



Karmaveer Bhaurao Patil University, Satara

Syllabus for

M. Sc. I (Food Technology)

Under

Faculty of Science and Technology

(As per NEP 2020)

With effect from Academic Year 2024-2025

Revised Syllabus of Advanced Diploma Courses (PG)

Advanced Diploma Course (I Year)

1. Title: Food Safety and Quality Management
2. Year of Implementation: 2024
3. Duration: One Year
4. Pattern: Semester
5. Medium of Instruction: English
6. Contact hours: 7 hours/week for I Year, 8 hours/week for II
8. Structure of Course:

Year	Semester	Paper No.	Paper Code	Contact Hours	Credits (1Credid =12H)	Marks		
						Semester/ Annual Exam	Internal	Total
I	I	T I	ADMFTT101	30	2.5	50	25	75
	II	T II	ADMFTT202	30	2.5	50	25	75
		L I	ADMFTL101	120	5	100	50	150
		L II	ADMFTL202	60	5	100	-	100
	Total			240	15	300	100	400
II	III	T III	ADMFTT 303	30	2.5	50	25	75
	VI	T IV	ADMFTT 404	30	2.5	50	25	75
		L III	ADMFPL 303	120	5	100	50	150
		L IV	ADMFPL 404	60	5	100	-	100
	Industrial/Incubation Training			20	2	-	-	-
	Total			260	17	300	100	400
Total				500	32	600	200	800

Semester I

ADMFTT 101: Food Safety and Quality Management
(Contact Hrs: 30 Credits: 2.5)

Learning Objectives:

Students will be able to

1. Learn the food regulatory regime
2. Learn the Risk assessment of various foods

Unit I: Indian Food Regulatory Regime (15)

PFA Act and Rules, Global Scenario, Codex Alimentarius Commission (CAC), CAC : Implications, Other International Standards Setting Bodies Block 3 Export & Import Laws and Regulations, FTDR Act, 1992 and Foreign Trade Policy, Plant and Animal Quarantine, Customs Act and Import Control Regulations Other Laws and Standards Related to Food, Other Laws Related to Food Products, National Agencies for Implementation of International Food Laws and Standards, Accreditation System for Conformity Assessment Bodies

Unit II: Food Safety and Quality Management Systems (15)

Introduction to Food Safety, Food Safety System, Total Quality Management, Project Management , Risk Analysis, An Introduction to Risk Analysis, Risk Management, Risk Assessment, Risk Communication , HACCP History, Background and Structure, Pre- requisites, Principles, Case Studies Block 4 Other Food Safety Practices, Good Agriculture Practices, Good Animal Husbandry Practices and Good Manufacturing Practices Good Retail Practices, Good Transport Practices and Nutrition Labelling, Traceability Studies

Learning Outcomes:

After completion of the unit, Student will

1. Understand the food regulatory regime
2. Know the risk assessments of various foods.

ADMFTL 101: (Practical)

Learning Objectives:

Students will be able to

1. Identify the GMPs and GHPS
2. Develop FSMS system for various industries.

List of Practical's

1. Application of ISO 9001 Model.
2. Understanding Process approach
3. defining quality policy and objectives,
4. Correction Corrective action and preventive action
5. Continual improvement
6. Food laws : Hygienic requirements for manufacturing premises as per legal requirements
7. Food laws: Design label for any food product

Learning Outcomes:

Students can

1. Identify the GMPs and GHPS
2. Develop FSMS system for various industries.

Semester II

ADMFTT 202: Food Safety and Auditing
(Contact Hrs: 30 Credits: 2.5)

Learning Objectives:

Students will be able to

1. Learn the management and Accreditation and auditing.
2. Learn the logistics and supply chain management.

Unit I: Management Systems, Auditing and Accreditation (15)

Introduction to Management Systems, Auditing, Standard and Accreditation, Laboratory Quality Management System, An Overview and Requirements of ISO 17025, Requirements Specific to Food Testing Laboratories – Physical and Chemical Parameters, Requirements Specific to Food Testing Laboratories – Biological Parameters, General Topics: Related to Food Testing Laboratories, Retailer Standards, BRC Food and BRC IOP Standards : An Overview, IFS: International Food Standard Unit 18 SQF :1000 SQF: 2000, Global Gap and India Gap,

Unit II: Logistics and Supply Chain Management (15)

Logistic and supply chain management:- Introduction, scope, importance, application. Supply Chain Management – Advantages & Supply Chain Management – Goals. SCM – PROCESS: Plan, Develop (Source), Make, Deliver, Return. SCM – PROCESS FLOW: Material Flow, Information Flow, Money Flow. SCM – FLOW COMPONENTS: Transportation, Warehousing, Sourcing and Procurement, Returns Management, Post-Sales Service. SCM – PERFORMANCE MEASURES: Quantitative Measures, Non-Financial Measures, Financial Measures. SCM- TRANSPORTATIOIN: Roadways, Railways, Airways, Seaways/Waterways.

Learning Outcomes:

After completion of the unit, Student is able to

1. Understand the management and Accreditation and auditing.
2. Understand the logistics and supply chain management.

ADMFTL 202: (Practical):

Learning Objectives: Students will be able to

1. Learn the Accreditation and Auditing System
2. Learn the various roles of logistic and supply chain management.

List of Practical's

1. Managing the flow of goods and services
2. Audit Approaches
3. SWOT analysis of Food Industry
4. SWOT analysis of Food Industry in terms of logistics
5. Draw a SCM of any E- comers Industry
6. Logistics System design Process
7. Product Procurement Process
8. Supply Planning in SCM

Learning Outcomes:

Students will be able to

1. Understand the Accreditation and Auditing System
2. Understand the various laws of food safety and hygiene

