

B.Tech. (Food Process Engineering) – Syllabus 2011

Semester wise distribution of courses and credits

S.No	Co. No.	Course Title	Cr. Hrs.
Semester I			
1.	MAT 101	Matrices, analytical geometry and differential equations	2+1
2.	COM 101	Introduction to Computer Technology	2+1
3.	PHY 101	Engineering Physics	2+1
4.	SAC 101	Principles of Analytical Chemistry	1+1
5.	AGR 121	Production Technology of Field Crops	1+1
6.	FMP 101	Manufacturing Practices	2+1
7.	AST 101	Engineering Drawing	0+1
8.	AGM 151	General Microbiology	2+1
9.	ENG 101	English for Effective Communication	0+1
10.	NSS / NCC 111	National Service Scheme/ National Cadet Corps	0+1
11.	PED 111	Physical Education	0+1
Total			12 +11=23

Semester II			
1.	MAT 102	Vector Calculus and Complex Analysis	2+1
2.	COM 102	Programming in C ⁺⁺	1+1
3.	AEC 101	Principles of Agricultural Economics	1+1
4.	HOR 121	Basic Horticulture	1+1
5.	AST 102	Engineering Mechanics	1+1
6.	FMP 102	Electrical Engineering	2+1
7.	FMP 103	Thermodynamics	2+1
8.	FPE 101	Heat and mass transfer	1+1
9.	BIC 151	Principles of Biochemistry	2+1
Total			13+9=22

Semester III			
1.	MAT 201	Partial Differential Equations and Transform theories	2+1
2.	AST 201	Strength of Materials	2+1
3.	FMP 201	Theory of machines	2+1
4.	SWE 201	Fluid Mechanics and Hydraulics	2+1
5.	FPE 201	Refrigeration and Air Conditioning	1+1
6.	FPE 202	Unit Operations in Food Processing	2+1
7.	FSN 251	Principles of Food Science	2+1
8.	BIC 252	Biochemistry of Food Processing and Preservation	2+1
Total			15+8=23

Semester IV			
1.	MAT 202	Numerical Methods for Engineering Applications	2+1
2.	ARM 201	Fundamentals of Agri Business Management	1+1
3.	FMP 202	Machine Design and Computer Aided Drawing	1+2
4.	FMP 203	Electronics and Instrumentation	2+1
5.	ERG 203	Heat Power Engineering	1+1
6.	FPE 251	Crop Process Engineering	2+1
7.	FPE 252	Principles of Food Process Engineering	2+1
8.	AGM 251	Food Microbiology	2+1
Total			13+9=22

Semester V			
1.	MAT 301	Engineering Statistics	1+1
2.	NST 301	Fundamentals and applications of Nanotechnology	1+0
3.	FSN 351	Food Regulations and Quality Control	1+1
4.	FPE 351	Process Engineering of Fruits and Vegetables	2+1
5.	FPE 352	Dairy Engineering	2+1
6.	FPE 353	Meat, Poultry and Fish Processing Technology	2+1
7.	FPE 354	Design of Food Processing Equipment	2+1
8.		Experiential Learning	0+5

	11+11=22
--	-----------------

Semester VI			
1.	MAT 302	Operations Research	1+1
2.	ENG 301	Soft skills for Employability	0+1
3.	ERG 305	Energy auditing and Management	2+1
4.	FSN 352	Technology of Fruits and Vegetables Preservation	2+1
5.	AMP 351	Technology of Milk and Milk Products	1+1
6.	FPE 302	Process Engineering of Spices and Plantation Crops	2+1
7.	FPE 355	Emerging Techniques in Food Processing for Safety and Quality	2+1
8.	FPE 356	Project Work I	0+2
9.	FPE 357	Study Tour I (10 days)	0+1
Total			10+10=20

Semester VII			
1.	TAM 401/ ENG 401	“Tamil illakkiyathil velanmai” /Development Education	0+1
2.	ENS 451	Pollution Control in Food Industries	2+1
3.	FSN 451	Baking and Confectionery Technology	2+1
4.	FPE 451	Food Packaging Technology	2+1
5.	FPE 452	Food Plant Layout and Management	2+1
6.	FPE 453	Study Tour II (10 days)	0+1
7.	FPE 456	Project Work II	0+2
8.		Experiential Learning	0+5
Total			8+13=21

Semester VIII			
1.	FPE 454	Industrial Internship Programme (80 days)	0+5
2.	FPE 455	Rural Agro Industrial Programme (10 days)	0+1
3.	FPE 457	All India Study Tour (15 days)	0+1
Total			0+7=07

Summary of semester wise distribution of credits

Sem.	No. of Courses	Credit Hours	Total
I	11	12 + 11	23
II	9	13 + 09	22
III	8	15 + 08	23
IV	8	13 + 09	22
V	8	11 + 11	22
VI	9	10 + 10	20
VII	8	08 + 13	21
VIII	3	00 + 07	07
Total	64	82+ 78	160