

Department of Processing and Food Engineering,

College of Technology and Engineering

Program Educational Objectives

- PEO 1. To provide the strong foundation in the areas of food engineering, post-harvest practices and value addition of food materials.
- PEO 2. Postgraduates of the program must be able to competently work with professionals of related fields over the wide spectrum of practice in areas of processing and food engineering, post-harvest technology and value addition
- PEO 3. Development of the analytical and logical aptitude amongst P. G. students to quickly adapt to new work environments, assimilate new information and problem solving in various areas for rural development through knowledge of various gadgets used in processing and food industries.

Program Outcomes

PO 1.	Develop skill and expertise in post graduate scholars to work on projects for value addition of various food products.
PO 2.	Generate adequate trained man power to work in food processing industries.
PO 3.	Develop cadre of scholars for achieving entrepreneurial skills and self-employment opportunities in food processing sector.

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Graduate Attributes

GA 1	Engineering Knowledge
GA 2	Problem Analysis
GA 3	Design & Development of Solution
GA 4	Investigation of Complex Problem
GA 5	Modern Tools Usage
GA 6	Engineer and Society
GA 7	Environment & Sustainability
GA 8	Ethics
GA 9	Individual & Team work
GA 10	Communication
GA 11	Lifelong Learning
GA 12	Project management and Finance

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Vision

To be a center of excellence which integrates all facets of processing and food engineering.

Mission

1. To produce business leaders, develop competitive processes, technologies and practices in the area of food engineering, entrepreneurship and management.
2. To be a prime academic institution and to carry out R&D in frontier areas of food engineering.
3. To offer training to enhance skill in research by consultation with the stake holders.

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Curriculum for PG Programme in Processing and Food Engineering

Course Title	Course No.	Credit Hours	Semester			
			I	II	III	IV-VI
Core Courses: Total 12 credits; 2 courses in first semester (6 credits) and 1 course each in second and third semester (3 credits each) to be evaluated externally.						
Unit Operations in Food Process Engineering	PFE 511	3(2+1)	3	-	-	-
Engineering Properties of Food Materials	PFE 512	3(2+1)	3	-	-	-
Fruits & Vegetable Process Engineering	PFE 521	3(2+1)	-	3	-	-
Processing of Oilseeds, Cereals and Pulses	PFE 531	3(2+1)	-	-	3	-
Optional Courses: Total 15 credits; two courses in first & second semester each (6 credits in each semester) and one course in third semester (3 credits).						
Food Process Engineering	PFE 513	3(2+1)	3	-	-	-
Food Packaging	PFE 514	3(2+1)	3	-	-	-
Meat Processing	PFE 515	3(2+1)	3	-	-	-
Drying and Dehydration of Foods	PFE 516	3(2+1)	3	-	-	-
Transport Phenomena in Food Processing	PFE 522	3(2+1)	-	3	-	-
Food Processing Equipments Design	PFE 523	3(2+1)	-	3	-	-
Farm Structures and Environmental Control	PFE 524	3(2+1)	-	3	-	-
Storage and Handling of Agricultural Products	PFE 525	3(2+1)	-	3	-	-
Post Harvest Processing of Grains	PFE 535	3(2+1)	-	-	3	-
Food Chemistry & Microbiology	PFE 536	3(2+1)	-	-	3	-
Biochemical & Process Engineering	PFE 537	3(2+1)	-	-	3	-
Minor & Supporting Courses: Total 9 credits; one course in first, second and third semester each (3 credits in each semester).						
Higher Mathematics	BS 515	3(3+0)	3	-	-	-
Statistical Methods	AST 510	3(2+1)	3	-	-	-
Advance Programming with 'C++'	CSE 511	3(1+2)	3	-	-	-
CAD/CAM	MED 518	3(1+2)	3	-	-	-
Methods of Numerical Analysis	BS 521	3(2+1)	-	3	-	-
Energy Management in Food Process Engineering	REE 523	3(3+0)	-	3	-	-
Alternate Fuels & Application	REE 524	3(3+0)	-	3	-	-
Energy, Ecology and Environment	REE 525	3(3+0)	-	3	-	-
Energy Management in Agriculture	REE 537	3(3+0)	-	-	3	-
Renewable Sources of Energy	REE 531	3(2+1)	-	-	3	-
Energy Lab	REE 536	3(0+3)	-	-	3	-
Others						
Compulsory Courses; {(0+1) or (1+0)} Non Credit (NC); PGS Series	PGS501/502/...	1	NC	NC		
Seminar (0+1)	PFE532	1	-	-	1	-
Comprehensive	PFE 533	NC			NC	
Research (Thesis). Thesis minimum duration 2 semesters	PFE 534	20	-	-	-	20
Total credits to be offered (for Master Programme)		57	15	12	10	20

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Course Summary for PG Programme in Processing and Food Engineering

Courses	No. of Courses					Credit Hours
	Semester					
	I	II	III	IV	Total	
Core	2	1	1	-	4	12
Optional	2	2	1	-	5	15
Minor & Supporting	1	1	1	-	3	9
Seminar	-	-	1	-	1	1
Comprehensive	-	-	-	1	1	Non Credit (graded as satisfactory/ non satisfactory)
Research (Thesis)	-	-	-	1	1	20* (graded as satisfactory/ non satisfactory)
Compulsory Courses (PGS Series)	1	1	-	-	2	Non Credit
Total	6	5	4	2	17	57

*Research (Thesis) credit load is not counted in calculation of final OGPA.