



Karmaveer Bhaurao Patil University, Satara
Faculty of Science and Technology
M. Sc. (Food Technology)

Programme and Credit Structure as per NEP 2020

Title: The degree shall be titled as ‘**Master of Science (Food Technology)**’ under the Faculty of Science and Technology.

M.Sc. Sem. I & II: To be implemented from Academic Year 2024-25

M.Sc. Sem. III & IV: To be implemented from Academic Year 2025-26

Programme Outcomes for M. Sc. (Food Technology)

PO. NO.	Programme Outcomes After completing M.Sc. programme the students will be able to..
PO-1	Understand the fundamentals and advancements of subject
PO-2	Study, plan, and conduct experiments in the labs to validate the ideas principles, and theories acquired in the classrooms
PO-3	Enhance scientific knowledge of the subject
PO-4	Define their area of focus in academia, research, and development.
PO-5	Pursue careers in various fields such as science, engineering, education, banking, business, public services, etc. or become an entrepreneur with precision, analytical thinking, innovative ideas, clarity thought, expression, and systematic approach.

PSO. NO	Programme Specific Outcomes After completing M.Sc. (Food Technology) programme the students will be able to..
PSO-1	understand knowledge in various aspects of Food Technology through Theory and Practical knowledge.
PSO-2	impart the knowledge about various compounds such as protein, carbohydrates, lipids amino acids, minerals, vitamins etc. associated with the chemical compositions of food, their structures and functions.
PSO-3	gain concepts of food safety and quality managements, national and international food laws and regulations as well as importance of food engineering and packaging in food industry.
PSO-4	classify their area of attention in academic, research and development.
PSO-5	perform job in various fields like science, engineering, education, business and public service, etc. or be an entrepreneur with precision, analytical mind, innovative thinking, clarity of thought, expression, and systematic approach.

Semester, Credit Framework NSQF Level and Exit Points

Sr. No	Semester	Year	Year	Credits	Level	Exit Points & Award
1	Sem. I & II	2024-25	1 Year	44	6	PG Diploma (Food Technology)
2	Sem. III & IV	2025-26	2 Year	44	6.5	PG Degree (Food Technology)
			Total	88		Master of Science (Food Technology)

Credit Distribution

Sr. No	Components	1 Year Master Degree Programme			2YearMaster Degree Programme		
		Courses	Credits	%	Courses	Credits	%
	Mandatory Courses	06	24	54.55	12	48	54.55
	Elective Courses	02	04	9.09	04	08	9.09
	Mandatory Practical	02	04	9.09	04	08	9.09
	Elective Practical	02	04	9.09	03	06	6.82
	Research Methodology	01	04	9.09	01	04	4.55
	Research Project	01	04	9.09	02	10	11.36
	OJT	--	--	--	01	04	4.55
	Total (Mandatory)-(A)	09	32	72.73	19	70	79.55
	Elective	04	08	18.18	07	14	15.91
	RM	01	04	9.09	01	04	4.55
	Total - (B)	05	12	27.27	01	04	4.55
	Grand Total (A+B)	14	44	100	27	88	100

Duration:

- The program shall be a full-time program.
- The duration of program shall be One Year / Two years.
- Students will have to exit option with: - First Year (44 Credits) - PG Diploma

Second Year (88 Credits) - Master Degree

Number of Students: A batch shall consist of not more than 40 students. An additional 20% of seats will be allotted as per Karmaveer Bhaurao Patil University, Satara Norms.

Eligibility of the Students:

- Bachelor of Science in Food Technology.
- Bachelor of Science in Food Processing and Packaging, Food Science and Quality Control, Food Science and Nutrition, Food Technology and Management
- B.Tech in Food Technology, B.Voc. Food Science, B.Voc. Food Technology
- Any other eligibility prescribed by UGC, Government of Maharashtra, Karmaveer Bhaurao Patil University, Satara.

Medium of Instruction: The medium of instruction shall be in English.

Eligibility of the Core Faculty:

- **Assistant Professor:** Master of Science with specialization in Food Technology/Food Science/ Microbiology and NET/ SET/ Ph.D.
- Associate Professor: Master of Science in Food Technology/Food Science/ Microbiology with NET/ SET/Ph.D.

Eligibility for Professor of Practice or Professional Trainer:

Any other eligibility as per the Guidelines and Regulations Passed by the Board of Concerned Studies, Academic Council of the College / University and Rules and Regulations of Karmaveer Bhaurao Patil University, Satara, Government of Maharashtra, and UGC norms.

Scheme of Examination & Standard of Passing :(SEE and CCE)

End Semester Exam (ESE): 60 Marks (Min 24 Marks for Passing)

Continuous Comprehensive Evaluation (CCE): 40 Marks (Min 16 Marks for Passing)

Total Marks: 100 Marks for **DSC mandatory courses**.

End Semester Exam (ESE): 30 Marks (Min 12 Marks for Passing)

Continuous Comprehensive Evaluation (CCE): 20 Marks (Min 08 Marks for Passing)

Total Marks: 50 Marks for **DSE elective courses**.

Minimum 40% Marks Required for Passing and there is a separate head of passing

as per the decision of the concerned Board of Studies or Competent Authority.

Evaluation of OJT and RP:

i. OJT: Total 100 marks for 4 credits

(Rubrics: Certificate = max 60 marks, Report = 20 marks, Viva = 20 marks)

ii. RP: Total 100 marks for 4 credits

(Rubrics: Decertation = 60 marks, Presentation & Viva = 40 marks)

M.Sc. (Food Technology) Part -I				
Semester –I				
Sr. No.	Components	Course Code	Course (Subject)	Credits
1	Mandatory	MFTT 411	Post-Harvest Technology of Horticulture Produce	4
2	Mandatory	MFTT 412	New Food Product Development	4
3	Mandatory	MFTT 413	Paper and Paperboard, Plastics and Polymer	4
4	Electives	MFTT 414	E1 - Food Refrigeration and Cold Storage or E2 - Marketing Management and International Trade	2
5	RM	MFTT 415	Research Methodology	4
6	Mandatory Lab	MFTP 416	Practical Course – I	2
	Electives Lab	MFTP 417	Practical Course – II	2
			Total	22
Semester –II				
Sr.	Components	Course Code	Course (Subject)	Credits
1	Mandatory	MFTT 421	Technology of Cereals, Legumes and Oil Seeds	4
2	Mandatory	MFTT 422	Food Plant Organization and Layout	4
3	Mandatory	MFTT 423	Packaging Laws and Regulation	4
4	Electives	MFTT 424	E1 - Instrumentation and Process Control or E2 - Fluid Mechanics and Hydraulics	2
5	RP	MFTT 425	Research Project	4
6	Mandatory Lab	MFTT 426	Practical Course – III	2
7	Electives Lab	MFTT 427	Practical Course – IV	2
			Total	22

EXIT OPTION: PG Diploma with **44 Credits** after Three Year UG Degree.

M.Sc. (Food Technology) Part -II				
Semester –III				
Sr.	Components	Course Code	Course (Subject)	Credits
1	Mandatory	MFTT 531	Snack Food and Extrusion Technology	4
2	Mandatory	MFTT 532	Technology of Milk, Meat, Fish and Poultry	4
3	Mandatory	MFTT 533	Technology of Bakery and Confectionary	4
5	Electives	MFTT 534	E1- Entrepreneurship in Food Processing or E2 - Climate Change and Food Security	2
4	Mandatory Lab	MFTT 535	Practical Course – V	2
7	RP	MFTT 536	Research Project	6
			Total	22
Semester –IV				
Sr.	Components	Course Code	Course (Subject)	Credits
1	Mandatory	MFTT 541	Quality Evaluation of Processed Food	4
2	Mandatory	MFTT 542	Waste Management and Renewable Energy in Food Processing	4
3	Mandatory	MFTT 543	Advance in Food Processing Engineering	4
4	Electives	MFTT 544	E-I Advanced Food Packaging or E-II Marketing Management in Food Sector	2
5	Mandatory Lab	MFTT 545	Practical Course – VI	2
6	Electives Lab	MFTT 546	Practical Course – VII	2
7	OJT	MFTT 547	On Job Training	4
			Total	22

****** PG Degree with 88 credits after Three Year UG Degree.**

Chairman
BOS in Food technology

Secretary
Academic Council

Chairman
Academic Council