



Mahatma Phule Krishi Vidyapeeth Rahuri-413 722, Dist. Ahmednagar (MS)

Master's Programme in Process and Food Engineering

Course Layout

Minimum Credit Requirements

Sr. No.	Subject	Minimum credit(s)
1	Major Courses	20
2	Minor Courses	09
3	Supporting Courses	05
4	Seminar	01
5	Research	20
	Total	55

Sr. No.	Course Number	Course Title	Credits
A) Major subjects (Min. 20 Credits)			
1	PFE 501*	Transport Phenomena In Food Processing	3(2+1)
2	PFE 502*	Engineering Properties Of Food Materials	3(2+1)
3	PFE 503*	Advanced Food Process Engineering	3(2+1)
4	PFE 504*	Unit Operations In Food Process Engineering	2(1+1)
5	PFE 506	Processing Of Cereals	2(1+1)
6	PFE 508	Fruits And Vegetables Process Engineering	3(2+1)
7	PFE 511	Food Quality And Safety Engineering	3(2+1)
8	PFE 513	Storage Engineering And Handling Of Agricultural Products	2(1+1)
9	PFE 519	Processing Of Pulses And Oilseeds	2(1+1)
10	PFE 509	Meat Processing	3(2+1)
11	PFE 516	Design Of Bins And Silos	2(2+0)
12	PFE 518	Food Plant Design And Layout	2(1+1)
13	PFE 592*	Special Problem	1(0+1)
14	PFE 595#	Industry/Institute Training	NC

B) Minor subjects (Min. 9 Credits)			
1	PFE 507	Food Process And Material Handling Equipment Design	3(2+1)
2	PFE 510	Food Packaging	3(2+1)
3	PFE 512	Farm Structures And Environmental Control	2(2+0)
4	PFE 514	Seed Drying, Processing And Storage	3(2+1)
5	PFE 515	Biochemical And Process Engineering	3(2+1)
6	RES 506	Design And Analysis Of Renewable Energy Conversion Systems	3(3+0)
7	RES 507	Agricultural Waste And By-Products Utilization	3(2+1)
8	RES 521	Energy Management In Food Processing Industries	3(1+2)
9	FMPE 510	Ergonomics And Safety In Farm Operations	3(2+1)
C) Supporting courses (Min. 5 Credits)			
1	STAT 501	Statistical Methods	3(2+1)
2	MATH 502	Methods Of Numerical Analysis	2(1+1)
3	FMPE 505	Instrumentation Stress Analysis	3(2+1)
4	AE 502	Simulation And Modeling	3(3+0)
5	FMPE 521	Computer Aided System Design	2(0+2)
6	PFE 520	Applied Food Chemistry	2(1+1)
7	PFE 521	Applied Food Microbiology	2(1+1)
D) Seminar (1 Credit)			
1	PFE 591	Masters Seminar	0+1
E) Master's Research (20 Credit)			
1	PFE 599	Masters Research	20
F) Non credit compulsory courses			
1	PGS 501	Library And Information Services	0+1
2	PGS 502	Technical Writing And Communications Skills	0+1
3	PGS 503 (e-Course)	Intellectual Property And Its Management In Agriculture	1+0
4	PGS 504	Basic Concepts In Laboratory Techniques	0+1
5	PGS 505 (e-Course)	Agricultural Research, Research Ethics And Rural Development Programmes	1+0
6	PGS 506 (e-Course)	Disaster Management	1+0

* Compulsory

#Minimum of three weeks