

Agricultural Engineering

Course Code	Course Name	Credit-L	Credit-P
I-SEMESTER			
FMPE 501*	DESIGN OF FARM POWER AND MACHINERY SYSTEMS	3	1
FMPE 503*	TESTING AND EVALUATION OF TRACTORS AND FARM EQUIPMENT	2	1
FMPE 505	APPLIED INSTRUMENTATION IN FARM MACHINERY AND STRESS ANALYSIS	2	1
FMPE 508	TRACTOR DESIGN	2	1
FMPE 509	OPERATIONS RESEARCH	2	1
FMPE 511/ PFE 502	ENGINEERING PROPERTIES OF BIOLOGICAL MATERIALS	2	1
FMPE 512	AGRO-ENERGY AUDIT AND MANAGEMENT	2	0
FMPE 515	PRODUCTION TECHNOLOGY	2	1
FMPE 591	MASTER'S SEMINAR	1	0
FMPE 601**	ADVANCES IN FARM MACHINERY AND POWER ENGINEERING	3	1
FMPE 603	ENERGY CONSERVATION AND MANAGEMENT IN FARM MACHINERY AND POWER ENGINEERING	2	0
FMPE 604	COMPUTER AIDED ANALYSIS AND DESIGN OF FARM MACHINERY	2	1
FMPE 691	DOCTORAL SEMINAR I	1	0
FMPE 692	DOCTORAL SEMINAR II	1	0
SWE 501*	WATERSHED HYDROLOGY	2	1
SWE 502*	DESIGN OF FARM IRRIGATION SYSTEMS	2	1
SWE 504*	GROUND WATER ENGINEERING	2	1
SWE 505	SOIL AND WATER CONSERVATION ENGINEERING	2	1
SWE 506	CROP ENVIRONMENTAL ENGINEERING	2	0
SWE 508	OPEN CHANNEL FLOW	3	0
SWE 510	WATER RESOURCES SYSTEM ENGINEERING	2	0
SWE591	MASTER'S SEMINAR	1	0
SWE 602**	SOIL AND WATER SYSTEMS' SIMULATION AND MODELLING	2	1
SWE 603	MODELLING SOIL EROSION PROCESSES	2	1
SWE 606/ES 606	PLANT GROWTH MODELLING AND SIMULATION OF ECOLOGICAL PROCESSES	2	1
SWE691	DOCTORAL SEMINAR I	1	0
SWE 692	DOCTORAL SEMINAR II	1	0
PFE 502*	ENGINEERING PROPERTIES OF FOOD MATERIALS	2	1
PFE 504*	UNIT OPERATIONS IN FOOD PROCESS ENGINEERING	2	1
PFE 505	ENERGY MANAGEMENT IN FOOD PROCESSING INDUSTRIES	2	1
PFE 506	PROCESSING OF CEREALS, PULSES AND	2	1

	OILSEEDS		
PFE 509	MEAT PROCESSING	2	1
PFE 510	FOOD PACKAGING	2	1
PFE 513	STORAGE ENGINEERING AND HANDLING OF AGRICULTURAL PRODUCTS	2	0
PFE 515	BIOCHEMICAL AND PROCESS ENGINEERING	2	1
PFE 591	MASTER'S SEMINAR	1	0
PFE 601** /PHT604	TEXTURAL & RHEOLOGICAL CHARACTERISTICS OF FOOD MATERIALS	2	1
PFE 604 /PHT 608	ADVANCES IN DRYING OF FOOD MATERIALS	2	1
PFE 691	DOCTORAL SEMINAR I	1	0
PFE 692	DOCTORAL SEMINAR II	1	0
II-SEMESTER			
FMPE 502*	SOIL DYNAMICS IN TILLAGE AND TRACTION	2	1
FMPE 504*	SYSTEM SIMULATION AND COMPUTER AIDED PROBLEM SOLVING IN ENGINEERING	1	1
FMPE 506	SYSTEM ENGINEERING AND PRODUCTIVITY	2	1
FMPE 507	FARM MACHINERY DYNAMICS NOISE & VIBRATIONS	3	1
FMPE 510	ERGONOMICS AND SAFETY IN FARM OPERATIONS	2	1
FMPE 513	DESIGN AND ANALYSIS OF RENEWABLE ENERGY CONVERSION SYSTEMS	3	0
FMPE 514	RESEARCH METHODOLOGY	0	1
FMPE 591	MASTER'S SEMINAR	1	0
FMPE 592	SPECIAL PROBLEM	0	1
FMPE 595#	INDUSTRY/ INSTITUTE TRAINING	NC	
FMPE 602**	SIMULATION MODELLING IN FARM MACHINERY AND POWER ENGINEERING	2	0
FMPE 605	MACHINERY FOR NATURAL RESOURCE MANAGEMENT AND PRECISION FARMING	3	1
FMPE 606	ADVANCES IN HYDRAULICS AND ELECTRO PNEUMATIC CONTROLS	2	0
FMPE 691	DOCTORAL SEMINAR I	1	0
FMPE 692	DOCTORAL SEMINAR II	1	0
SWE 503*	AGRICULTURAL DRAINAGE SYSTEMS	2	1
SWE 507	DESIGN OF PUMPS FOR IRRIGATION AND DRAINAGE	2	0
SWE 509	FLOW THROUGH POROUS MEDIA	2	0
SWE 511	GIS AND REMOTE SENSING FOR LAND AND WATER RESOURCE MANAGEMENT	2	1
SWE 512	WATERSHED MANAGEMENT AND MODELLING	2	1
SWE 513	LAND DEVELOPMENT AND EARTH MOVING MACHINERY	2	0
SWE 514	ENGINEERING HYDRAULICS	3	0
SWE591	MASTER'S SEMINAR	1	0
SWE 592	SPECIAL PROBLEM	0	1
SWE 595#	INDUSTRY/ INSTITUTE TRAINING	NC	
SWE 601**	ADVANCED HYDROLOGY	3	0
SWE 604	ADVANCED HYDRO-MECHANICS IN SOIL	3	0

	AQUIFER SYSTEMS		
SWE 605	HYDRO-CHEMICAL MODELLING AND POLLUTANT MANAGEMENT	3	0
SWE 607	ADVANCES IN IRRIGATION AND DRAINAGE	2	0
SWE691	DOCTORAL SEMINAR I	1	0
SWE 692	DOCTORAL SEMINAR II	1	0
SWE 693	SPECIAL PROBLEM	0	1
SWE 694	CASE STUDY	0	1
PFE 501*	TRANSPORT PHENOMENA IN FOOD PROCESSING	2	1
PFE 503*	ADVANCED FOOD PROCESS ENGINEERING	2	1
PFE 507	FOOD PROCESSING EQUIPMENT AND PLANT DESIGN	2	1
PFE 508	FRUITS AND VEGETABLES PROCESS ENGINEERING	2	1
PFE 511	FOOD QUALITY AND SAFETY ENGINEERING	2	1
PFE 512	FARM STRUCTURES AND ENVIROMENTAL CONTROL	1	1
PFE 514/VSC 605	SEED DRYING, PROCESSING AND STORAGE	2	1
PFE591	MASTER'S SEMINAR	1	0
PFE 592	SPECIAL PROBLEM	0	1
PFE 595#	INDUSTRY/ INSTITUE TRAINING	NC	
PFE 602**	ADVANCES IN FOOD PROCESSING	3	0
PFE 603	MATHEMATICAL MODELS IN FOOD PROCESSING	3	0
PFE 605	AGRICULTURAL WASTE AND BY –PRODUCTS UTILIZATION	2	1
PFE 691	DOCTORAL SEMINAR I	1	0
PFE 692	DOCTORAL SEMINAR II	1	0
PFE 693	SPECIAL PROBLEM	0	1
PFE 694	CASE STUDY	0	1
AGR 016	BASIC AGRICULTURAL ENGINEERING	1	1

Core Courses:

M.Sc.: FMPE 501, FMPE 502, FMPE 503, FMPE 504, SWE 501, SWE 502, SWE 503, SWE 504, PFE 501, PFE 502, PFE 503, PFE 504

Ph.D.: FMPE 601, FMPE 602, SWE 601, SWE 602, PFE 601, PFE 602