Milk and Milk Products
<p>Objectives: To introduce the students to dairy industry, properties and processing of milk, manufacture of dairy products, and effluent treatment in dairy industry</p>		
5.	FS-509	Technology of Fermented Foods
<p>Objectives: 1.To understand the Enzyme kinetics, Inhibition kinetics, Immobilization</p> <p>2.To understand the concept of basic fermentation processes and its control systems etc</p>		
6.		DSE-III
	FS-511/CH 505	IPR and Patent Laws in Food Sector/Patent Law and IPR Issues
<p>Objectives: 1.Follow research ethics</p> <p>2.Understand relevance and significance of IPR</p>		
	FS-513	Food Plant Design and Sanitation
<p>Objectives: To enable the students to understand the various concepts of process development, design consideration and control in food industry</p>		
	FS-515	Technology of Beverages
<p>Objectives: To provide an understanding of the science and technology for processing different types of beverages</p>		
PRACTICALS		
1.	FS-521	Advance Food Processing Lab
2.	FS-523	Dairy Technology Lab
3.	FS-555	Training (4-6 weeks Summer training after II semester)
		Total Contact Hours
Semester- IV		
1.	FS-556	Project
<p>Objectives: The main objective of the dissertation work is to enhance practical and professional skills of the students by providing an edge over others in finding desired professional roles and career advancement</p>		
		Total

PROGRAMME – B.TECH FOOD PROCESSING & TECHNOLOGY

PROGRAM OBJECTIVE:

Prepares the students for specific job role in various sectors in food processing industries and Professional organization.

Semester- I			
S.No	Code	Subject Name	Credits
	CY101/PH102	Engineering Chemistry/ Engineering Physics	4
	MA105	Engineering Mathematics – I	4
	EC101/ EE102	Basic Electronics engineering/Basic Electrical Engineering	4
	CS101/ME101	Fundamentals of Computer Programming/ Engineering Mechanics	4
	BS101	Human Values & Buddhist	2

		Ethics	
	EN101	English Proficiency	2
PRACTICALS			
	CE103/ME102	Engineering Graphics/ Workshop Practice	
	CY 103/PH104	Engineering Chemistry Lab/engineering Physics Lab	
	CS 181/EN151	Computer Programming Lab/Language Lab	
	EC 181/EE104	Basic Electronics Lab/Basic Electrical Engineering Lab	
	GP	General Proficiency	
		Total Contact Hours	
Semester- II			
	PH102/ CY101	Engineering Physics/ Engineering Chemistry	4
	MA102	Engineering Mathematics – II	4
	EE102/ EC101	Basic Electrical Engineering/ Basic Electronics engineering/	4
	ME101/ CS101	Engineering Mechanics/ Fundamentals of Computer Programming	4
	FT 111	Introduction to food technology	2
Objectives: The course aims to introduce the students to the area of Food science and technology and the role of food processing for human welfare. This course will enable to understand the importance of food processing with respect to the producer, manufacturer and consumer.			
	ES101	Environmental studies	4
Objectives: Creating the awareness about environmental problems among people.			
	ME102/ CE103	Workshop Practice/ Engineering Graphics	2
PRACTICALS			
	EN151/ CS 181	Language Lab/ Computer Programming Lab	1
	PH104/CY 103	Engineering Physics Lab/ Engineering Chemistry Lab	1
	EE104/ EC 181	Basic Electrical Engineering Lab/ Basic Electronics Lab	1
	GP	General Proficiency	
Semester III			
	FT-201	Principles of Food Processing & Preservation	3
Objectives: To expose the students to the principles and methods of food processing and preservation			
	FT-203	Food Microbiology	3
Objectives: 1. To provide awareness about nutrition and growth of microorganisms.			

		2. To impart knowledge about role of microorganisms in air, water and soil. 3. To understand the role of microorganisms in fermented foods, food spoilage, food infections and intoxications.	
	ME-221	Mechanics of Engineering Materials and Solids	4
Objectives: To produce and analyze products, processes, or plant designs; to simulate and test how a machine, or food system operates			
		Generic Elective 1	3
	BT207	Introductory Bioinformatics	
	BT209	Biochemistry and Biotechnology	
Objectives: To Understand sciences of molecular biology, immune chemistry, with the development of new techniques			
	BT203	Fundamental of Biochemistry	
		Course offered by other school	
		Generic Elective 2	4
	MA201	Engineering Mathematics-III	
Objectives: To provide some statistical information related to mathematical modelling and calculation			
		Course offered by other school	
		Open Elective	3
PRACTICALS			
	FT-251	Food Microbiology Lab	2
		Generic Elective 3	3
		Laboratory-I: Cell biology, Microbiology and Biochemistry	
		Laboratory-II: Basic Bioinformatics Lab	
	GP	General Proficiency	0
		Total	26
Semester IV			
1.	FT-202	Food Chemistry and Nutrition	3
Objectives: 1. The course aims to develop the knowledge of students in the basic area of Food Chemistry. 2. This is necessary for effective understanding of food processing and technology subjects. 3. This course will enable students to appreciate the similarities and complexities of the chemical components in foods.			
2.	FT-204	Unit Operations in Food Processing	3
Objectives: 1. To impart knowledge of different unit operations of food industries like size reduction, evaporation, drying, fluid flow and food freezing. 2. To introduce the concept of material and energy balance as applied to food engineering systems.			

3.	ME-206	Fluid Mechanics	4
Objectives: enhancing the design process and understanding of the basic physical nature of fluid dynamics can provide benefits to the food processing industry in many areas, such as drying, sterilization, mixing, refrigeration and other application areas			
4.	EE-202	Measurement and Instrumentation	3
Objectives: To evaluation of food involves instrumentation and use. of physical and chemical techniques instead of variable human.			
5.	FT-206	Food Process Engineering	4
Objectives: 1. To understand the area of Foodengineering 2.To elaborate the basic concepts of material and energy balance, fluid dynamics, thermal process calculationsetc			
6.		Open Elective	3
PRACTICALS			
1.	FT-252	Food Chemistry Lab	2
2.	FT-254	Food Processing Lab	2
	EE-220	Measurement/ and InstrumentationLab	1
		Total	25
Semester- V			
1.	FT-301	Food Packaging	3
Objectives: 1.The course aims to develop the knowledge of students in the area of packaging of foods and the related technologyused. 2. This course will enable students to appreciate the application of scientific principles in the packaging offoods.			
2.	FT-303	Fruit and Vegetable Processing	3
Objectives: 1. The course aims to develop the knowledge of students in the area of vegetable and fruit processing andtechnology. 2.This course will enable students to appreciate the application of scientific principles in the processing of fruits andvegetables			
3.	FT-305	Advances in food process technology	3
Objectives: 1.The course aims to develop the knowledge of students in the area of emerging oralternative technologies applied to foodprocessing. 2.This course will enable students to understand the advantages and disadvantages over existingtechnologies.			
4.	ME-309	Heat and Mass transfer (HMT)	4
Objectives: Heat transfer in food processing is simultaneous heat and mass transfer in drying and frying , free convection heat transfer in thermal sterilization of cans, and phase change in freezing and thawing			
5.	FT-315	Analytical Techniques in Food Technology	3
Objectives: To enable the students to understand the principles and methods of advanced techniques in			

the analysis of foods			
		Generic Elective IV	
		Entrepreneurship Development	
Objectives: It plays a vital role in diversification and commercialization of agriculture, enhances shelf life, ensures value addition to agro products			
		Food Additives	
Objectives: the purpose of restoring nutrients lost or degraded during production, fortifying or enriching certain foods			
		Entrepreneurship Development in Agri-and Allied-Sectors	
Objectives: It plays a vital role in diversification and commercialization of agriculture, enhances shelf life, ensures value addition to agro products			
		Rural Management	
Objectives: A strong and dynamic food processing sector plays a vital role in reduction in the wastage of perishable agricultural produce			
PRACTICALS			
1.	FT-353	Food packaging and Food Quality Lab	
2.	FT-355	Fruit, Vegetable and Milk Products Processing Lab	2
3.		Total	
Semester- VI			
1.	FT- 302	Technology Of Cereals, Pulses And Oilseeds	3
Objectives: 1.The course aims to develop the knowledge of students in the area of pulse and oil seed processing and technology. 2. This is necessary for effective understanding specific aspects of food processing related to these foods. This course will enable students to appreciate the application of scientific principles in the processing of these materials.			
2.	FT- 304	Food Texture and Rheology	3
Objectives: 1. To understand the concepts of food rheology and food texture. 2. To depict rheological properties of foods and measuring methods.			
3.	FT-306	Plantation Products and Spices Technology	3
Objectives: 1.Coffee and its processing techniques, instant coffee, and quality grading 2.Different types of tea and its manufacturing techniques, instant tea, quality parameters of tea			
4.	ME-306	Refrigeration and Air conditioning	4
Objectives: The purpose of a refrigeration system is to make understanding cooling behavior of materials and products.			
5.		Discipline Specific Elective I	3
	FT310	Technology of Fats and Oils	
Objectives: 1.The course aims to develop the knowledge of students in the area of Fat and Oil processing and technology.			

		2.This is necessary for effective understanding specific aspects of food processing related to thesefoods. 3.This course will enable students to appreciate the application of scientific principles in the processing of thesematerials	
	FT308	Food Process EquipmentDesign	
	Objectives: To understand the construction requirements, process design, fabrication and installation of equipments and to enhance the knowledge in the design of food processingequipments.		
	FT317	Entrepreneurship Development in Agri-and Allied-Sectors	
6.		Discipline Specific Elective II	3
	FT312	Food Processing WasteManagement	
	Objectives: Toimpartknowledgeofwastesandby-products offoodprocessing,theireffectsonthequality ofenvironment,andmeasures tominimizetheproductionofwastesandfoodprocessingwaste management		
	FT314	Technology of FrozenFood	
	Objectives: 1.To understand the underlying principles of operation in different Refrigeration & cold storage systems and itscomponents. 2.To provide knowledge on design aspects of cold storagesystems		
	FT318	Rural Management	
	Objectives: A strong and dynamic food processing sector plays a vital role in reduction in the wastage of perishable agricultural produce		
PRACTICALS			
1.	FT- 352	Cereal and Pulse Processing Lab	2
2.	FT- 354	Food Engineering Lab	2
3.	FT-356	Seminar	2
	FT-316	Industry Visit/Academic Visit/Village Site Visit	1
Semester- VII			
	FT- 401	Bakery and Confectionary Technology	3
	Objectives: 1.Familiarizewiththecommercialmethodsofbakingbreadandrecentadvancesinbakeryindustry 2. Learn microbiological aspects of bakery products, sanitation and hygiene of bakingindustries.		
	FT-403	Food Storage Engineering	3
	Objectives: 1.The course aims to develop the knowledge of students in the area of Foodstorage 2.This is necessary for effective understanding specific aspects of foodstorage		
	FT- 405	Dairy process technology	3
	Objectives: Tointroducethestudentstodairyindustry,propertiesandprocessingofmilk,manufactureof dairy products, sanitation and effluent treatment in dairyindustry		
	FT- 407	Traditional and Fermented Foods	3

Objectives: 1.To understand the concept of basic fermentation processes and its control systemsetc. 2.To help students acquire a sound knowledge on diversities of foods, food habits and patterns in India with focus on traditionalfoods.			
	FT- 417	Food Safety, Quality and Regulation	3
Objectives: 1.To characterize different type of food hazards, physical, chemical and biological in the industry and food serviceestablishments 2.To help become skilled in systems for food safetysurveillance 3.To be aware of the regulatory and statutory bodies in India and theworld			
		Discipline Specific Elective III	3
	FT- 409	Food DehydrationTechnology	
Objectives: To explain the dehydration, drying curve, freeze-drying and equipments required for carrying out these operations.			
	FT411	Meat Fish Poultry ProcessingTechnology	
Objectives: 1.The course aims to develop the knowledge of students in the area of animal product processing andtechnology. 2.This course will enable students to appreciate the application of scientific principles in the processing of thesematerials.			
		Generic Elective	3
	FT 413	Functional Foods andNutraceuticals	
Objectives: 1.To understand the basic concepts of nutraceuticals and functionalfood. 2.To understand the role of nutraceuticals and functional food in human health.			
	FT415	FlavourTechnology	
Objectives: 1.To understand the flavour compounds involved in development offlavor 2.To understand the analytical techniques involved in flavoranalysis			
PRACTICALS			
	FT-451	Advance Food Processing Lab	4
	FT-453	*Training	2
	FT- 455	Project I	4
	GP	General Proficiency	0
		Total	31
Semester- VIII			
	FT-454	Project II	20
Objectives: The main objective of the dissertation work is to enhance practical and professional skills of the students thus providing an edge over others in finding desired professional roles and career advancement			
	MOOCS courses/	(Open elective) OE4	03

	Seminar/Workshop/ Research Ethics/ Area Specific case study		
Objectives: Students can choose according to their choice subjects and can also take other subject other than subjects			

PROGRAMME- POST GRADUATE DIPLOMA IN FOOD SAFETY AND QUALITY MANAGEMENT (FSQM)

PROGRAMME OBJECTIVE

To promote excellence in learners for managing quality and safety of food, using latest knowledge, national and international food laws and practices of Food quality management.

Semester- I			
1	FQD-401	Food Chemistry and Analysis	4
Objectives: 1.The course aims to develop the knowledge of students in the basic area of Food Chemistry. 2.This is necessary for effective understanding of food processing and technology subjects.			
2	FQD-403	Food Microbiology	4
Objectives: 1.To provide awareness about nutrition and growth ofmicroorganisms. 2. To impart knowledge about role of microorganisms in air, water andsoil. 3. To understand the role of microorganisms in fermented foods, food spoilage, food infections andintoxications.			
3	PGD-405	Food Laws and Standards	4
Objectives: 1.To characterize different type of food standard.			

4	FQD-409	Principles of Food Safety and Quality Management	4
Objectives: 1.To characterize different type of food hazards, physical, chemical and biological in the industry and food service establishments 2.To help become skilled in systems for food safety surveillance			
5	BS 101	Human Values & Buddhist Ethics	2
Objectives: To account of the moral prescriptions, norms and values of a community or group			
1	FQD-411	Food Microbiology Lab	4
2	FQD-413	Chemical Analysis and Quality Assurance	4
Semester II			
	FQD-402	Methods of Food analysis & Sampling	4
Objectives: to review the basic principles of the analytical procedures commonly used to analyze foods and to discuss their application			
	FQD-404	Food Safety and Quality Auditing	4
Objectives: To know about Audits, crucial component of maintaining food safety standards and certification			
	FQD-406	Seminar	1
Objectives: To make students how to deliver oral lectures and speech.			
	FQD-408	Industrial Visit/Academic Visit/Field Visit	2
Objectives: To know about actual problems in site areas and how to controlled			
	FQD-410	Project Work and Viva Voce	8
Objectives: To make them how to each student is required to carry out the work and submit the report individually.			

**PROGRAMME- POST GRADUATE DIPLOMA IN FOOD
SCIENCE & TECHNOLOGY (FST)**

PROGRAMME OBJECTIVE

To develop professionals/entrepreneurs well equipped with the wise understanding of new product developments, and self-life enhancement.