

# **STRUCTURE OF THE SYLLABUS FOR 4 YEAR UG PROGRAMME**

## **ROYAL SCHOOL OF BIO SCIENCES**

### **B.Sc. Food Technology(Honours/Honours with Research)**

<b>1<sup>st</sup> SEMESTER</b>			
<b>COMPONENT</b>	<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDIT</b>
Major (Core)	FTC152M101	Principles of Food Processing and Preservation	3
	FTC152M111	Practical on Principles of Food Processing and Preservation	3
Minor	FTC152N101	Basic Food Science	3
IKS	IKS 1	IKS I (Introduction to Indian Knowledge System- I)	3
Ability Enhancement course (AEC)	AEC982A101	Communicative English	1
	BHS982A102	Behavioral Science –I	1
Skill Enhancement Course (SEC)	FTC152S111	Fruits and Vegetables Processing	3
Value Added Course (VAC)	VAC 1	Basket Course	3
*Swayam/MOOCs	Swayam/MOOCs 1	*Swayam/MOOCs course will be identified by the dept. from the list of courses available on the MOOCs/Swayam portal	3
<b>TOTAL CREDIT FOR 1<sup>st</sup> SEMESTER</b>			<b>23</b>
<b>2<sup>nd</sup> SEMESTER</b>			
<b>COMPONENT</b>	<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDIT</b>
Major (Core)	FTC152M201	Fruits and Vegetables Product Technology	3
	FTC152M211	Practical on Fruits and Vegetables Product Technology	3
Minor	FTC152N201	Food Microbiology	3
IKS	IKS	IKS II (Introduction to Indian Knowledge System- II)	3
AEC	AEC982A201	Communicative English	1
	BHS982A202	Behavioral Science –II	1
SEC	FTC152S211	Waste and By-product Utilization	3
VAC	VAC 2	Basket Course	3
*Swayam/MOOCs	Swayam/MOOCs 1	*Swayam/MOOCs course will be identified by the dept. from the list of courses available on the MOOCs/Swayam portal	3
<b>TOTAL CREDIT FOR 2<sup>nd</sup> SEMESTER</b>			<b>23</b>

COMPONENT	COURSE CODE	COURSE TITLE	CREDIT
Major (Core)	FTC152M301	Food Chemistry	4
	FTC152M311	Practical on Food Chemistry	4
Minor	FTC152N301	Food Ingredients and Additives	4
IDC	IDC 3	Basic Food Processing	3
AEC	AEC982A301	Communicative English	1
	BHS982A302	Behavioral Science –III	1
SEC	FTC152S311	Basic techniques in bakery	3
*Swayam/MOOCs	Swayam/MOOCs 1	*Swayam/MOOCs course will be identified by the dept. from the list of courses available on the MOOCs/Swayam portal	3
			<b>23</b>
<b>3<sup>rd</sup> SEMESTER</b>			
COMPONENT	COURSE CODE	COURSE TITLE	CREDIT
Major (Core)	FTC152M401	Cereals, Pulses and Oilseeds Product Technology	4
	FTC152M402	Traditional Knowledge of Indian Foods	4
	FTC152M411	Practical Cereals, Pulses and Oilseeds Product Technology and Traditional Knowledge of Indian Foods	4
Minor	FTC152N401	Food Product Development	3
	FTC152N402	Sugar Confectionary and Chocolate Processing	3
AEC	AEC982A401	Communicative English	1
	BHS982A402	Behavioral Science –IV	1
*Swayam/MOOCs	Swayam/MOOCs 1	*Swayam/MOOCs course will be identified by the dept. from the list of courses available on the MOOCs/Swayam portal	3
<b>TOTAL CREDIT FOR 4<sup>th</sup> SEMESTER</b>			<b>23</b>
<b>5<sup>th</sup> SEMESTER</b>			
COMPONENT	COURSE CODE	COURSE TITLE	CREDIT
Major (Core)	FTC152M501	Dairy Technology	4
	FTC152M502	Animal Product Technology	4
	FTC152M511	Practical on Dairy and Animal Product Technology	4
Minor	FTC152N501	Basic of Food Processing and Preservation	4
Internship	FTC152M521	Internship	4
<b>TOTAL CREDIT FOR 5<sup>th</sup> SEMESTER</b>			<b>20</b>
<b>6<sup>th</sup> SEMESTER</b>			

COMPONENT	COURSE CODE	COURSE TITLE	CREDIT	
Major (Core)	FTC152M601	Unit Operations in food processing	4	
	FTC152M602	Food Packaging Technology	4	
	FTC152M603	Food Safety and Quality Management	4	
	FTC152M611	Practical on Unit operation, packaging and quality management	4	
Minor	FTC152N601	Extrusion Technology	4	
TOTAL CREDIT FOR 6 <sup>th</sup> SEMESTER			20	
7 <sup>th</sup> SEMESTER				
COMPONENT	COURSE CODE	COURSE TITLE	CREDIT	
Major (Core)	FTC152M701	Food Plant Sanitation	4	
	FTC152M702	Concepts of Food Engineering	4	
	FTC152M703	Fermentation Technology	4	
	FTC152M711	Practical on Food Plant Sanitation and Fermentation Technology	4	
Minor	FTC152N701	Food Business Management	4	
TOTAL CREDIT FOR 7 <sup>th</sup> SEMESTER			20	
8 <sup>th</sup> SEMESTER				
COMPONENT	COURSE CODE	COURSE TITLE	LEVEL	CREDIT
Major (Core)	FTC152M801	Nutraceutical and Functional Foods		4
Minor	FTC152N801	Research Methodology		4
Project / Dissertation	FTC152M821	Research Project OR		12
	FTC152M802	Food Quality and Sensory Evaluation		4
	FTC152M803	Food Adulteration and Additives		4
	FTC152M804	Technology of Spices, Condiments and Plantation Crops		4
TOTAL CREDIT FOR 8 <sup>th</sup> SEMESTER				20

# **STRUCTURE OF THE SYLLABUS FOR 2 YEAR PG PROGRAMME**

## **ROYAL SCHOOL OF BIO SCIENCES**

### **M.Sc. Food Technology**

1 <sup>st</sup> SEMESTER			
COURSE CODE	COURSE TITLE		CREDIT
FTC154C101	Food Biochemistry and Nutrition		4
FTC154C102	Food Preservation and Processing		4
FTC154C103	Food Microbiology		4
FTC154C104	Cereals, Legumes and Oilseeds Processing Technology		4
FTC154C115	Practical on Biochemistry and Nutrition		4
TOTAL CREDIT FOR 1 <sup>st</sup> SEMESTER			20
2 <sup>nd</sup> SEMESTER			
COURSE CODE	COURSE TITLE		CREDIT
FTC154C201	Spices and Plantation Crop Technology		4
FTC154C202	Instrumental Techniques in Food Analysis		4
FTC154C203	Food Safety, Quality Control, and Management Systems		4
FTC154C204	Meat, Poultry, Freshwater, and Marine Food Technology		4
FTC154C215	Practical on Spices and Plantation Crop Technology		4
TOTAL CREDIT FOR 2 <sup>nd</sup> SEMESTER			20
TOTAL CREDIT FOR 1 <sup>st</sup> YEAR = 40			
3 <sup>rd</sup> SEMESTER			
COURSE CODE	COURSE TITLE		CREDIT
FTC154C301	Food Plant Design and Layout		4
FTC154C302	Research Methodology and Statistics		4
FTC154C303	Nutraceuticals and Health Foods		4
FTC154C314	Practical on Food Plant Design and Layout		4
FTC154C315	Practical on Research Methodology and Statistics		4
TOTAL CREDIT FOR 3 <sup>rd</sup> SEMESTER			20
OR 3 <sup>rd</sup> SEMESTER (For students with 3 <sup>rd</sup> and 4 <sup>th</sup> Semester Research)			
FTC154C321	RESEARCH PROJECT – PHASE I	500	20
4 <sup>th</sup> SEMESTER			
COURSE CODE	COURSE TITLE		CREDIT
FTC154C421	Dissertation (Students with research in 4 <sup>th</sup> Sem)		20
(for ‘coursework only’ in lieu of Research)			
FTC154C401	Food Additives, Adulteration, and Toxicology		4

FTC154C402	Recent Trends in Food Product Development	4
FTC154C421	Dissertation-2 [One year PG (coursework + research)]	12
<b>TOTAL CREDIT FOR 4<sup>th</sup> SEMESTER = 20</b>		
<b>OR 4<sup>th</sup> SEMESTER</b> <b>(For students with 3<sup>rd</sup> and 4<sup>th</sup> semester Research)</b>		
FTC154C421	RESEARCH PROJECT -PHASE 2	20
<b>TOTAL CREDIT FOR 2<sup>nd</sup> YEAR = 40</b>		