

JSS MAHAVIDYA PEETHA
JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE
OOTY ROAD, MYSORE - 570 025

Model Curriculum

Department	Food Processing and Engineering
Programme \ Semester	M.Voc / III Semester
Course	Value Added Course
Course Title	Food Safety Management System Implementation in Food Chain
Course Code	MVA010
Scheme	LTP: 2:0:0 30 Hours Lecture
Exam Pattern	C1:10, C2:10, C3 :30

Unit 1: Introduction to Food Safety Management Systems (FSMS)

Hours: 8

Overview of Food Safety - Importance, global challenges, key concepts
Food Safety Hazards - Biological, chemical, physical hazards, allergen management
Legislation and Standards - International standards (ISO 22000, HACCP), national regulations
FSMS Models and Frameworks - Comparison and benefits of different models

Unit 2: Planning and Designing FSMS

Hours: 8

Pre-requisite Programs (PRPs) - GMP, GHP
HACCP - Principles, plan development
Risk Assessment and Management - Conducting risk assessments, strategies
FSMS Documentation - Policies, procedures, record-keeping
Roles and Responsibilities - Management, staff roles, training

Unit 3: Implementation and Monitoring of FSMS

Hours: 6

Implementation Strategies - Steps, integration with other systems
Monitoring and Measurement - Techniques, tools, KPIs
Internal Audits and Inspections - Conducting audits, preparing for inspections
Verification and Validation - Methods, continuous improvement
Crisis Management - Plans, product recalls

Unit 4: Continuous Improvement and Sustainability in FSMS

Hours: 8

Continuous Improvement - PDCA cycle, corrective actions
Sustainable Practices - Environmental impact, sustainable sourcing

Emerging Trends and Technologies - Advances, traceability
Stakeholder Engagement - Communication, food safety culture
Case Studies - Successful implementations, lessons learned

Reference Books

- "Food Safety Management Systems: Principles and Practices" by Dr. Rakesh Kumar
- "Planning and Designing FSMS: A Practical Handbook" by Dr. Neha Gupta
- "Implementation and Monitoring of FSMS: Strategies and Tools" by Dr. Rajesh Sharma
- "Continuous Improvement and Sustainability in FSMS: Best Practices" by Dr. Ananya Singh

"Emerging Trends and Technologies in Food Safety: Case Studies from India"
by Dr. Vivek Patel