

Scheme
For
M.Sc. in Food Technology (Semester System)
As per NEP 2020

To be implemented w.e.f. Academic Session 2025-26



Department of Food Technology
Guru Jambheshwar University of Science and Technology
Hisar-125001

Vision

- To emerge as a nationally and internationally recognized department for excellence in education, research and innovation in food science and technology.

Mission

- To foster sustainable growth of the food industry by providing innovative technological solutions and expert technical services.
- To add value to regional and national agro-resources through focused R&D initiatives and industry collaboration.
- To nurture competent and ethically responsible professionals equipped to meet the evolving needs of the food sector.

Programme Educational Objectives (PEOs)

1. To develop students into knowledgeable, skilled, and ethical professionals for careers in food and allied industries.
2. To empower students to become entrepreneurs and leaders capable of initiating successful start-ups in the food sector.
3. To inspire and prepare students for higher studies and research in food engineering food science, and related interdisciplinary domains.

Programme Outcomes (POs)

At the end of a postgraduate program, students will be able to:

PO1. Demonstrate the ability to conduct independent and collaborative research with scientific integrity and critical thinking.

PO2. Effectively communicate scientific knowledge, findings, and ideas through written, oral, and digital means.

PO3. Apply advanced knowledge and skills in the area of specialization to solve real-world and theoretical problems.

PO4. Utilize appropriate tools, techniques, and methodologies to analyze data and interpret results in the chosen field.

PO5. Integrate interdisciplinary perspectives to approach complex issues holistically and innovatively.

PO6. Practice professional ethics and contribute to achieving the Sustainable Development Goals.

Programme Specific Outcomes (PSOs)

PSO1. Analyze food components, their behavior, and changes during processing using advanced scientific techniques.

PSO2. Apply technological, engineering, and microbiological principles to food product development, safety, and quality.

PSO3. Design and improve food systems that align with health, nutrition, safety, sustainability, and consumer needs.

SEMESTER-I

Type of Course	Course Code	Nomenclature of Paper/ Course	Credits	Contact Hours	Internal Marks	External Marks	Total Marks	Duration of Exam (Hrs.)
Discipline-Specific Course (DSC)	U25MFT101T	Food Chemistry	4	4	30	70	100	3 Hr.
	U25MFT102T	Food Processing and Preservation	4	4	30	70	100	3 Hr.
	U25MFT103T	Food Microbiology	4	4	30	70	100	3 Hr.
Discipline Elective Course (DEC)	U25MFT111T OR U25MFT112T OR U25MFT113T	Technology of Beverages OR Technology of Fermented Foods OR Technology of Confectionery Products	4	4	30	70	100	3 Hr.
Practicum (PC I)	U25MFT104P	Composition and Microbiological Analysis of Foods Lab	3	6	25	50	75	6Hr.
Practicum (PC II)	U25MFT114P OR U25MFT115P OR U25MFT116P	Technology of Beverages Lab OR Technology of Fermented Foods Lab OR Technology of Confectionery Products Lab	3	6	25	50	75	6Hr.
Value Added Course (VAC)*	U25VAC116T	Indian Traditional Foods	2	2	15	35	50	2Hr.
		Total Credits	24					

*To be opted by the students of other department

** The students of Department of Food Technology are required to opt for only one VAC out of this pool. (Annexure -I)

SEMESTER-II

Type of Course	Course Code	Nomenclature of Paper/ Course	Credits	Contact Hours	Internal Marks	External Marks	Total Marks	Duration of Exam (Hr)
Discipline-Specific Course (DSC)	U25MFT201T	Technology of Cereals, Pulses and Oilseeds	4	4	30	70	100	3 Hr.
	U25MFT202T	Post-Harvest Technology of Fruits and Vegetables	4	4	30	70	100	3 Hr.
	U25MFT203T	Food Engineering	4	4	30	70	100	3 Hr.
Discipline Elective Course (DEC)	U25MFT211T OR U25MFT212T OR U25MFT213T	Nutrition and Dietetics OR Technology of Animal- Derived Foods OR Technology of Specialty Foods	4	4	30	70	100	3 Hr.
Practicum (PC I)	U25MFT204P	Processing of Plant-based Products Lab	3	6	25	50	75	6 Hr.
Practicum (PC II)	U25MFT214P OR U25MFT215P OR U25MFT216P	Nutrition and Dietetics Lab OR Technology of Animal- Derived Foods Lab OR Technology of Specialty Foods Lab	3	6	25	50	75	6 Hr.
Credit Seminar (S)	U25MFT205S	Credit Seminar	2	2	15	35	50	2Hr.
**Internship (I)	U25MFT206I	Internship	4				100	
		Total Credits	24					

Note: Exit Option: Semester I & II: Certificate in Food Technology with 48 credits

Important Notes:

- 1. The students of the Department of Food Technology are required to opt for only one Value-Added Course (VAC) out of the list during semester I.**
- 2. Internship of 4 credits (120 contact hours) over & above of 4-6 week duration after the 2nd Semester.**
- 3. Exit Option: Semester I & II: Certificate in Food Technology with 48 credits.**