



Yenepoya (Deemed to be University)

Recognized under Sec3 (A) of the UGC Act 1956 Accredited by NAAC with 'A+' Grade

CURRICULUM GOVERNING M.Sc. FOOD TECHNOLOGY PROGRAMME

M.Sc. Food Technology

1. Coursework
2. Coursework and Research
3. Research

Offered by
Department of Food Science and Nutrition
The Yenepoya Institute of Arts, Science, Commerce and Management

Under the
FACULTY OF SCIENCE
Yenepoya (Deemed to be University)

2025-26

Course Structure

M.Sc. Food Technology (Coursework)

Semester 1/ Year 1

Semester 1										
Sl. No.	Course Code	Course Type	Course Title	Hours per Week			CIA	SEE	Total	Credits
				T	P	E				
1	25MFT101CT	DSC	Advanced Food Chemistry (Theory)	4	0	0	50	50	100	4
2	25MFT102CT	DSC	Applied Food Microbiology (Theory)	3	0	0	50	50	100	3
3	25MFT102CP	DSC	Applied Food Microbiology (Practical)	0	2	0	50	50	100	1
4	25MFT131CT	DSE	Value Addition and Preservation of Fruits and Vegetables (Theory)	3	0	3	50	50	100	4
5	25MFT132CT		Dairy Processing and Product Development (Theory)							
6	25MFT133CT		Cereals, Pulses and Oilseed Processing (Theory)							
7	25MFT141CT	TDE	Global Supply Chain Management	4	0	0	50	50	100	4
8	25MFT142CT		Customs Compliance and GST							
9	25MFT143CT		SWAYAM Course*							
10	25PGNMEC	ME	Multidisciplinary Elective	3	2	0	50	50	100	4
Total									600	20

T, Theory; P, Practical; E, Experiential Learning

Semester 2/ Year 1

Semester 2										
Sl. No.	Course Code	Course Type	Course Title	Hours per Week			CIA	SEE	Total	Credits
				T	P	E				
1	25MFT201CT	DSC	Advanced Technologies in Food Processing and Preservation (Theory)	3	0	0	50	50	100	3
2	25MFT201CP	DSC	Advanced Technologies in Food Processing and Preservation (Practical)	0	2	0	50	50	100	1
3	25MFT202CT	DSC	Innovations in Food Packaging Technology (Theory)	3	0	0	50	50	100	3
4	25MFT202CP	DSC	Innovations in Food Packaging Technology (Practical)	0	2	0	50	50	100	1
5	25MFT231CT	DSE	Food Branding and Labelling (Theory)	3	0	3	50	50	100	4
6	25MFT232CT		Sensory Analysis and Consumer-Driven Product Innovation (Theory)							
7	25MFT233CT		Modern Food Additives and Preservatives (Theory)							
8	25MFT241CT	DSE	Science of Baked and Confectionery Products (Theory)	3	0	3	50	50	100	4
9	25MFT242CT		Science of Beverages (Theory)							
10	25MFT243CT		Processing Technologies for Spices and Aromatic Plants (Theory)							
11	25MFT251CT	DSE	Food Law and Legislation (Theory)	4	0	0	50	50	100	4
12	25MFT252CT		Fluid Mechanics and Rheology in Food (Theory)							
13	25MFT253CT		Food Toxicology and Safety Assessment (Theory)							
Total									700	20

T, Theory; P, Practical; E, Experiential Learning

Semester 3/ Year 2

Semester 3										
Sl. No.	Course Code	Course Type	Course Title	Hours per Week			CIA	SEE	Total	Credits
				T	P	E				
1	25MFT301CT	DSC	Unit Operations in Food Industry (Theory)	3	0	0	50	50	100	3
2	25MFT301CP	DSC	Unit Operations in Food Industry (Practical)	0	2	0	50	50	100	1
3	25MFT302CT	DSC	Novel Food Processing Techniques (Theory)	4	0	0	50	50	100	4
4	25MFT303CT	DSC	Instrumental Techniques in Food Analysis (Theory)	3	0	0	50	50	100	3
5	25MFT303CP	DSC	Instrumental Techniques in Food Analysis (Practical)	0	2	0	50	50	100	1
6	25MFT341CT	DSE	Sustainability in Food Technology (Theory)	3	0	3	50	50	100	4
7	25MFT342CT		Advanced Food Processing Systems and Equipment Design (Theory)							
8	25MFT343CT		Transport Phenomenon in Food Industry (Theory)							
9	25MFT351CT	DSE	Global Food Trade and Export Policy (Theory)	4	0	0	50	50	100	4
10	25MFT352CT		Integrated Pest Management in Food Systems (Theory)							
11	25MFT353CT		Waste Management and Sanitation Practices (Theory)							
Total									700	20

T, Theory; P, Practical; E, Experiential Learning

Semester 4/ Year 2

Semester 4										
Sl. No.	Course Code	Course Type	Course Title	Hours per Week			CIA	SEE	Total	Credits
				T	P	E				
1	25MFTCI	SEC	Internship	0	0	60	200	200	400	20
Total									400	20

T, Theory; P, Practical; E, Experiential Learning

Course Structure

M.Sc. Food Technology (Coursework and Research)

Semester 1/ Year 1

Semester 1										
Sl. No.	Course Code	Course Type	Course Title	Hours per Week			CIA	SEE	Total	Credits
				T	P	E				
1	25MFT101CRT	DSC	Advanced Food Chemistry (Theory)	4	0	0	50	50	100	4
2	25MFT102CRT	DSC	Applied Food Microbiology (Theory)	3	0	0	50	50	100	3
3	25MFT102CRP	DSC	Applied Food Microbiology (Practical)	0	2	0	50	50	100	1
4	25MFT131CRT	DSE	Value Addition and Preservation of Fruits and Vegetables (Theory)	3	0	3	50	50	100	4
5	25MFT132CRT		Dairy Processing and Product Development (Theory)							
6	25MFT133CRT		Cereals, Pulses and Oilseed Processing (Theory)							
7	25MFT141CRT	TDE	Global Supply Chain Management	4	0	0	50	50	100	4
8	25MFT142CRT		Customs Compliance and GST							
9	25MFT143CRT		SWAYAM Course*							
10	25PGNMECR	ME	Multidisciplinary Elective	3	2	0	50	50	100	4
Total									600	20

T, Theory; P, Practical; E, Experiential Learning

Semester 2/ Year 1

Semester 2										
Sl. No.	Course Code	Course Type	Course Title	Hours per Week			CIA	SEE	Total	Credits
				T	P	E				
1	25MFT201CRT	DSC	Advanced Technologies in Food Processing and Preservation (Theory)	3	0	0	50	50	100	3
2	25MFT201CRP	DSC	Advanced Technologies in Food Processing and Preservation (Practical)	0	2	0	50	50	100	1
3	25MFT202CRT	DSC	Innovations in Food Packaging Technology (Theory)	3	0	0	50	50	100	3
4	25MFT202CRP	DSC	Innovations in Food Packaging Technology (Practical)	0	2	0	50	50	100	1
5	25MFT231CRT	DSE	Food Branding and Labelling (Theory)	3	0	3	50	50	100	4
6	25MFT232CRT		Sensory Analysis and Consumer-Driven Product Innovation (Theory)							
7	25MFT233CRT		Modern Food Additives and Preservatives (Theory)							
8	25MFT241CRT	DSE	Science of Baked and Confectionery Products (Theory)	3	0	3	50	50	100	4
9	25MFT242CRT		Science of Beverages (Theory)							
10	25MFT243CRT		Processing Technologies for Spices and Aromatic Plants (Theory)							
11	25MFT251CRT	DSE	Food Law and Legislation (Theory)	4	0	0	50	50	100	4
12	25MFT252CRT		Fluid Mechanics and Rheology in Food (Theory)							
13	25MFT253CRT		Food Toxicology and Safety Assessment (Theory)							
Total									700	20

T, Theory; P, Practical; E, Experiential Learning

Semester 3/ Year 2

Semester 3										
Sl. No.	Course Code	Course Type	Course Title	Hours per Week			CIA	SEE	Total	Credits
				T	P	E				
1	25MFT301CRT	DSC	Unit Operations in Food Industry (Theory)	3	0	0	50	50	100	3
2	25MFT301CRP	DSC	Unit Operations in Food Industry (Practical)	0	2	0	50	50	100	1
3	25MFT302CRT	DSC	Novel Food Processing Techniques (Theory)	4	0	0	50	50	100	4
4	25MFT303CRT	DSC	Instrumental Techniques in Food Analysis (Theory)	3	0	0	50	50	100	3
5	25MFT303CRP	DSC	Instrumental Techniques in Food Analysis (Practical)	0	2	0	50	50	100	1
6	25MFT341CRT	DSE	Sustainability in Food Technology (Theory)	3	0	3	50	50	100	4
7	25MFT342CRT		Advanced Food Processing Systems and Equipment Design (Theory)							
8	25MFT343CRT		Transport Phenomenon in Food Industry (Theory)							
9	25MFT351CRT	DSE	Global Food Trade and Export Policy (Theory)	4	0	0	50	50	100	4
10	25MFT352CRT		Integrated Pest Management in Food Systems (Theory)							
11	25MFT353CRT		Waste Management and Sanitation Practices (Theory)							
	Total								700	20

T, Theory; P, Practical; E, Experiential Learning

Semester 4/ Year 2

Semester 4										
Sl. No.	Course Code	Course Type	Course Title	Hours per Week			CIA	SEE	Total	Credits
				T	P	E				
1	25MFTCRRP	SEC	Research Project	0	0	60	200	200	400	20
	Total								400	20

T, Theory; P, Practical; E, Experiential Learning

Course Structure

M.Sc. Food Technology (Research)

Semester 1/ Year 1

Semester 1										
Sl. No.	Course Code	Course Type	Course Title	Hours per Week			CIA	SEE	Total	Credits
				T	P	E				
1	25MFT104R	DSC	Advanced Data Analysis Tools	3	2	0	50	50	100	4
2	25MFT105R	DSC	Advanced Research Methodology	3	2	0	50	50	100	4
3	25MFT131RT	DSE	Value Addition and Preservation of Fruits and Vegetables (Theory)	3	0	3	50	50	100	4
4	25MFT132RT		Dairy Processing and Product Development (Theory)							
5	25MFT133RT		Cereals, Pulses and Oilseed Processing (Theory)							
6	25MFT141RT	TDE	Global Supply Chain Management	4	0	0	50	50	100	4
7	25MFT142RT		Customs Compliance and GST							
8	25MFT143RT		SWAYAM Course*							
9	25PGNMER	ME	Multidisciplinary Elective	3	2	0	50	50	100	4
	Total								500	20

T, Theory; P, Practical; E, Experiential Learning

Semester 2/ Year 1

Semester 2										
Sl. No.	Course Code	Course Type	Course Title	Hours per Week			CIA	SEE	Total	Credits
				T	P	E				
1	25MFT201RT	DSC	Advanced Technologies in Food Processing and Preservation (Theory)	3	0	0	50	50	100	3
2	25MFT201RP	DSC	Advanced Technologies in Food Processing and Preservation (Practical)	0	2	0	50	50	100	1
3	25MFT202RT	DSC	Innovations in Food Packaging Technology (Theory)	3	0	0	50	50	100	3
4	25MFT202RP	DSC	Innovations in Food Packaging Technology (Practical)	0	2	0	50	50	100	1
5	25MFT206RT	DSC	Applied Food Microbiology (Theory)	3	0	0	50	50	100	3
6	25MFT206RP	DSC	Applied Food Microbiology (Practical)	0	2	0	50	50	100	1
7	25MFT241RT	DSE	Science of Baked and Confectionery Products (Theory)	3	0	3	50	50	100	4
8	25MFT242RT		Science of Beverages (Theory)							
9	25MFT243RT		Processing Technologies for Spices and Aromatic Plants (Theory)							
10	25MFT251RT	DSE	Food Law and Legislation (Theory)	4	0	0	50	50	100	4
11	25MFT252RT		Fluid Mechanics and Rheology in Food (Theory)							
12	25MFT253RT		Food Toxicology and Safety Assessment (Theory)							
Total									800	20

T, Theory; P, Practical; E, Experiential Learning

Semester 3/ Year 2

Semester 3										
Sl. No.	Course Code	Course Type	Course Title	Hours per Week			CIA	SEE	Total	Credits
				T	P	E				
1	25MFTRRP1	SEC	Research Project 1	0	0	60	200	200	400	20
Total									400	20

T, Theory; P, Practical; E, Experiential Learning

Semester 4/ Year 2

Semester 4										
Sl. No.	Course Code	Course Type	Course Title	Hours per Week			CIA	SEE	Total	Credit
				T	P	E				
1	25MFTRRP2	SEC	Research Project 2	0	0	60	200	200	400	20
	Total								400	20

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***SWAYAM Course:** Candidates opting for SWAYAM courses must register in the beginning of 1st semester and should complete the course on or before 2nd semester end. After certification, the candidate should make a request to the University for the credit transfer.

Multidisciplinary Elective (ME) Courses:

Multidisciplinary Elective - ME	
25PGNME*	Transformative Role of Artificial Intelligence in Food Science and Nutrition

***The course code for Multidisciplinary Elective will be modified based on the vertical selected by the students.**