B.SC. DEGREE IN FOOD SCIENCE AND TECHNOLOGY
(B.Sc. FST)

Food Science & Technology is one of the rapidly developing areas of current industrial importance in Sri Lanka. It is a major contributor to the goods and services sector of the GDP. It is identified as one of the 10 thrust areas for support under the Human Resource Development project of the Ministry of Science & Technology. Industries leading to skill-intensive value addition, and involving small- and medium -scale entrepreneurs are recognized by the UNIDO for assistance in their programmes in Sri Lanka. Absence of intense value addition and post-harvest handling & preservation technologies have become a major constraint in making available the agricultural produce to the consumers, thus creating economic losses to the farmers. There are more than six research institutes in Sri Lanka engaged in research on processing of foods, and 120 large-scale industries and more than 300 medium small enterprises engaged in food processing. A degree programme in Food Science & Technology at the level of B.Sc. is a national necessity in producing graduates with fundamental knowledge and practical capabilities in Food Science & Technology to serve the industry, research sector and the academia.

Objectives of the Degree Programme

The objective of this programme is to produce graduates with a B.Sc. degree capable of handling the technical, supervisory, marketing and managerial functions of the food industry and take up research leading to product development. The course envisages in inculcating students with,

- Knowledge and understanding of scientific agro-processing concepts.
- Understanding of nutritional role of foods.
- Professional attitude and orientation.
- Technical and research skills and abilities.
- Personal, managerial and leadership characteristics.

Structure of the Degree Programme

The B.Sc. FST degree programme comprises more than 50% practical, and is aimed at learner-centered education with close links with the industry. This programme consists of 8 semesters of fulltime academic work with implant training and few industrial visits. The last semester is assigned for the research project preferably in the industry.

Semester	Notation	Courses and Credit Hours	Credits
1100	*English & Other Complementary Courses*		
	BFST 1101	Introduction to Food Science & Technology (2: 30/00)	14
	BFST 1102	Basic Science Practical (1: 00/30)	
	BFST 1103	Chemistry for Food Science (3: 45/00)	
	BFST 1104	Task Project (4: 00/120)	
	BFST 1105	Food Regulation & Food Quality Control (1: 15/00)	
	BFST 1106	Unit Operations in Food Processing (1: 15/00)	
	BFST 1107	Techniques in Research & Scientific Writing in Food Science (2: 20/20)	
1200	BFST 1201	Biochemistry (4: 45/30)	16
	BFST 1202	Food Sampling (1: 10/10)	
	BFST 1203	Food Chemistry (2: 27/06)	
	BFST 1204	Food Microbiology (2: 23/14)	
	BFST 1205	Food Preservation (2: 30/00)	
	BFST 1206	Food Sanitation (1: 15/00)	
	BFST 1207	Food Physics (2: 25/10)	
	AB 2201	Plant Physiology (2: 20/20/40)	

2100	BFST 2101	Food Analysis (4: 40/40)	18
	BFST 2102	Seminar in Food Science & Technology (1:3/24)	
	BFST 2103	Sensory Evaluation of Foods (1: 12/06)	
	BFST 2104	Applied Mechanics (2: 30/00)	
	BFST 2105	Principles of Human Nutrition (2: 30/00)	
	EB 2101	Principles of Economics (3: 40/10/40)	
	CS 2102	Handling of Products from Perennial, Field & Horticultural Crops (3: 30/3000)	
	AB 2111	Post harvest Biology (2: 15/30/25)	
2200	BFST 2201	Food & Nutrition (2: 30/00)	18 C: 9 O: 9
	BFST 2202	Kernal and Nut Products (1: 15/00) **OPTIONAL**	
	BFST 2203	Food Proteins and Hydrocolloids (1: 15/00) **OPTIONAL**	
	BFST 2204	Study Report on Market Foods or Processing Potential of an Agricultural Commodity (2:2/56)	
	BFST 2205	Food Safety (2: 28/04)	
	BFST 2206	Processing of Beverages (2: 30/00) **OPTIONAL**	
	BFST 2207	Edible Lipid Technology (1:15/00) **OPTIONAL**	
	BFST 2208	Chemistry and Technology of Essences & Flavors in Food (2:30/00) **OPTIONAL**	
	EX 2201	Principles of Human Behaviour (3: 40/10)	
	AE 3204	Energy and Waste Management (2: 20/20) **OPTIONAL**	
3100	BFST 3101	Post-harvest Technology of Fruits and Vegetables (2: 20/20)	20 C: 19 O: 01
	BFST 3102	Group Project (3: 00/45)	
	BFST3103	Food Packaging (1: 15/00)	
	BFST 3104	Food Process Engineering (2: 20/20)	
	BFST 3105	Food processing for Product Development (2: 30/00)	
	BFST 3106	Foods for the Future (1: 15/00) **OPTIONAL**	
	AB 3101	Insect Pests of Crops (2: 15/30)	
	AB 4114	Post-harvest Pathology (1: 10/10)	
	EB 3101	Business Creation and Management (2: /30/35)	
	AS 3101	Animal Products Processing Technology (2:15/30)	
	CS 3102	Statistical Methods I (2: 30/00/15)	

3200	BFST 3201	Practical in Product Development (2:00/60)	22 C: 14 O: 08
	BFST3202	Applied Human Nutrition (1: 15/00)	
	BFST 3203	Seafood Processing (2: 25/10) **OPTIONAL**	
	BFST 3204	Industrial Visit (1: 00/30)	
	BFST 3205	Grain and Starch Products Technology (2:30/00) **OPTIONAL**	
	AB 3211	Recombinant DNA Technology (2: 20/20) **OPTIONAL**	
	AE 3201	Post-harvest Technology (2: 21/18)	
	AE 3202	Thermodynamics (2: 30/00)	
	EB 3201	Project Analysis (1: 10/10/20)	
	EB 3204	Marketing Management (2:20/20/40)	
	EB 3205	Agricultural Marketing (2: 30/00/50) **OPTIONAL**	
	CS 3201	Design and Analysis of Experiments (2: 30/00/15)	
	EX 2202	Career Development (1: 10/10)	
4100	BFST 4101	Review on Modern Food Technology (2: 00/60)	22 C: 12 O: 10
	BFST 4102	Processing of Milk and Milk Products (2: 20/20)	
	BFST 4103	Production & Marketing Operations in Food Manufacturing Organizations (1:15/00) **OPTIONAL**	
	BFST 4104	Design of a Food Processing Factory (2: 00/60)	
	BFST 4105	Food Biotechnology (1: 15/00) **OPTIONAL**	
	BFST 4106	Experimental Biochemistry (2: 20/20) **OPTIONAL**	
	AS 4101	Meat, Fish & Egg Product Technology (2: 25/10)	
	CS 4103	Statistical Methods II (2: 30/00/15)	
	EB 4106	Entrepreneurship (2: 25/10/45) **OPTIONAL**	
	EB 4108	International Agribusiness (2: 25/10/45) **OPTIONAL**	
	EB 4109	Advanced Project Analysis (2: 30/00/50) **OPTIONAL**	
	EX 4102	Human Resource Management (2: 24/12)	
4200	BFST 4201	Research Project	8

C = Compulsory courses, O = Optional courses