

BACHELOR OF SCIENCE IN AGRICULTURAL AND BIOSYSTEMS ENGINEERING

FIRST YEAR

FIRST SEMESTER		SECOND SEMESTER		MIDYEAR	
ABE 30. Introduction to Agricultural and Biosystems Engineering	1	AGRI 21. Introduction to Animal Science	3		
AGRI 31. Fundamentals of Crop Science I	3	CHEM 18. University Chemistry	3		
ENSC 10.1. Engineering Graphics Laboratory	2	CHEM 18.1. University Chemistry Laboratory	2		
MATH 27. Analytic Geometry and Calculus II	3	AGRI 32. Fundamentals of Crop Science II	3		
PHYS 51. Elements of Physics	4	ENSC 11. Statics of Rigid Bodies	3		
PHYS 51.1. Elements of Physics Laboratory	1	MATH 28. Analytic Geometry and Calculus III	3		
KAS 1/HIST 1. Kasaysayan ng Pilipinas/Philippine History	3	NSTP 2. National Service Training Program II	(3)		
PI 10. The Life and Works of Jose Rizal	3	HK 12/13. Human Kinetics Activities/Advanced Human Kinetics Activities	(2)		
NSTP 1. National Service Training Program I	(3)	GE Elective	3		
HK 11. Wellness and Basic Injury Management	(2)				
	20		20		

SECOND YEAR

FIRST SEMESTER		SECOND SEMESTER		MIDYEAR	
ABE 43. Engineering Shop	3	ABE 52. Agricultural Structures I	3		
ABE 48. Fundamentals of Surveying	3	ABE 53. Machine Design for Bio-production Systems I	4		
ENSC 12. Dynamics of Rigid Bodies	3	ABE 56. Engineering Properties of Agricultural and Biological Materials	3		
ENSC 13. Strength of Materials	3	ABE 57. Field Hydrology	3		
ENSC 14a. Engineering Thermodynamics and Heat Transfer	5	ENSC 16. Fluid Mechanics	3		
AGRI 51. Principles of Soil Science	3	GE Elective	3		
HK 12/13. Human Kinetics Activities/Advanced Human Kinetics Activities	(2)	HK 12/13. Human Kinetics Activities/Advanced Human Kinetics Activities	(2)		
	20		19		

THIRD YEAR

FIRST SEMESTER		SECOND SEMESTER		MIDYEAR	
ABE 62. Environmental Control Engineering	3	ABE 74. Bio-production System Machinery Management and Technopreneurship	4	ABE 198. Internship	3
ABE 63. Agricultural and Biosystems Power Engineering	4	ABE 79. Agricultural Engineering Law	1		
ABE 65. Quantitative Approaches in Agricultural and Biosystems Engineering	3	ABE 77. Soil and Water Conservation Engineering	3		
ABE 66. Agricultural Processing I	3	COMM 10. Critical Perspectives in Communication	3		
ABE 67. Irrigation and Drainage Engineering I	3	STAT 101. Statistical Methods	3		
FPPS 183. Engineering Economic Analysis	3	Elective	3		
		Specialization Course	3		
	19		20		3

FOURTH YEAR

FIRST SEMESTER		SECOND SEMESTER		MIDYEAR	
ABE 80. Computer-Aided Solutions in Agricultural and Biosystems Engineering	3	ABE 83. Electrical System Design for Agricultural and Biosystems Structures	3		
ABE 88. Aquaculture Engineering I	3	ETHICS 1. Ethics and Moral Reasoning in Everyday Life	3		
GE Elective	3	ARTS 1. Critical Perspectives in the Arts	3		
ENG 10. Writing of Scientific Papers	3	STS 1. Science, Technology, and Society	3		
Elective	3	Specialization Course	3		
Specialization Course	3	ABE 199. Undergraduate Seminar	1		
ABE 200/200b/200c. Undergraduate Thesis /Innovationeering/Engineering Industry Research	3	ABE 200/200b/200c. Undergraduate Thesis/Innovationeering/Engineering Industry Research	3		
	21		19		

TOTAL UNITS

161

BACHELOR OF SCIENCE IN AGRICULTURAL AND BIOSYSTEMS ENGINEERING
Redesigned curriculum for remote learning from First Semester 2020-2021 to present

FIRST YEAR					
FIRST SEMESTER		SECOND SEMESTER		MIDYEAR	
ABE 30. Introduction to Agricultural and Biosystems Engineering	1	AGRI 21. Introduction to Animal Science	3		
AGRI 31. Fundamentals of Crop Science	3	CHEM 18. University Chemistry	3		
ENSC 10.1. Engineering Graphics Laboratory	2	CHEM 18.1. University Chemistry Laboratory	2		
MATH 27. Analytical Geometry and Calculus II	3	AGRI 32. Fundamentals of Crop Science II	3		
PHYS 51. Elements of Physics	4	ENSC 11. Static of Rigid Bodies	3		
PHYS 51.1. Elements of Physics Laboratory	1	MATH 28. Analytical Geometry and Calculus III	3		
KAS 1. Kasaysayan ng Pilipinas	3	NSTP 2. National Service Training Program	(3)		
PI 10. Life and Works of Rizal	3	HK 12/13. Human Kinetics Activities/Advanced Human Kinetics Activities	(2)		
NSTP 1. National Service Training Program	(3)	GE. Elective	3		
HK 11. Wellness and Basic Injury Management	(2)				
	20		20		
SECOND YEAR					
FIRST SEMESTER		SECOND SEMESTER		MIDYEAR	
ABE 43. Engineering Shop	3	ABE 52. Agricultural Structures I	3		
ABE 48. Fundamentals of Surveying	3	ABE 53. Machine Design for Bio-production Systems	4		
ENSC 12. Dynamics of Rigid Bodies	3	ABE 56. Engineering Properties and Agricultural and Biological Materials	3		
ENSC 13. Strength of Materials	3	ABE 57. Field Hydrology	3		
ENSC 14a. Thermodynamics and Heat Transfer	5	ENSC 16. Fluid Mechanics	3		
AGRI 51. Principles of Soil Science	3	GE. Elective	3		
HK 12/13. Human Kinetics Activities/Advanced Human Kinetics Activities	(2)	HK 12/13. Human Kinetics Activities/Advanced Human Kinetics Activities	(2)		
	20		19		
THIRD YEAR					
FIRST SEMESTER		SECOND SEMESTER		MIDYEAR	
ABE 62. Environmental Control Engineering	3	ABE 74. Bioproduction Systems Machinery Management and Technopreneurship	4	ABE 198	3
ABE 63. Agricultural and Biosystems Power Engineering	4	ABE 79. ABE Laws, Specifications and Contracts	1		
ABE 65. Quantitative Approaches in Agricultural and Biosystems Engineering	3	ABE 77. Soil and Water Conservation Engineering	3		
ABE 66. Agricultural Processing I	3	COMM 10. Critical Perspectives in Communications	3		
ABE 67. Irrigation and Drainage Engineering	3	STAT 101. Statistical Method	3		
FPPS 183. Engineering Economic Analysis	3	*** Elective	3		
		**** Specialization Course	3		
	19		20		3
FOURTH YEAR					
FIRST SEMESTER		SECOND SEMESTER		MIDYEAR	
ABE 80. Computer-Aided Solutions in Agricultural and Biosystems Engineering	3	ABE 83. Electrical System Design for Agricultural Biosystems Structures	3		
ABE 88. Agricultural and Biosystems Power Engineering	3	ETHICS 1. Ethics and Moral Reasoning in Everyday Life	3		
GE. Elective	3	ARTS 1. Critical Perspective in the Arts	3		
ENG 10. Writing of Scientific Papers	3	STS 1. Science, Technology and Society	3		
*** Elective	3	**** Specialization Course	3		
**** Specialization Course	3	ABE 199. Undergraduate Seminar	1		
ABE 200. Undergraduate Thesis		ABE 200. Undergraduate Thesis			
/ABE 200b. /Innovationeering		/ABE 200b. /Innovationeering			
/ABE 200c. /Engineering Industry Research	3	/ABE 200c. /Engineering Industry Research	3		
	21		19		

TOTAL UNITS

161