

College of Agricultural Engineering & Technology

M.Tech

Course Code	Course Name	Credit Hours	Course Type	Semester	Syllabus	Lecture Schedule
Soil and Water Engineering						
SWE- 501*	Watershed Hydrology	2+1	Major			
SWE- 502*	Design of Farm Irrigation Systems	2+1	Major			
SWE-503*	Agricultural Drainage Systems	2+1	Major			
SWE-504*	Ground Water Engineering	2+1	Major			
SWE-505	Soil and Water Conservation Engineering	2+1	Major			
SWE-506	Crop Environmental Engineering	2+0	Major			
SWE-507	Design of Pumps for Irrigation and Drainage	2+0	Major			
SWE-508	Open Channel Flow	3+0	Major			
SWE-509	Flow Through Porous Media	2+0	Major			
SWE-510	Water Resources System Engineering	3+0	Major			
SWE-511	GIS and Remote Sensing for Land and Water Resource Management	2+1	Major			
SWE-512	Watershed Management and Modelling	2+1	Major			
SWE-513	Land Development and Earth Moving Machinery	2+0	Major			
SWE-591	Master's Seminar	1+0	Major			
SWE-592	Special Problem	0+1	Major			
SWE-595	Industry/ Institute Training	NC	Major			
SWE-599	Master Research	20	Major			

Farm Machinery and Power Engineering						
FMPE 501*	Design of Farm Power and Machinery Systems	3+1	Major			
FMPE 502*	Soil Dynamics in Tillage and Traction	2+1	Major			
FMPE 503*	Testing and Evaluation of Tractors and Farm Equipment	2+1	Major			
FMPE 504*	System Simulation and Computer Aided Problem Solving in Engineering	1+1	Major			
FMPE 505	Applied Instrumentation in Farm Machinery and Stress Analysis	2+1	Major			
FMPE 506	System Engineering and Productivity	2+1	Major			
FMPE 507	Farm Machinery Dynamics Noise & Vibrations	3+1	Major			
FMPE 508	Tractor Design	2+1	Major			
FMPE 509	Operations Research in Farm Power & Machinery Management	2+1	Major			
FMPE 510	Ergonomics and Safety in Farm Operations	2+1	Major			
FMPE 511/ PFE 502	Engineering Properties of Biological Materials	2+1	Major			
FMPE 512	Agro-Energy Audit and Management	2+0	Major			
FMPE 513	Design and Analysis of Renewable Energy Conversion Systems	3+0	Major			
FMPE 514	Research Methodology	0+1	Major			

FMPE 591	Master's Seminar	1+0	Major			
FMPE 592	Special Problem	0+1	Major			
FMPE 595	Industry/ Institute Training	NC	Major			
FMPE 599	Master's Research	20	Major			
Processing and Food Engineering						
PFE-501*	Transport Phenomena in Food Processing	2+1	Major			
PFE-502*	Engineering Properties of Food Materials	2+1	Major			
PFE-503*	Advanced Food Process Engineering	2+1	Major			
PFE-504*	Unit operations in Food Process Engineering	2+1	Major			
PFE-505	Energy Management in Food Processing Industries	2+1	Major			
PFE-506	Processing of Cereals, Pulses and Oilseeds	2+1	Major			
PFE-507	Food Processing Equipments and Plant Design	2+1	Major			
PFE-508	Fruits and Vegetables Process Engineering	2+1	Major			
PFE-509	Meat Processing	2+1	Major			
PFE-510	Food Packagaing	2+1	Major			
PFE-511	Food Quality and Safety Engineering	2+1	Major			
PFE-512	Farm Structures and Environmental Control	1+1	Major			
PFE-513	Storage Engineering and Handling of Agricultural Products	2+1	Major			
PFE-514	Seed Drying, Processing and Storage	2+1	Major			

PFE-515	Biochemical and Process Engineering	2+1	Major			
PFE-591	Master's Seminar	1+0	Major			
PFE-595	Industry/Institute Training	NC	Major			
PFE-599	Master's Research	20	Major			
Minor Courses						
CE 501	Open Channel Flow	3+0	Minor			
CE 502	Dams & Reservoir Operations	3+1	Minor			
CE 503	Water Quality and Pollution Control	3+1	Minor			
CE 504	Fluvial Hydraulics	2+1	Minor			
CE 505	Experimental Stress Analysis	2+1	Minor			
CE 506	Similitude in Engineering	2+1	Minor			
CE 507	Control of Pollution from Solid Wastes	2+0	Minor			
CE 601	Probabilistic Approach in Design	2+0	Minor			
CE 602	Random Vibrations	2+0	Minor			
CE 603	Design of Bins and Silos	2+1	Minor			
CSE 501	Computer Graphis	2+1	Minor			
CSE 502	Neural Network and its Applications	2+1	Minor			
EE 501	Applied Instrumentation	2+1	Minor			
EE 502	Process Control Systems	2+1	Minor			
ME 501	Mechanism Analysis and Syntheses	3+0	Minor			
ME 502	Vibrations	3+0	Minor			