

# MFI-2022-M.Sc.(5 Year Integrated Food Science and Technology)

Category Credit Detail				
Sl.No.	Description	Credits		Maximum Credit
1	FC - Foundation Core	56		56
2	DC - Discipline Core	71		71
3	DE - Discipline Elective	27		27
4	PI - Projects and Internship	17		17
5	OE - Open Elective	12		12
6	AE - Ability Enhancement	9		9
7	SE - Skill Enhancement	8		8
Total Credits		200		

Foundation Core									
sl.no	Course Code	Course Title	Course Type	Ver sio n	L	T	P	J	Credits
1	TBIT101L	Biological Science	Theory Only	1.0	3	0	0	0	3.0
2	TBIT102L	Bioethics and Biosafety	Theory Only	1.0	2	0	0	0	2.0
3	TBIT103L	Cell Biology	Theory Only	1.0	3	0	0	0	3.0
4	TBIT104L	Molecular Biology	Theory Only	1.0	3	0	0	0	3.0
5	TBIT105P	Cell and Molecular Biology Lab	Lab Only	1.0	0	0	4	0	2.0
6	TBIT106L	Biochemistry	Theory Only	1.0	3	0	0	0	3.0
7	TBIT106P	Biochemistry Lab	Lab Only	1.0	0	0	4	0	2.0
8	TBIT107L	Industrial Unit Operations	Theory Only	1.0	3	0	0	0	3.0
9	TBIT107P	Industrial Unit Operations Lab	Lab Only	1.0	0	0	2	0	1.0
10	TBIT208L	Industry Standards and Guidelines	Theory Only	1.0	3	0	0	0	3.0
11	TCHY101L	Chemistry	Theory Only	1.0	3	0	0	0	3.0
12	TCHY101P	Chemistry Lab	Lab Only	1.0	0	0	2	0	1.0
13	TCSE101L	Computer Programming : C	Theory Only	1.0	2	0	0	0	2.0
14	TCSE101P	Computer Programming : C Lab	Lab Only	1.0	0	0	2	0	1.0
15	TCSE207L	Computer Programming: Python	Theory Only	1.0	2	0	0	0	2.0
16	TCSE207P	Computer Programming: Python Lab	Lab Only	1.0	0	0	2	0	1.0
17	TFLE200L	M.Sc. (5 Year Integrated Programme) - Foreign Language - 2021	Basket	1.0	0	0	0	0	2.0
18	TMAT101L	Mathematics	Theory Only	1.0	3	1	0	0	4.0
19	TMAT201L	Probability and Statistics	Theory Only	1.0	3	0	0	0	3.0
20	TMAT201P	Probability and Statistics Lab	Lab Only	1.0	0	0	2	0	1.0
21	TPHY101L	Physics	Theory Only	1.0	3	0	0	0	3.0
22	TPHY101P	Physics Lab	Lab Only	1.0	0	0	2	0	1.0
23	TRES102L	Research Methodology	Theory Only	1.0	3	0	0	0	3.0
24	TSSC201L	Critical Thinking	Theory Only	1.0	2	0	0	0	2.0
25	TSSC202L	Intra and Interpersonal Skills	Theory Only	1.0	2	0	0	0	2.0

Discipline Core									
sl.no	Course Code	Course Title	Course Type	Ver sio n	L	T	P	J	Credits
1	TFSI201L	Principles of Food Science	Theory Only	1.0	3	0	0	0	3.0
2	TFSI202L	Food Chemistry	Theory Only	1.0	3	0	0	0	3.0
3	TFSI203L	Food Microbiology	Theory Only	1.0	3	0	0	0	3.0
4	TFSI203P	Food Chemistry and Food Microbiology Lab	Lab Only	1.0	0	0	4	0	2.0
5	TFSI204L	Physiology and Nutrition	Theory Only	1.0	3	0	0	0	3.0
6	TFSI205L	Food Additives	Theory Only	1.0	3	0	0	0	3.0
7	TFSI206L	Food Quality and Analysis	Theory Only	1.0	3	0	0	0	3.0
8	TFSI207L	Food Preservation Technology	Theory Only	1.0	3	0	0	0	3.0
9	TFSI207P	Food Analysis and Preservation Lab	Lab Only	1.0	0	0	4	0	2.0
10	TFSI301L	Food Engineering	Theory Only	1.0	3	0	0	0	3.0
11	TFSI302L	Food Packaging	Theory Only	1.0	3	0	0	0	3.0
12	TFSI302P	Food Engineering and Packaging Lab	Lab Only	1.0	0	0	4	0	2.0
13	TFSI303L	Milk and Milk Products Technology	Theory Only	1.0	3	0	0	0	3.0
14	TFSI304L	Nutraceuticals and Functional Foods	Theory Only	1.0	3	0	0	0	3.0
15	TFSI305L	Food Toxicology and Safety	Theory Only	1.0	3	0	0	0	3.0
16	TFSI305P	Food Toxicology and Safety Lab	Lab Only	1.0	0	0	4	0	2.0
17	TFSI306L	Animal Products Technology	Theory Only	1.0	3	0	0	0	3.0
18	TFSI306P	Animal and Milk Products Lab	Lab Only	1.0	0	0	4	0	2.0
19	TFSI401L	Food Laws and Regulations	Theory Only	1.0	3	0	0	0	3.0
20	TFSI402L	Food Equipment Design and Automation	Theory Only	1.0	3	0	0	0	3.0
21	TFSI403L	Baking and Confectionary Technology	Theory Only	1.0	3	0	0	0	3.0
22	TFSI403P	Baking and Confectionary Lab	Lab Only	1.0	0	0	4	0	2.0
23	TFSI404L	Food Process Technology	Theory Only	1.0	3	0	0	0	3.0
24	TFSI405L	Production Technology of Spices and Plantation Crops	Theory Only	1.0	3	0	0	0	3.0
25	TFSI406L	Grain Science and Technology	Theory Only	1.0	3	0	0	0	3.0
26	TFSI406P	Grain, Spices and Plantation Products Lab	Lab Only	1.0	0	0	4	0	2.0

Discipline Elective									
sl.no	Course Code	Course Title	Course Type	Ver sio n	L	T	P	J	Credits
1	TFSI208L	Food Adulteration	Theory Only	1.0	3	0	0	0	3.0
2	TFSI307L	Fruit and Vegetable Processing Technology	Theory Only	1.0	3	0	0	0	3.0
3	TFSI308L	Nutrition and Dietetics	Theory Only	1.0	3	0	0	0	3.0
4	TFSI309L	Industrial Enzymology	Theory Only	1.0	3	0	0	0	3.0
5	TFSI310L	Beverage Processing Technology	Theory Only	1.0	3	0	0	0	3.0
6	TFSI390J	Student Project	Project	1.0	0	0	0	0	3.0
7	TFSI391J	Technical Answers to Real Problems Project	Project	1.0	0	0	0	0	3.0
8	TFSI392J	Design Project	Project	1.0	0	0	0	0	3.0

Discipline Elective									
sl.no	Course Code	Course Title	Course Type	Ver sio n	L	T	P	J	Credits
9	TFSI393J	Laboratory Project	Project	1.0	0	0	0	0	3.0
10	TFSI397J	Special Project	Project	1.0	0	0	0	0	3.0
11	TFSI407L	Crop Production Concepts and Practices	Theory Only	1.0	3	0	0	0	3.0
12	TFSI408L	Food Fermentation and Synbiotic Technology	Theory Only	1.0	3	0	0	0	3.0
13	TFSI409L	Food Nanotechnology	Theory Only	1.0	3	0	0	0	3.0
14	TFSI410L	Food Forensics	Theory Only	1.0	3	0	0	0	3.0
15	TFSI411L	Food Rheology	Theory Only	1.0	3	0	0	0	3.0
16	TFSI412L	Technology of Fats and Oils	Theory Only	1.0	3	0	0	0	3.0

Projects and Internship									
sl.no	Course Code	Course Title	Course Type	Ver sio n	L	T	P	J	Credits
1	TFSI399J	Summer Industrial Internship	Project	1.0	0	0	0	0	2.0
2	TFSI497J	Project	Project	1.0	0	0	0	0	3.0
3	TFSI498J	Research Project I	Project	1.0	0	0	0	0	4.0
4	TFSI499J	Research Project II / Internship	Project	1.0	0	0	0	0	8.0

Open Elective									
sl.no	Course Code	Course Title	Course Type	Ver sio n	L	T	P	J	Credits
1	CFOC181M	WildLife Conservation	Online Course	1.0	0	0	0	0	2.0
2	CFOC191M	Forests and their Management	Online Course	1.0	0	0	0	0	3.0
3	CFOC575M	Wildlife Ecology	Online Course	1.0	0	0	0	0	3.0
4	CFOC631M	Conservation Geography	Online Course	1.0	0	0	0	0	3.0
5	CFOC642M	Conservation Economics	Online Course	1.0	0	0	0	0	3.0

Ability Enhancement									
sl.no	Course Code	Course Title	Course Type	Ver sio n	L	T	P	J	Credits
1	TCHY140L	Environmental Studies	Theory Only	1.0	3	0	0	0	3.0
2	TENG101L	Effective English Communication	Theory Only	1.0	2	0	0	0	2.0
3	TENG102L	Technical English Communication	Theory Only	1.0	2	0	0	0	2.0
4	TENG102P	Technical English Communication Lab	Lab Only	1.0	0	0	2	0	1.0
5	TENG103P	Technical Report Writing	Lab Only	1.0	0	0	2	0	1.0

Skill Enhancement									
sl.no	Course Code	Course Title	Course Type	Ver sio n	L	T	P	J	Credits

Skill Enhancement									
1	TFSI311E	Value Added Food Products	Embedded Theory and Lab	1.0	1	0	2	0	2.0
2	TFSI312E	Mushroom Farming	Embedded Theory and Lab	1.0	1	0	2	0	2.0
3	TFSI413E	Beekeeping and Honey Processing	Embedded Theory and Lab	1.0	1	0	2	0	2.0
4	TFSI414E	Biofortification of Foods	Embedded Theory and Lab	1.0	1	0	2	0	2.0