

Name of the Programme: B.Tech Food Processing Technology

Programme Type (UG/PG): UG Duration: 04Years

First Year - Semester I

Course Category	Course Code	Course Title	Nature of Course	No. of Credits	Teaching (Contact hrs/ week)		Evaluation Scheme (Marks)			Minimum Passing (Marks)		
					L	P	Internal	External	Total	Internal	External	Total
BSC	BFT42BSL101	Introduction to Food Science And Nutrition	Lecture	2	2	-	60	40	100	-	16	40
BSC	BFT42BSL102	Biology Concept, Connection, Innovation And Application	Lecture	2	2	-	60	40	100	-	16	40
ESC	BFT42ESL101	Food Engineering-I	Lecture	3	2	-	60	40	100	-	16	40
ESC	BFT42ESL102	Chemistry of Food	Lecture	3	2	-	60	40	100	-	16	40
AEC	MGM54AEL101	Communicative English	Lecture	2	2	-	30	20	50	-	8	20
VSEC*	BFT42VSP101	Food Industry Lab	Practical	2	-	4	30	20	50	-	8	20
BSC	BFT42BSP101	Food Science Lab	Practical	2	-	4	30	20	50	-	8	20
ESC	BFT42ESP101	Food Engineering Lab	Practical	2	-	4	30	20	50	-	8	20
ESC	BFT42ESP102	Food Chemistry Lab	Practical	2	-	4	30	20	50	-	8	20
CCA	MGM82CCP101 MGM82CCP102 MGM82CCP103	NCC /Yoga /Sports	Practical	2	-	4	50	-	50	20	-	20
Total				22	10	20	440	260	700	-	-	-

Nature of Course: L- Lecture, P-Practical, S-Seminar, J-Project, I-Internship, D-Dissertation,

Course Category: PCC-Program Core Course, PEC-Program Elective Course, MDM-Multidisciplinary Minor, OE-Open Elective, EEMC-Entrepreneurship/Economic/Management Course, VSEC-Vocational Skill and Skill Enhancement Course, AEC-Ability Enhancement Course, IKS-Indian Knowledge System, VEC-Value Education Course, OJT-On Job Training / Internship / Apprenticeship, FP-Field Project, CEP-Community Engagement and Service, CC-Co curricular course, RM-Research Methodology, RP-Research Project, HSSM- Humanities, Social Science and Management

First Year - Semester II

Course Category	Course Code	Course Title	Nature of Course	No. of Credits	Teaching (Contact hrs/ week)		Evaluation Scheme (Marks)			Minimum Passing (Marks)		
					L	P	Internal	External	Total	Internal	External	Total
BSC	BFT42BSL103	Fundamentals of Food Technology & Microbiology	Lecture	2	2	-	60	40	100	-	16	40
BSC	BFT42BSL104	Post-Harvest Management of Fruits and Vegetables Commodities	Lecture	2	2	-	60	40	100	-	16	40
ESC	BFT42ESL103	Food Engineering– II	Lecture	2	2	-	60	40	100	-	16	40
ESC	BFT42ESL104	Numerical and Computational Fundamentals-I	Lecture	2	2	-	60	40	100	-	16	40
PCC	BFT42PCL101	Principles of Food Processing	Lecture	2	2	-	60	40	100	-	16	40
VSEC*	BFT42VSP102	Food Industry Lab	Practical	2	-	4	30	20	50	-	8	20
ESC	BFT42ESP103	Engineering of Food Lab	Practical	2	-	4	30	20	50	-	8	20
BSC	BFT42BSP102	Graphics and Product Designing Lab	Practical	2	-	4	30	20	50	-	8	20
BSC	BFT42BSP103	Microbiology of Food Lab	Practical	2	-	4	30	20	50	-	8	20
CCA	MGM85CCP107 MGM82CCP104 MGM73CCP105 MGM73CCP106	Cultural Activities/NSS/Fine Art/ Visual Art	Practical	2	-	4	50	-	50	20	-	20
IKS	APS21IKL101	Indian Knowledge System	Lecture	2	2	-	60	40	100	-	16	40
Total				22	12	20	530	320	850	-	-	-

Name of the Programme: B. Tech. Food Processing Technology with Multidisciplinary Minor

Programme Type: UG

Duration: 04 Years

Note: All Students will have to choose one Multidisciplinary Minor from the different disciplines of the engineering faculty or it can be different faculty all together. List of Multidisciplinary Minor courses is given in Annexure A

Students who are eligible (having **CGPA ≥ 7.5** at first year) can opt for Honors degree, where they will have to take 5 to 6 additional courses of 18-20 credits in the same engineering / Technology discipline, distributed over semester 3rd to 8th . List of Honor Courses is given in Annexure B.

Students who are eligible (having **CGPA ≥ 7.5** at first year) can opt for Specialization Minor, where they take 5 to 6 additional courses of 18-20 credits in another engineering / Technology discipline / Emerging area specialization distributed over semester 3rd to 8th . List of Specialization Minor Courses is given in Annexure C.

The maximum number of credits earned by the student should not exceed 194

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Second Year - Semester III

Course Category	Course Code	Course Title	Nature of Course	No. of Credits	Teaching (Contact hrs/ week)		Evaluation Scheme (Marks)			Minimum Passing (Marks)		
					L	P	Internal	External	Total	Internal	External	Total
PCC	BFT42PCL201	Food Engineering-III	Lecture	3	3	-	60	40	100	-	16	40
PCC	BFT42PCL202	Fundamentals of Fresh Produce and Preservation	Lecture	3	3	-	60	40	100	-	16	40
PCC	BFT42PCL203	Numerical and Computational Fundamentals-II	Lecture	2	2	-	60	40	100	-	16	40
MDM		Refer MDM Basket (Annexure A)	Lecture	2	2	-	60	40	100	-	16	40
OE	OE-1	Refer MGMU Basket of Open Electives	Lecture	2	2	-	30	20	50	-	8	20
OE	OE-2	Refer MGMU Basket of Open Electives	Lecture	2	2	-	30	20	50	-	8	20
EEMC	BFT42HSL201	Entrepreneurship Management-I	Lecture	2	2	-	60	40	100	-	16	40
VEC	MGM56VEL10 2	Constitution of India	Lecture	2	2	-	30	20	50	-	8	20
CEP/ FP	BFT42FPJ201	Field Project	Project	2	-	4	50	-	50	20	-	20
PCC	BFT42PCP201	Food Lab	Practical 1	2	-	4	30	20	50	-	8	20
Total				22	18	8	470	280	750	-	-	-

Honor (Please refer the Annexure B.)

Specialization Minor (Please refer the Annexure C.)

Honors with Research (Please refer the Annexure D.)

Second Year - Semester IV

Course Category	Course Code	Course Title	Nature of Course	No. of Credits	Teaching (Contact hrs/ week)		Evaluation Scheme (Marks)			Minimum Passing (Marks)		
					L	P	Internal	External	Total	Internal	External	Total
PCC	BFT42PCL204	Food Preservation, Energy Generation and Conservation	Lecture	2	2	-	60	40	100	-	16	40
PCC	BFT42PCL205	Food Quality Assurance, HACCP and Hygiene	Lecture	2	2	-	60	40	100	-	16	40
PCC	BFT42PCL206	Numerical And Computational Fundamentals-III	Lecture	2	2	-	60	40	100	-	16	40
MDM		Refer MDM Basket (Annexure A)	Lecture	2	2	-	60	40	100	-	16	40
OE	OE-3	Refer MGMU Basket of Open Electives	Lecture	2	2	-	30	20	50	-	8	20
AEC	MGM54AEL103	Refer MGMU Basket of AEC	Lecture	2	2	-	30	20	50	-	8	20
VSEC	BFT42VSP201	Mini Project	Project	2	-	4	60	40	100	-	16	40
EEMC	BFT42HSL202	Entrepreneurship Management-II	Lecture	2	2	-	60	40	100	-	16	40
VEC	MGM21VEL101	Environmental studies	Lecture	2	2	-	30	20	50	-	8	20
PCC	BFT42PCP203	Food Quality Lab	Practical	2	-	4	30	20	50	-	8	20
Total				20	16	8	480	320	800	-	-	-

Honor (**Please refer the Annexure B.**)

Specialization Minor (Please refer the Annexure C.)

Honors with Research (Please refer the Annexure D.)

Third Year - Semester V

Course Category	Course Code	Course Title	Nature of Course	No. of Credits	Teaching (Contact hrs/week)		Evaluation Scheme (Marks)			Minimum Passing (Marks)		
					L	P	Internal	External	Total	Internal	External	Total
PCC	BFT42PCL301	Cereals, Legumes, Pulses And Oilseeds Processing Technology	Lecture	3	3	-	60	40	100	-	16	40
PCC	BFT42 PCL 302	Food Defense And Sustainability	Lecture	3	3	-	60	40	100	-	16	40
PCC	BFT42 PCL 303	Numerical And Computational Fundamentals-IV	Lecture	2	2	-	60	40	100	-	16	40
PEC	BFT42PEL301	Confectionary and Snacks Technology	Lecture	2	2	-	60	40	100	-	16	40
PEC	BFT42PEP301	Confectionary and Snacks Lab	Practical	2		4	30	20	50	-	8	20
MDM		Refer MDM Basket (Annexure A)	Lecture	4	4	-	60	40	100	-	16	40
OE	OE-4	Refer MGMU Basket of Open Electives	Lecture	2	2	-	30	20	50	-	8	20
PCC	BFT42 PCP301	Food Lab	Practical	2	-	4	30	20	50	-	8	20
PCC	BFT42 PCP302	Food Processing Lab	Practical	2	-	4	30	20	50	-	8	20
		Total		22	16	12	420	280	700	-	-	-

Honor (**Please refer the Annexure B.**)

Specialization Minor (Please refer the Annexure C.)

Honors with Research (Please refer the Annexure D.)

Third Year - Semester VI

Course Category	Course Code	Course Title	Nature of Course	No. of Credits	Teaching (Contact hrs/week)		Evaluation Scheme (Marks)			Minimum Passing (Marks)		
					L	P	Internal	External	Total	Internal	External	Total
PCC	BFT42PCL304	Fruits, Vegetables, Spices And Plantation Crop Processing Technology	Lecture	2	2	-	60	40	100	-	16	40
PCC	BFT42PCL305	Food Law Ethics And CSR	Lecture	2	2	-	60	40	100	-	16	40
PCC	BFT42PCL306	Food Rheology, Texture and Sensory Science	Lecture	2	2	-	60	40	100	-	16	40
PEC	BFT42PEL302	Instrumentation and Process Control	Lecture	3	3	-	60	40	100	-	16	40
PEC	BFT42PEL303	Food Processing Equipment Design	Lecture	3	3	-	60	40	100	-	16	40
PEC	BFT42PEP302	Food Instrumentation and Equipment Design Lab	Practical	2	-	4	30	20	50	-	8	20
MDM		Refer MDM Basket (Annexure A)	Lecture	2	2	-	60	40	100	-	16	40
VSEC	BFT42VSP301	Mini Project	Project	2	-	4	60	40	100	-	16	40
PCC	BFT42PCP303	Seminar	Practical	2	-	4	30	20	50	-	8	20
PCC	BFT42PCP304	Processing And Evaluation Lab	Practical	2	-	4	30	20	50	-	8	20
Total				22	14	16	510	340	850	-	-	-

Honor (Please refer the Annexure B.)

Specialization Minor (Please refer the Annexure C.)

Honors with Research (Please refer the Annexure D.)

Students who are eligible (having CGPA ≥ 7.5 at Third year) can opt for Honors with Research degree, where the students will have to work on a research project or dissertation for 18 credits in the fourth year in the same engineering / Technology discipline, distributed over semester 7th and 8th .

List of Honors with Research Courses is given in Annexure D.

Fourth Year (Semester VII)												
Course Category	Course Code	Course Title	Nature of Course	No. of Credits	Teaching period per week (Hrs /week)		Evaluation Scheme (Marks)			Minimum Passing (Marks)		
					L	P	Internal	External	Total	Internal	External	Total
PCC	BFT42PCL401	Bakery, Confectionary, snacks, and Beverage Processing Technology	Lecture	3	3	-	60	40	100	-	16	40
PCC	BFT42PCL402	Food defense and sustainability	Lecture	3	3	-	60	40	100	-	16	40
Program Elective - IV												
PEC	BFT42PEL401/ BFT42PEL402	Food Packaging Technology Food Plant Sanitation	Lecture	2	2	-	60	40	100	-	16	40
MDM		Refer MDM Basket (Annexure A)	Lecture	2	2	-	60	40	100	-	16	40
OJT	BFT42JTI401	Internship/ On Job Training	Internship	12	-	24	90	60	150	-	20	60
Total				22	10	24	330	220	550	-	-	-

For Honor course (Please refer the Annexure B.)

For Specialization Minor course (Please refer the Annexure C.)

For Honors with Research (Please refer the Annexure D.)

Fourth Year (Semester VIII)

Course Category	Course Code	Course Title	Nature of Course	No. of Credits	Teaching period per week (Hrs /week)		Evaluation Scheme (Marks)			Minimum Passing (Marks)		
					L	P	Internal	External	Total	Internal	External	Total
PCC	BFT42PCL403	Nutraceutical and Functional Food	Lecture	3	3	-	60	40	100	-	16	40
PCC	BFT42PCP404	Food Fermentation	Practical	1	-	2	30	20	50	-	8	20
Program Elective - V												
PEC	BFT 42PEL403/ BFT PEL404	Program Elective Course: Food Industry	Lecture	3	3	-	60	40	100	-	16	40
PEC	BFT 42PEL405/ BFT 42PEL406	Program Elective Course Food Industry	Practical	3	-	6	60	40	100	-	16	40
RM	BFT 42RML401	Research Methodology I	Lecture	2	2	-	60	40	100	-	16	40
RM	BFT 42RMP402	Research Methodology II	Practical	2	-	4	30	20	50	-	8	20
RP	BFT 42RPJ401	Project	Project	4	-	8	60	40	100	-	16	40
MDM		Refer MDM Basket (Annexure A)	Lecture	2	2	-	60	40	100	-	16	40
		Total		20	10	20	420	280	700	-	-	-

For Honor course (**Please refer the Annexure B.**)

For Specialization Minor course (Please refer the Annexure C.)

For Honors with Research (Please refer the Annexure D.)

Exit Options after FY

One Year UG certificate in (Food Processing Technology)

Course Category	Course Code	Course Title	Nature of Course	No of Credits	Teaching (Contact hrs/ week)		Evaluation Scheme (Marks)			Minimum Passing (Marks)		
					L	P	Internal	External	Total	Internal	External	Total
Internship/OJT	BFT42JTI101	In-Plant Training (8 weeks)	Internship	8	-	16	60	40	100	-	16	40
		Total		8	-	16	60	40	100	-	-	-

Exit Options after SY

UG Diploma Food Processing Technology.

Course Category	Course Code	Course Title	Nature of Course	No of Credits	Teaching (Contact hrs/ week)		Evaluation Scheme (Marks)			Minimum Passing (Marks)		
					L	P	Internal	External	Total	Internal	External	Total
Project	BFT42JTI201	Mini Project (8 weeks)	Project	8	-	16	60	40	100	-	16	40
		Total		8	-	16	60	40	100	-	-	-

Exit Options after TY

B. Voc in Food Processing Technology

Course Category	Course Code	Course Title	Nature of Course	No of Credits	Teaching (Contact hrs/ week)		Evaluation Scheme (Marks)			Minimum Passing (Marks)		
					L	P	Internal	External	Total	Internal	External	Total
Internship/OJT	BFT42JTI301	In-Plant Training (8 weeks)	Internship	6	-	16	60	40	100	-	16	40
		Total		6	-	16	60	40	100	-	-	-