



Republic of the Philippines
CENTRAL LUZON STATE UNIVERSITY
Science City of Muñoz, Nueva Ecija

STUDY PLAN

SCHOLARSHIPS for INSTRUCTORS' KNOWLEDGE ADVANCEMENT PROGRAM (SIKAP)

DHEI: Central Luzon State University

PROGRAM: Master of Science in Agricultural Engineering

Major: Agricultural Machinery

NAME OF STUDENT:

Check which version of the study plan applies:

WITH BRIDGING SUBJECTS

WITHOUT BRIDGING SUBJECTS

TERM AND SCHOOL YEAR <i>(modify as necessary; include the nature of the subject)</i>	# OF UNITS REQUIRED
YEAR 1 First Semester, SY 2021-2022 <ul style="list-style-type: none">• AE 701c – Applied Statistics• AE 750 – Project Planning and Management• AE 798 – Special Problem• AE 800 – Thesis• Major Course 1	3 3 2 1 3
Second Semester, SY 2021-2022 <ul style="list-style-type: none">• AE 710 – Advanced Mathematical Methods• AE 713 – Basic Computer Programming• AE 800 – Thesis• Major Course 2• Cognate 1	3 3 1 3 3
Mid-Year Term 2022 <ul style="list-style-type: none">• AE 800 – Thesis	1
YEAR 2 First Semester, SY 2022-2023 <ul style="list-style-type: none">• AE 799 – Seminar• AE 800 – Thesis• Major Course 3• Elective 1• Cognate 2	1 2 3 3 3
Second Semester, SY 2022-2023 <ul style="list-style-type: none">• AE 800 – Thesis• Comprehensive Examination	1 -
TOTAL Units	39 units

NOTE: Include terms for comprehensive exam and other required exams (if any), practicum, and alike.

COURSE REQUIREMENTS

CORE SUBJECTS

COURSE CODE	COURSE TITLE	# OF UNITS
AE 701c	Applied Statistics (2 lec: 1 lab)	3
AE 710	Advanced Mathematical Methods	3
AE 713	Basic Computer Programming	3
AE 750	Project Planning and Management	3

MAJOR SUBJECTS

COURSE CODE	COURSE TITLE	# OF UNITS
First Semester		
AE 798	Special Problem	1-3
AE 799	Seminar	1-3
AM 780	Agricultural Mechanization and Management (2 lec: 1 lab)	3
AE 775	Computer Applications (1 lec: 2 lab)	3
AM 782	Instrumentation and Measurement Techniques (2 lec: 1 lab)	3
AM 784	Manufacturing and Testing of Agricultural Equipment (2 lec: 1 lab)	3
AM 786	Agricultural Machinery Laboratory (2 lec: 1 lab)	3
Second Semester		
AM 781	Theory of Field Machinery (2 lec: 1 lab)	3
AM 783	Agricultural Machinery Design (2 lec: 1 lab)	3
AM 785	Ground Drive System (2 lec: 1 lab)	3

Note: Major Courses can also be chosen as an Elective/Cognate

ELECTIVE/COGNATE COURSES

COURSE CODE	COURSE TITLE	# OF UNITS
First Semester		
AE 714	GIS in Agriculture and Fisheries	3
AE 816	Energy and Bio-fuel Engineering	3
Second Semester		
AE 819	Sustainable Energy for Developing Countries	3
EM 705	Environmental Science	3

THESIS/APPRENTICESHIP

COURSE CODE	COURSE TITLE	# OF UNITS
AE 779	Apprenticeship	4
AE 800	Thesis	6



Republic of the Philippines
CENTRAL LUZON STATE UNIVERSITY
Science City of Muñoz, Nueva Ecija

STUDY PLAN

SCHOLARSHIPS for INSTRUCTORS' KNOWLEDGE ADVANCEMENT PROGRAM (SIKAP)

DHEI: Central Luzon State University

PROGRAM: Master of Science in Agricultural Engineering

Major: Agricultural Machinery

NAME OF STUDENT:

Check which version of the study plan applies:

WITH BRIDGING SUBJECTS

WITHOUT BRIDGING SUBJECTS

TERM AND SCHOOL YEAR <i>(modify as necessary; include the nature of the subject)</i>	# OF UNITS REQUIRED
YEAR 1 Second Semester, SY 2021-2022 <ul style="list-style-type: none">• AE 710 – Advanced Mathematical Methods• AE 713 – Basic Computer Programming• AE 800 – Thesis• Major Course 1• Cognate 1	3 3 1 3 3
Mid-Year Term 2022 <ul style="list-style-type: none">• AE 800 – Thesis	1
First Semester, SY 2022-2023 <ul style="list-style-type: none">• AE 701c – Applied Statistics• AE 750 – Project Planning and Management• AE 798 – Special Problem• AE 799 – Seminar• AE 800 – Thesis• Major Course 2	3 3 2 1 1 3
YEAR 2 Second Semester, SY 2022-2023 <ul style="list-style-type: none">• AE 800 – Thesis• Major Course 3• Elective 1• Cognate 2	2 3 3 3
First Semester, SY 2023-2024 <ul style="list-style-type: none">• AE 800 – Thesis• Comprehensive Examination	1 -
TOTAL Units	39 units

NOTE: Include terms for comprehensive exam and other required exams (if any), practicum, and alike.

COURSE REQUIREMENTS

CORE SUBJECTS

COURSE CODE	COURSE TITLE	# OF UNITS
AE 701c	Applied Statistics (2 lec: 1 lab)	3
AE 710	Advanced Mathematical Methods	3
AE 713	Basic Computer Programming	3
AE 750	Project Planning and Management	3

MAJOR SUBJECTS

COURSE CODE	COURSE TITLE	# OF UNITS
First Semester		
AE 798	Special Problem	1-3
AE 799	Seminar	1-3
AM 780	Agricultural Mechanization and Management (2 lec: 1 lab)	3
AE 775	Computer Applications (1 lec: 2 lab)	3
AM 782	Instrumentation and Measurement Techniques (2 lec: 1 lab)	3
AM 784	Manufacturing and Testing of Agricultural Equipment (2 lec: 1 lab)	3
AM 786	Agricultural Machinery Laboratory (2 lec: 1 lab)	3
Second Semester		
AM 781	Theory of Field Machinery (2 lec: 1 lab)	3
AM 783	Agricultural Machinery Design (2 lec: 1 lab)	3
AM 785	Ground Drive System (2 lec: 1 lab)	3

Note: Major Courses can also be chosen as an Elective/Cognate

ELECTIVE/COGNATE COURSES

COURSE CODE	COURSE TITLE	# OF UNITS
First Semester		
AE 714	GIS in Agriculture and Fisheries	3
AE 816	Energy and Bio-fuel Engineering	3
Second Semester		
AE 819	Sustainable Energy for Developing Countries	3
EM 705	Environmental Science	3

THESIS/APPRENTICESHIP

COURSE CODE	COURSE TITLE	# OF UNITS
AE 779	Apprenticeship	4
AE 800	Thesis	6



STUDY PLAN

SCHOLARSHIPS for INSTRUCTORS' KNOWLEDGE ADVANCEMENT PROGRAM (SIKAP)

DHEI: Central Luzon State University
 PROGRAM: Master of Science in Agricultural Engineering
 Major: Crop Process Engineering

NAME OF STUDENT:

Check which version of the study plan applies:

WITH BRIDGING SUBJECTS

WITHOUT BRIDGING SUBJECTS

TERM AND SCHOOL YEAR <i>(modify as necessary; include the nature of the subject)</i>	# OF UNITS REQUIRED
YEAR 1 First Semester, SY 2021-2022 <ul style="list-style-type: none"> ● AE 701c – Applied Statistics ● AE 750 – Project Planning and Management ● AE 798 – Special Problem ● AE 800 – Thesis ● Major Course 1 	3 3 2 1 3
Second Semester, SY 2021-2022 <ul style="list-style-type: none"> ● AE 710 – Advanced Mathematical Methods ● AE 713 – Basic Computer Programming ● AE 800 – Thesis ● Major Course 2 ● Cognate 1 	3 3 1 3 3
Mid-Year Term 2022 <ul style="list-style-type: none"> ● AE 800 – Thesis 	1
YEAR 2 First Semester, SY 2022-2023 <ul style="list-style-type: none"> ● AE 799 – Seminar ● AE 800 – Thesis ● Major Course 3 ● Elective 1 ● Cognate 2 	1 2 3 3 3
Second Semester, SY 2022-2023 <ul style="list-style-type: none"> ● AE 800 – Thesis ● Comprehensive Examination 	1 -
TOTAL Units	39 units

NOTE: Include terms for comprehensive exam and other required exams (if any), practicum, and alike.

COURSE REQUIREMENTS

CORE SUBJECTS

COURSE CODE	COURSE TITLE	# OF UNITS
AE 701c	Applied Statistics (2 lec: 1 lab)	3
AE 710	Advanced Mathematical Methods	3
AE 713	Basic Computer Programming	3
AE 750	Project Planning and Management	3

MAJOR SUBJECTS

COURSE CODE	COURSE TITLE	# OF UNITS
First Semester		
AE 798	Special Problem	1-3
AE 799	Seminar	1-3
CPE 720	Agricultural Process Engineering	3
CPE 722	Applied Fluid Mechanics	3
CPE 724	Convection Heat Transfer	3
CPE 726	Advanced Process Design and Optimization	3
CPE 728	Primary Processing of Plantation and Special Crops (2 lec:1 lab)	3
Second Semester		
CPE 721	Energy Use and Control in Agricultural Systems	3
CPE 723	Conduction Heat Transfer	3
CPE 725	Radiation Heat Transfer	3
CPE 727	Postharvest Handling and Storage of Perishable Crops (2 lec: 1 lab)	3
CPE 729	Processing of Grains and their Products	3

Note: Major Courses can also be chosen as an Elective/Cognate

ELECTIVE/COGNATE COURSES

COURSE CODE	COURSE TITLE	# OF UNITS
First Semester		
AE 714	GIS in Agriculture and Fisheries	3
AE 816	Energy and Bio-fuel Engineering	3
Second Semester		
AE 819	Sustainable Energy for Developing Countries	3
EM 705	Environmental Science	3

THESIS/APPRENTICESHIP

COURSE CODE	COURSE TITLE	# OF UNITS
AE 779	Apprenticeship	4
AE 800	Thesis	6



Republic of the Philippines
 CENTRAL LUZON STATE UNIVERSITY
 Science City of Muñoz, Nueva Ecija

STUDY PLAN

SCHOLARSHIPS for INSTRUCTORS' KNOWLEDGE ADVANCEMENT PROGRAM (SIKAP)

DHEI: Central Luzon State University

PROGRAM: Master of Science in Agricultural Engineering
 Major: Crop Process Engineering

NAME OF STUDENT:

Check which version of the study plan applies:

WITH BRIDGING SUBJECTS

WITHOUT BRIDGING SUBJECTS

TERM AND SCHOOL YEAR <i>(modify as necessary; include the nature of the subject)</i>	# OF UNITS REQUIRED
YEAR 1 Second Semester, SY 2021-2022 <ul style="list-style-type: none"> ● AE 710 – Advanced Mathematical Methods ● AE 713 – Basic Computer Programming ● AE 800 – Thesis ● Major Course 1 ● Cognate 1 	3 3 1 3 3
Mid-Year Term 2022 <ul style="list-style-type: none"> ● AE 800 – Thesis 	1
First Semester, SY 2022-2023 <ul style="list-style-type: none"> ● AE 701c – Applied Statistics ● AE 750 – Project Planning and Management ● AE 798 – Special Problem ● AE 799 – Seminar ● AE 800 – Thesis ● Major Course 2 	3 3 2 1 1 3
YEAR 2 Second Semester, SY 2022-2023 <ul style="list-style-type: none"> ● AE 799 – Seminar ● AE 800 – Thesis ● Major Course 3 ● Elective 1 ● Cognate 2 	1 2 3 3 3
First Semester, SY 2023-2024 <ul style="list-style-type: none"> ● AE 800 – Thesis ● Comprehensive Examination 	1 -
TOTAL Units	39 units

NOTE: Include terms for comprehensive exam and other required exams (if any), practicum, and alike.

COURSE REQUIREMENTS

CORE SUBJECTS

COURSE CODE	COURSE TITLE	# OF UNITS
AE 701c	Applied Statistics (2 lec: 1 lab)	3
AE 710	Advanced Mathematical Methods	3
AE 713	Basic Computer Programming	3
AE 750	Project Planning and Management	3

MAJOR SUBJECTS

COURSE CODE	COURSE TITLE	# OF UNITS
First Semester		
AE 798	Special Problem	1-3
AE 799	Seminar	1-3
CPE 720	Agricultural Process Engineering	3
CPE 722	Applied Fluid Mechanics	3
CPE 724	Convection Heat Transfer	3
CPE 726	Advanced Process Design and Optimization	3
CPE 728	Primary Processing of Plantation and Special Crops (2 lec:1 lab)	3
Second Semester		
CPE 721	Energy Use and Control in Agricultural Systems	3
CPE 723	Conduction Heat Transfer	3
CPE 725	Radiation Heat Transfer	3
CPE 727	Postharvest Handling and Storage of Perishable Crops (2 lec: 1 lab)	3
CPE 729	Processing of Grains and their Products	3

Note: Major Courses can also be chosen as an Elective/Cognate

ELECTIVE/COGNATE COURSES

COURSE CODE	COURSE TITLE	# OF UNITS
First Semester		
AE 714	GIS in Agriculture and Fisheries	3
AE 816	Energy and Bio-fuel Engineering	3
Second Semester		
AE 819	Sustainable Energy for Developing Countries	3
EM 705	Environmental Science	3

THESIS/APPRENTICESHIP

COURSE CODE	COURSE TITLE	# OF UNITS
AE 779	Apprenticeship	4
AE 800	Thesis	6



Republic of the Philippines
 CENTRAL LUZON STATE UNIVERSITY
 Science City of Muñoz, Nueva Ecija

STUDY PLAN

SCHOLARSHIPS for INSTRUCTORS' KNOWLEDGE ADVANCEMENT PROGRAM (SIKAP)

DHEI: Central Luzon State University
 PROGRAM: Master of Science in Agricultural Engineering
 Major: Soil and Water Management

NAME OF STUDENT:

Check which version of the study plan applies:

WITH BRIDGING SUBJECTS

WITHOUT BRIDGING SUBJECTS

TERM AND SCHOOL YEAR <i>(modify as necessary; include the nature of the subject)</i>	# OF UNITS REQUIRED
YEAR 1 First Semester, SY 2021-2022 <ul style="list-style-type: none"> ● AE 701c – Applied Statistics ● AE 750 – Project Planning and Management ● AE 798 – Special Problem ● AE 800 – Thesis ● Major Course 1 	3 3 2 1 3
Second Semester, SY 2021-2022 <ul style="list-style-type: none"> ● AE 710 – Advanced Mathematical Methods ● AE 713 – Basic Computer Programming ● AE 800 – Thesis ● Major Course 2 ● Cognate 1 	3 3 1 3 3
Mid-Year Term 2022 <ul style="list-style-type: none"> ● AE 800 – Thesis 	1
YEAR 2 First Semester, SY 2022-2023 <ul style="list-style-type: none"> ● AE 799 – Seminar ● AE 800 – Thesis ● Major Course 3 ● Elective 1 ● Cognate 2 	1 2 3 3 3
Second Semester, SY 2022-2023 <ul style="list-style-type: none"> ● AE 800 – Thesis ● Comprehensive Examination 	1 -
TOTAL Units	39 units

NOTE: Include terms for comprehensive exam and other required exams (if any), practicum, and alike.

COURSE REQUIREMENTS

CORE SUBJECTS

COURSE CODE	COURSE TITLE	# OF UNITS
AE 701c	Applied Statistics (2 lec: 1 lab)	3
AE 710	Advanced Mathematical Methods	3
AE 713	Basic Computer Programming	3
AE 750	Project Planning and Management	3

MAJOR SUBJECTS

COURSE CODE	COURSE TITLE	# OF UNITS
First Semester		
AE 798	Special Problem	1-3
AE 799	Seminar	1-3
AE 772	Introduction to Systems Engineering	3
SW 710	Water Management	3
SW 712	Drainage Engineering (2 lec: 1 lab)	3
SW 714	Land Use Capability, Classification and Management (2 lec: 1 lab)	3
SW 814	Water Resources Development	3
Second Semester		
AE 774	Introduction to Operations Research	3
SW 711	Irrigation Engineering	3
SW 713	Sociological Aspect of Water Management	3
SW 813	Applied Hydrology (2 lec: 1 lab)	3
SW 815	Farm Irrigation System Design	3

Note: Major Courses can also be chosen as an Elective/Cognate

ELECTIVE/COGNATE COURSES

COURSE CODE	COURSE TITLE	# OF UNITS
First Semester		
AE 714	GIS in Agriculture and Fisheries	3
AE 816	Energy and Bio-fuel Engineering	3
Second Semester		
AE 819	Sustainable Energy for Developing Countries	3
EM 705	Environmental Science	3

THESIS/APPRENTICESHIP

COURSE CODE	COURSE TITLE	# OF UNITS
AE 779	Apprenticeship	4
AE 800	Thesis	6



Republic of the Philippines
 CENTRAL LUZON STATE UNIVERSITY
 Science City of Muñoz, Nueva Ecija

STUDY PLAN

SCHOLARSHIPS for INSTRUCTORS' KNOWLEDGE ADVANCEMENT PROGRAM (SIKAP)

DHEI: Central Luzon State University
 PROGRAM: Master of Science in Agricultural Engineering
 Major: Soil and Water Management

NAME OF STUDENT:

Check which version of the study plan applies:

WITH BRIDGING SUBJECTS

WITHOUT BRIDGING SUBJECTS

TERM AND SCHOOL YEAR <i>(modify as necessary; include the nature of the subject)</i>	# OF UNITS REQUIRED
YEAR 1 Second Semester, SY 2021-2022 <ul style="list-style-type: none"> ● AE 710 – Advanced Mathematical Methods ● AE 713 – Basic Computer Programming ● AE 800 – Thesis ● Major Course 1 ● Cognate 1 	3 3 1 3 3
Mid-Year Term 2022 <ul style="list-style-type: none"> ● AE 800 – Thesis 	1
First Semester, SY 2022-2023 <ul style="list-style-type: none"> ● AE 701c – Applied Statistics ● AE 750 – Project Planning and Management ● AE 798 – Special Problem ● AE 799 – Seminar ● AE 800 – Thesis ● Major Course 2 	3 3 2 1 1 3
YEAR 2 Second Semester, SY 2022-2023 <ul style="list-style-type: none"> ● AE 800 – Thesis ● Major Course 3 ● Elective 1 ● Cognate 2 	2 3 3 3
First Semester, SY 2023-2024 <ul style="list-style-type: none"> ● AE 800 – Thesis ● Comprehensive Examination 	1 -
TOTAL Units	39 units

NOTE: Include terms for comprehensive exam and other required exams (if any), practicum, and alike.

COURSE REQUIREMENTS

CORE SUBJECTS

COURSE CODE	COURSE TITLE	# OF UNITS
AE 701c	Applied Statistics (2 lec: 1 lab)	3
AE 710	Advanced Mathematical Methods	3
AE 713	Basic Computer Programming	3
AE 750	Project Planning and Management	3

MAJOR SUBJECTS

COURSE CODE	COURSE TITLE	# OF UNITS
First Semester		
AE 798	Special Problem	1-3
AE 799	Seminar	1-3
AE 772	Introduction to Systems Engineering	3
SW 710	Water Management	3
SW 712	Drainage Engineering (2 lec: 1 lab)	3
SW 714	Land Use Capability, Classification and Management (2 lec: 1 lab)	3
SW 814	Water Resources Development	3
Second Semester		
AE 774	Introduction to Operations Research	3
SW 711	Irrigation Engineering	3
SW 713	Sociological Aspect of Water Management	3
SW 813	Applied Hydrology (2 lec: 1 lab)	3
SW 815	Farm Irrigation System Design	3

Note: Major Courses can also be chosen as an Elective/Cognate

ELECTIVE/COGNATE COURSES

COURSE CODE	COURSE TITLE	# OF UNITS
First Semester		
AE 714	GIS in Agriculture and Fisheries	3
AE 816	Energy and Bio-fuel Engineering	3
Second Semester		
AE 819	Sustainable Energy for Developing Countries	3
EM 705	Environmental Science	3

THESIS/APPRENTICESHIP

COURSE CODE	COURSE TITLE	# OF UNITS
AE 779	Apprenticeship	4
AE 800	Thesis	6



STUDY PLAN

SCHOLARSHIPS for INSTRUCTORS' KNOWLEDGE ADVANCEMENT PROGRAM (SIKAP)

DHEI: Central Luzon State University

PROGRAM: Doctor of Philosophy in Agricultural Engineering

NAME OF STUDENT:

Check which version of the study plan applies:

WITH BRIDGING SUBJECTS

WITHOUT BRIDGING SUBJECTS

TERM AND SCHOOL YEAR <i>(modify as necessary; include the nature of the subject)</i>	# OF UNITS REQUIRED
YEAR 1 First Semester, SY 2021-2022 <ul style="list-style-type: none"> ● AE 810 – Open Channel Hydraulics ● AE 815 – Advanced Soil and Water Conservation Engineering ● AE 898 – Special Problem in Agricultural Engineering ● AE 900 – Dissertation ● Major Course 1 	 3 3 2 1 3
Second Semester, SY 2021-2022 <ul style="list-style-type: none"> ● AE 824 – Water Resources Economics ● AE 851 – Irrigation System Management ● AE 900 – Dissertation ● Major Course 2 	 3 3 1 3
Mid-Year Term 2022 <ul style="list-style-type: none"> ● AE 900 – Dissertation 	 1
YEAR 2 First Semester, SY 2022-2023 <ul style="list-style-type: none"> ● AE 899 – Seminar in Agricultural Engineering ● AE 900 – Dissertation ● Major Course 3 ● Major Course 4 ● Cognate/Elective 1 	 1 1 3 3 3
Second Semester, SY 2022-2023 <ul style="list-style-type: none"> ● Major Course 5 ● Major Course 6 ● Cognate/Elective 2 ● AE 900 – Dissertation 	 3 3 3 2
Mid-Year Term 2023 <ul style="list-style-type: none"> ● AE 900 – Dissertation 	 2
YEAR 3 First Semester, SY 2023-2024 <ul style="list-style-type: none"> ● AE 900 – Dissertation ● Comprehensive Examination 	 2 -
Second Semester, SY 2023-2024 <ul style="list-style-type: none"> ● AE 900 – Dissertation 	 2

TOTAL Units

51 units

NOTE: Include terms for comprehensive exam and other required exams (if any), practicum, and alike.

COURSE REQUIREMENTS

CORE SUBJECTS

COURSE CODE	COURSE TITLE	# OF UNITS
AE 810	Open Channel Hydraulics	3
AE 815	Advanced Soil and Water Conservation Engineering	3
AE 824	Water Resources Economics	3
AE 851	Irrigation System Management	3

MAJOR SUBJECTS

COURSE CODE	COURSE TITLE	# OF UNITS
First Semester		
AE 898	Special Problem in Agricultural Engineering	1-3
AE 899	Seminar in Agricultural Engineering	1-3
AE 820	Groundwater Hydrology	3
AE 823	Design of Small Earth Dams	3
AE 826	System Analysis in Environmental Management	3
AE 828	Design of Micro-hydro Power Systems	3
AE 850	System Modeling I	3
CE 810	Advanced Soil Mechanics	3
SW 814	Water Resources Development	3
Second Semester		
AE 822	Design of Small Canal Structures	3
AE 825	Environmental Impact Assessment of Agricultural Engineering Projects	3
AE 827	Sustainable and Renewable Energy Technologies	3
AE 840	Surface Hydrology	3
AE 855	System Modeling II	3
SO 810	Advanced Soil Physics	3

Note: Major Courses can also be chosen as an Elective/Cognate

ELECTIVE/COGNATE COURSES

COURSE CODE	COURSE TITLE	# OF UNITS
First Semester		
AE 812	Optimization and Operations Research	3
AE 814	GIS Application in Natural Resource Management	3
AE 816	Energy and Biofuel Engineering	3
AE 818	Integrated Watershed Management	3
Second Semester		
AE 813	Micro-computer Programming and Operations	3
AE 817	Water Policy and Governance	3
EM 705	Environmental Science	3
Math 814	Numerical Methods	3

THESIS/APPRENTICESHIP

COURSE CODE	COURSE TITLE	# OF UNITS
AE 900	Dissertation	12



STUDY PLAN

SCHOLARSHIPS for INSTRUCTORS' KNOWLEDGE ADVANCEMENT PROGRAM (SIKAP)

DHEI: Central Luzon State University

PROGRAM: Doctor of Philosophy in Agricultural Engineering

NAME OF STUDENT:

Check which version of the study plan applies:

WITH BRIDGING SUBJECTS

WITHOUT BRIDGING SUBJECTS

TERM AND SCHOOL YEAR <i>(modify as necessary; include the nature of the subject)</i>	# OF UNITS REQUIRED
YEAR 1 Second Semester, SY 2021-2022 <ul style="list-style-type: none"> ● AE 824 - Water Resources Economics ● AE 851 - Irrigation System Management ● AE 900 - Dissertation ● Major Course 1 ● Major Course 2 	 3 3 1 3 3
Mid-Year Term 2022 <ul style="list-style-type: none"> ● AE 900 - Dissertation 	 1
First Semester, SY 2022-2023 <ul style="list-style-type: none"> ● AE 810 - Open Channel Hydraulics ● AE 815 - Advanced Soil and Water Conservation Engineering ● AE 898 - Special Problem in Agricultural Engineering ● AE 899 - Seminar in Agricultural Engineering ● AE 900 - Dissertation ● Major Course 3 	 3 3 2 1 1 3
YEAR 2 Second Semester, SY 2022-2023 <ul style="list-style-type: none"> ● Major Course 4 ● Cognate/Elective 1 ● AE 900 - Dissertation 	 3 3 1
Mid-Year Term 2023 <ul style="list-style-type: none"> ● AE 900 - Dissertation 	 1
First Semester, SY 2023-2024 <ul style="list-style-type: none"> ● Major Course 5 ● Major Course 6 ● Cognate/Elective 2 ● AE 900 - Dissertation 	 3 3 3 1
YEAR 3 Second Semester, SY 2023-2024 <ul style="list-style-type: none"> ● AE 900 - Dissertation ● Comprehensive Examination 	 3 -
First Semester, SY 2024-2025 <ul style="list-style-type: none"> ● AE 900 - Dissertation 	 3
TOTAL Units	51 units

NOTE: Include terms for comprehensive exam and other required exams (if any), practicum, and alike.

COURSE REQUIREMENTS

CORE SUBJECTS

COURSE CODE	COURSE TITLE	# OF UNITS
AE 810	Open Channel Hydraulics	3
AE 815	Advanced Soil and Water Conservation Engineering	3
AE 824	Water Resources Economics	3
AE 851	Irrigation System Management	3

MAJOR SUBJECTS

COURSE CODE	COURSE TITLE	# OF UNITS
First Semester		
AE 898	Special Problem in Agricultural Engineering	1-3
AE 899	Seminar in Agricultural Engineering	1-3
AE 820	Groundwater Hydrology	3
AE 823	Design of Small Earth Dams	3
AE 826	System Analysis in Environmental Management	3
AE 828	Design of Micro-hydro Power Systems	3
AE 850	System Modeling I	3
CE 810	Advanced Soil Mechanics	3
SW 814	Water Resources Development	3
Second Semester		
AE 822	Design of Small Canal Structures	3
AE 825	Environmental Impact Assessment of Agricultural Engineering Projects	3
AE 827	Sustainable and Renewable Energy Technologies	3
AE 840	Surface Hydrology	3
AE 855	System Modeling II	3
SO 810	Advanced Soil Physics	3

Note: Major Courses can also be chosen as an Elective/Cognate

ELECTIVE/COGNATE COURSES

COURSE CODE	COURSE TITLE	# OF UNITS
First Semester		
AE 812	Optimization and Operations Research	3
AE 814	GIS Application in Natural Resource Management	3
AE 816	Energy and Biofuel Engineering	3
AE 818	Integrated Watershed Management	3
Second Semester		
AE 813	Micro-computer Programming and Operations	3
AE 817	Water Policy and Governance	3
EM 705	Environmental Science	3
Math 814	Numerical Methods	3

THESIS/APPRENTICESHIP

COURSE CODE	COURSE TITLE	# OF UNITS
AE 900	Dissertation	12