

M.Sc. in Agricultural and Bio-Systems Engineering

List of Courses:

Code	Title	Credits	Option
First Semester			
AE 5102	Thermodynamics	2	Compulsory
AE 5104	Engineering Drawing	2	Compulsory
AE 5106	Physical Properties of Agricultural Products	2	Compulsory
AE 5109	Soil Mechanics	2	Compulsory
AE 5111	Engineering Mechanics	2	Compulsory
AE 5112	Farm Mechanization	2	Compulsory
AE 5117	Numerical Analysis in Agricultural Engineering Applications	2	Compulsory
AE 5107	Water Quality for Agriculture and Environment	2	Elective
AE 5113	Principles of Farm Machinery	2	Elective
AE 5114	Agricultural Structures and Environment	2	Elective
AE 5115	Electronics and Instrumentation in Agriculture	2	Elective
AE 5116	Farm Machinery Testing and Evaluation	1	Elective
AE 5118	Principles of Post-harvest Biology and Technology	2	Elective
ST 5106	Computer Programming	2	Elective
Second Semester			
AE 5203	Food Process Engineering	2	Compulsory
AE 5204	Power and Energy for Agriculture	2	Compulsory
AE 5206	Fluid Mechanics	2	Compulsory
AE 5202	Water Application Systems	2	Elective
AE 5205	Ecologically Sustainable Industrial Development	1	Elective
AE 5207	Applied Heat Transfer	2	Elective
AE 5209	GIS for Natural Resources Management	2	Elective
AE 5210	Health, Sanitation and Wastewater Management	2	Elective
AE 5211	Hydraulics of Erosion and Sediment Transport	2	Elective
AE 5213	Bioreactor and Bio-Environment Design and Control Systems	2	Elective
AE 5214	Electrical Power and Machines	2	Elective
Second Year First Semester			
AE 5157	Solid Waste Management	2	Compulsory
AE 5198	Directed Study and Seminar	5	Compulsory
AE 5152	Environmental Impact Assessment	2	Elective
AE 5153	Principles of Ergonomics in Agriculture	2	Elective
AE 5154	Application of Remote Sensing in Agriculture	2	Elective
AE 5156	Environment and Industry	3	Elective
AE 5158	Organic Produce Certification and Marketing	1	Elective
AE 5159	Grading Packaging and Transportation of Fruits and Vegetables	2	Elective
AE 5160	Advanced Power and Machinery	2	Elective
AE 5161	Solar Energy Applications in Agriculture	2	Elective
AE 5162	Tillage Engineering	2	Elective
AE 5163	Analysis of Agricultural Systems	2	Elective
AE 5164	Combustion of Biomass	2	Elective
AE 5165	Natural Fibre Technology	2	Elective
AE 5167	Process Control and Automation	2	Elective
AE 6101	Advanced Irrigation Water Management	2	Elective
AE 6102	Advanced GIS and Geo-informatics	2	Elective