

MGM University, Aurangabad – 431003

Approved Program Structure

Name of the College/Institute: Institute of Biosciences & Technology

Faculty of Basic & Applied Science

Name of the Program: B.Sc.(Hons) Food Technology & Processing

Approved by the Board of Studies on _____

Intake: 40 students

Program Approved vide Academic Council Meeting dt _____

Item No. -----

Program Type: UG Program

Duration: 8 Semesters

Curriculum Code: BT (this code will change when you change the Curriculum)

Eligibility: HSC Science of 10+2 equivalent program

Proposed Fees: Rs. 65,000/

Semester I

Course code*	Course Title	Type	Teaching Scheme			Evaluation Scheme						Minimum Passing						Credit		
						Internal			External			Total	Internal			External			Total	
						CA	MSE	TW	ESE	PR	CA		MSE	TW	ESE	PR				
	(Mandatory)		L	T	P	CA	MSE	TW	ESE	PR	Total	CA	MSE	TW	ESE	PR	Total			
BFT-111	English Communication Essentials	Audit	{2}	-	-	10	20	10	60	-	100	-	-	-	24	-	40	Audit		
BFT-112	Food chemistry-I	Minor	3	-	-	20	20	20	90	-	150	-	-	-	36	-	60	3		
BFT-113	Food Defence & Sustainability	Core	2	-	-	10	20	10	60	-	100	-	-	-	24	-	40	2		
BFT-114	Basic Food Engineering (Heat & Mass Transfer, Unit operation for food process)-I	Core	3	-	-	20	20	20	90	-	150	-	-	-	36	-	60	3		
BFT-115	Introduction to Food Science	Minor	2	-	-	10	20	10	60	-	100	-	-	-	24	-	40	2		
BFT-116	Physics for Food	Minor	-	2	-	20	10	10	60	-	100	-	-	-	24	-	40	2		
UGL-01	Key Skills in food & Nutritional Science	Core		-	6	20	25	15	90	60	150	-	-	-	36	24	60	3		
UGL-02	Sensory Evaluation of food	Core		-	6	20	25	15	90	60	150	-	-	-	36	24	60	3		
UGL-03	Micro Project-I	BRP	-	-	4	10	20	10	60	40	100	-	-	-	24	16	40	2		
UNC-01	Gandhian Thoughts	Audit	{2}	-	-	10	20	10	60	-	100	-	-	-	24	-	40	Audit		
UNC-02	Universal Human Values	Audit	{1}	-		10	10	-	30	0	50	-	-	-	12	0	20	Audit		
	Total		10{5}	2	16	110	140	90	750	160	1250							20		

Semester II

Course code*	Course Title	Type	Teaching Scheme			Evaluation Scheme						Minimum Passing						Credit
						Internal			External			Total	Internal			External		
			L	T	P	CA	MSE	TW	ESE	PR	CA		MSE	TW	ESE	PR		
	(Mandatory)																	
BFT-121	Basic Food Engineering (Heat & Mass Transfer, Unit operation for food process)-II	Minor	3	-	-	20	20	20	90	-	150	-	-	-	36	-	60	3
BFT-122	Food chemistry-II	Core	2	-	-	10	20	10	60	-	100	-	-	-	24	-	40	2
BFT-123	Introduction to human physiology & Nutrition	Core	3	-	-	20	20	20	90	-	150	-	-	-	36	-	60	3
BFT-124	Nutraceutical and Functional foods	Core	2	-	-	10	20	10	60	-	100	-	-	-	24	-	40	2
BFT-125	Food Engineering	Minor	2	-	-	10	20	10	60	-	100	-	-	-	24	-	40	2
BFT-126	Numerical & Fundametnals of Computer	Minor	2	0	-	10	20	10	60	-	100	-	-	-	24	-	40	2
UGL-01	Microbiological safety & Chemical Analysis of food	Core	-	-	6	20	25	15	90	60	150	-	-	-	36	24	60	3
UGL-02	Food Quality Labelling & Composition	Core	-	-	6	20	25	15	90	60	150	-	-	-	36	24	60	3
UGL-03	Micro Project-II	BRP	-	-	4	10	20	10	60	40	100	-	-	-	24	16	40	2
UNC-01	Communication skills	Audit	{2}	-	-	10	20	10	60	-	100	-	-	-	24	-	40	Audit
	Total		14(2)	0	16	90	140	90	720	160	1200							22

Semester III

Course code*	Course Title	Type	Teaching Scheme			Evaluation Scheme						Minimum Passing						Credit
						Internal			External			Internal			External			
			L	T	P	CA	MSE	TW	ESE	PR	Total	CA	MSE	TW	ESE	PR	Total	
	(Mandatory)																	
BFT-231	Nutrition (Macro & Micro Nutrients)	Core	3	-	-	20	20	20	90	-	150	-	-	-	36	-	60	3
BFT-232	Fundamentals of Food Development & Formulation	Minor	3	-	-	20	20	20	90	-	150	-	-	-	36	-	60	3
BFT-233	Food Manufacturing & Processing	Core	3	-	-	20	20	20	90	-	150	-	-	-	36	-	60	3
BFT-234	Cereals, Legume, Pulses & oil seed Technology	Minor	3	-	-	20	20	20	90	-	150	-	-	-	36	-	60	3
BFT-236	Seminar (Subject Base Seminar)	SBS	0	0	1	0	0	0	30	20	50	-	-	-	12	8	20	1
UGL-01	Experiment Design & Analysis	Core	-	-	6	20	25	15	90	60	150	-	-	-	36	24	60	3
UGL-02	Sustainable Food Production	Core	-	-	4	10	20	10	60	40	100	-	-	-	24	16	40	2
UGL-03	Technique Intergration in the agriculture food supply chain	Core	-	-	4	10	20	10	60	40	100	-	-	-	24	16	40	2
UGL-03	Mini Project	BRP	-	-	6	20	25	15	90	60	150	-	-	-	36	24	60	3
UNC-01	Environmental Studies	Audit	-	-	2	-	-	-	30	20	50	-	-	-	12	8	20	Audit
UNC-02	Gandhian Studies	Audit	-	-	2	-	-	-	30	20	50	-	-	-	12	8	20	Audit
	Total		8(4)	2	25	60	100	40	690	160	1150							23

Semester IV

Course code*	Course Title	Type	Teaching Scheme			Evaluation Scheme						Minimum Passing						Credit
						Internal			External			Total	Internal			External		
			L	T	P	CA	MSE	TW	ESE	PR	CA		MSE	TW	ESE	PR		
	(Mandatory)																	
BFT-241	Exponential Technologies in food science	Minor	3	-	-	20	20	20	90	-	150	-	-	-	36	-	60	3
BFT-242	Food Microbiology	Minor	4	-	-	25	25	30	120	-	200	-	-	-	48	-	80	4
BFT-243	Bakery, Confectionary, Snacks & Beverage Processing Technology	Core	3	-	-	20	20	20	90	-	150	-	-	-	36	-	60	3
BFT-244	Fruits, vegetables, spices & Plantation crop processing Technology	Core	3	-	-	20	20	20	90	-	150	-	-	-	36	-	60	3
BFT-245	Academic Tutorials-IV	AT	-	2	-	10	20	10	60	-	100	-	-	-	24	-	40	2
UGL-01	Food Microbiology Lab.	Core	-	-	6	20	25	15	90	60	150	-	-	-	36	24	60	3
UGL-02	Basic food product development	Core	-	-	6	20	25	15	90	60	150	-	-	-	36	24	60	3
UGL-03	Mini Project	BRP	-	-	6	20	25	15	90	60	150	-	-	-	36	24	60	3
BFT-246	Seminar (Subject Base Seminar)	SBS	0	0	1	0	0	0	30	20	50	-	-	-	12	8	20	1
	Total		11	2	19	90	100	70	690	200	1150							23

Semester V

Course code*	Course Title	Type	Teaching Scheme			Evaluation Scheme						Minimum Passing						Credit
						Internal			External			Total	Internal			External		
			L	T	P	CA	MSE	TW	ESE	PR	CA		MSE	TW	ESE	PR		
(Mandatory)																		
BFT-351	Food law,Ethics & cooperate social responsibilities	Core	2	-	-	20	20	-	60	-	100	-	-	-	24	-	40	2
BFT-352	Milk, Meat, Poultry, sea food & Fish Processing Technology	Minor	2	-	-	20	20	-	60	-	100	-	-	-	24	-	40	2
BFT-353	Innovation & Design Principles for food	Core	2	-	-	20	20	-	60	-	100	-	-	-	24	-	40	2
BFT-354	Future Food	Core	2	-	-	20	20	-	60	-	100	-	-	-	24	-	40	2
BFT-355	Academic Tutorial-V	AT	-	2	-	10	20	10	60	-	100	-	-	-	24	-	40	2
UGL-01	Physiochemical Properties of Food	Core	-	-	6	20	25	15	90	60	150	-	-	-	36	24	60	3
UGL-02	Food Perception & Product Designing	Core	-	-	4	10	20	10	60	40	100	-	-	-	24	16	40	2
UGL-03	Mini Project	BRP	-	-	6	20	25	15	90	60	150	-	-	-	36	24	60	3
BFT-356	Seminar (Subject Base Seminar)	SBS	1	-	-	10	10	-	30	-	50	-	-	-	12	-	20	1
BFT-357	Foregin Language	SCC	6	-	0	20	20	20	90	0	150	-	-	-	36	0	60	3
	Total		15	2	16	120	130	30	660	180	1100							22

Semester VI

Course code*	Course Title	Type	Teaching Scheme			Evaluation Scheme						Minimum Passing						Credit
						Internal			External			Internal			External			
			L	T	P	CA	MSE	TW	ESE	PR	Total	CA	MSE	TW	ESE	PR	Total	
	(Mandatory)																	
BFT-361	Advance food safety & Quality Managemet	Minor	3	-	-	20	20	20	90	-	150	-	-	-	36	-	60	3
BFT-362	Advanced Food Crop Development	Minor	2	-	-	20	20	-	60	-	100	-	-	-	24	-	40	2
BFT-363	Bakery, Confectionery, Snacks & Beverages processing Technology	Core	3	-	-	20	20	20	90	-	150	-	-	-	36	-	60	3
BFT-364	Post harvest Management of Fruits & Vegetables	Core	3	-	-	20	20	20	90	-	150	-	-	-	36	-	60	3
BFT-365	Academic Tutorials-VI	AT	-	2	-	10	20	10	60	-	100	-	-	-	24	-	40	2
UGL-01	Key industrial Processing Operations for Food	Core	-	-	4	10	20	10	60	40	100	-	-	-	24	16	40	2
UGL-02	Literature Review in Food Science & Nutrition	Core	-	-	6	20	25	15	90	60	150	-	-	-	36	24	60	3
UGL-03	Quality Assurance-I	SOE	-	-	4	10	20	10	60	-	100	-	-	-	24	-	40	2
UGL-04	Mini Project	BRP	-	-	6	20	25	15	90	60	150	-	-	-	36	24	60	3
BFT-366	Seminar (Research Paper Based)	RBS	1	-	-	10	10	-	30	-	50	-	-	-	12	-	20	1
	Total		12	2	20	110	130	80	720	160	1200							24

Semester VII

Course code*	Course Title	Type	Teaching Scheme			Evaluation Scheme						Minimum Passing						Credit		
						Internal			External			Total	Internal			External			Total	
						L	T	P	CA	MSE	TW		ESE	PR	CA	MSE	TW			ESE
(Mandatory)																				
BFT-471	Advanced food Manufacturing	Core	2	-	-	20	20	-	60	-	100	-	-	-	24	-	40	2		
BFT-472	Food Preservation, energy generation & conservation	Minor	3	-	-	20	20	20	90	-	150	-	-	-	36	-	60	3		
BFT-473	Advanced Food processing & Technology	Minor	3	-	-	20	20	20	90	-	150	-	-	-	36	-	60	3		
UGL-01	Quality Assurance-II	Core	-	-	6	20	25	15	90	60	150	-	-	-	36	24	60	3		
UGL-02	Open Elective: Foundation Project case studies	SOE	-	-	6	20	25	15	90	60	150	-	-	-	36	24	60	3		
UGL-03	Major Project	BRP	-	-	14	45	45	50	210	140	350	-	-	-	84	56	140	7		
BFT-474	Seminar (Research Paper Based)	RBS	2	0	-	10	10	-	30	-	50	-	-	-	12	-	20	1		
	Total		10	-	26	70	70	40	660	260	1100							22		

Semester VIII

Course code*	Course Title	Type	Teaching Scheme			Evaluation Scheme						Minimum Passing						Credit		
						Internal			External			Total	Internal			External			Total	
						L	T	P	CA	MSE	TW		ESE	PR	CA	MSE	TW			ESE
(Mandatory)																				
BFT-481	Research Methodology	SOE	2	-	-	20	20	-	60	-	100	-	-	-	24	-	40	2		
UGL-01	Practical Based on Research Methodology	SOE	-	-	4	10	20	10	60	40	100	-	-	-	24	16	40	2		
UGL-02	Big Idea	BRP	-	-	22	80	90	50	330	220	550	-	-	-	132	88	220	11		
BFT-482	Seminar (Research Paper Based)	RBS	2	-	-	10	10	-	30	-	50	-	-	-	12	-	20	1		
	Total		2	-	26	30	30	-	480	260	800							16		

L- Lecture, T-Tutorial, P-Practical, CA- Continuous Assessment, MSE- Mid Semester Examination, k ESE- End Semester Examination, PR-Practical, TW-Term Wor