

Bachelor of Science in Agricultural and Biosystems Engineering (Prospectus)

First Year, First Semester						
Course Code	Course Title	Units	Hrs/Wk		Pre-requisite(s)	Co-requisite(s)
			Lec	Lab		
MAT060	Calculus w/ Analytic Geometry 1	4	4	0	None	None
CHM012	Chemistry for Engineers	3	3	0	None	None
CHM012.1	Chemistry for Engineers Laboratory	1	0	3	None	CHM012
ABE011	Introduction to AB Engineering	1	3	0	None	None
GEC104	Mathematics in the Modern World	3	3	0	None	None
FPE101	Fundamentals of Peace Education	3	3	0	None	None
GEC101	Understanding the Self	3	3	0	None	None
GEC102	Purposive Communication	3	3	0	None	None
PED001	Exercise Prescription and Management	2	2	0	None	None
NST001	National Service Training Program I	(3)	3	0	None	None
TOTAL		23	28	3		

First Year, Second Semester						
Course Code	Course Title	Units	Hrs/Wk		Pre-requisite(s)	Co-requisite(s)
			Lec	Lab		
GEC103	The Contemporary World	3	3	0	None	None
GEC106	Art Appreciation	3	3	0	None	None
MAT070	Calculus w/ Analytic Geometry 2	4	4	0	MAT060	None
PHY061	Physics 1	3	3	0	None	MAT060
PHY061.1	Physics 1 Laboratory	1	0	3	None	PHY061
ENS150.2	Engineering Graphics	2	0	6	None	None
SSC001	Principles of Soils Science	3	2	3	None	None
FIL101	Wika at Kultura sa Mapayapang Lipunan	3	3	0	None	None
PED002	Dance/ Martial Arts	2	2	0	PED001	None

NST002	National Service Training Program II	(3)	3	0	NST001	None
TOTAL		23	28	3		

Second Year, First Semester						
Course Code	Course Title	Units	Hrs/Wk		Pre-requisite(s)	Co-requisite(s)
			Lec	Lab		
ENS181	Engineering Mathematics	3	3	0	MAT070	None
ENS161	Statics for Rigid Bodies	3	3	0	PHY061, PHY061.1 MAT070	None
ABE051	Thermodynamics and Heat Transfer for ABE	5	4	3	PHY061, PHY061.1, MAT070	None
ABE053	Surveying for ABE	3	2	3	MAT060	None
ANS001	Introduction to Animal Science	3	2	3	None	None
CRS001	Principles of Crop Production	3	2	3	None	None
PED003	Individual/Dual sports/ Traditional/ Recreational Games	2	0	2	PED001	None
TOTAL		22	16	14		

Second Year, Second Semester						
Course Code	Course Title	Units	Hrs/Wk		Pre-requisite(s)	Co-requisite(s)
			Lec	Lab		
GEC108	Science, Technology & Society	3	3	0	None	None
ENS162	Dynamics of Rigid Bodies	3	3	0	ENS161	None
ENS164	Mechanics of Deformable Bodies	3	3	0	ENS161	None
ABE052	Computer Applications for ABE	3	2	3	MAT070	None
ABE054	Materials and Processes for ABE	3	2	3	CHM012, CHM012.1, ENS161	None
ABE056	AB Engineering Economy	3	2	3	MAT060	None
ABE058	Computer Aided Design for ABE	1	0	3	ENS150.2	None
FIL102	Ekokritisismo at Pagpapahalaga sa Kalikasan	3	3	0	None	None
PED004	Team Sports	2	2	0	PED001	None
TOTAL		24	20	12		

Third Year, First Semester						
Course Code	Course Title	Units	Hrs/Wk		Pre-requisite(s)	Co-requisite(s)
			Lec	Lab		
HIS003	History of Muslim Filipinos & Indigenous Peoples of MINSUPALA	3	3	0	None	None
ABE055	Kinematics of Machine Elements for ABE	1	0	3	ENS162	None
ABE057	AB Engineering Data Analysis	3	2	3	MAT070	None
ABE131	Properties of AB Materials	3	2	3	ABE054; ABE051	None
ABE133	AB Power & Energy Sources Engineering	3	2	3	ABE051	None
ABE135	Fluid Mechanics for ABE	3	2	3	ENS162, ABE051	None
ABE137	Hydrometeorology	3	2	3	ENS062; SSC001	None
ABE139	AB Engineering Management	3	2	3	ABE056, MAT070	None
TOTAL		22	12	21		

Third Year, Second Semester						
Course Code	Course Title	Units	Hrs/Wk		Pre-requisite(s)	Co-requisite(s)
			Lec	Lab		
ABE060	GIS and Spatial Analysis	3	2	3	ABE052, ABE053	None
ABE130	AB Structures Engineering	3	2	3	ENS164, ABE054	None
ABE132	AB Products Processing & Storage	3	2	3	ABE131, CRS001, ANS001	None
ABE134	Renewable Energy for AB Applications	3	2	3	ABE133	None
ABE136	AB Machinery and Mechanization	3	2	3	ABE133, ABE056, CRS001, SSC001	None
ABE138	Irrigation and Drainage Engineering	3	2	3	ABE052, ABE137, CRS001	None
ABE198	Undergraduate Thesis 1: Proposal and Research Methods for Agricultural and Biosystems Engineering	3	3	0	ABE057, ABE131, ABE133, ABE137	None

TOTAL	21	15	18	
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Fourth Year, Second Semester					
	Course Title	Units	Hrs/Wk		Co-requisite(s)

Course Code			Lec	Lab	Pre-requisite(s)	
ABE140	Technopreneurship for ABE	3	2	3	ABE139	None

Third Year, Summer						
Course Code	Course Title	Units	Hrs/Wk		Pre-requisite(s)	Co-requisite(s)
			Lec	Lab		
ABE197	Industry Immersion Program (Practicum)	6	0	320	ABE198, ABE060	None
TOTAL		6	0	320		

Fourth Year, First Semester						
Course Code	Course Title	Units	Hrs/Wk		Pre-requisite(s)	Co-requisite(s)
			Lec	Lab		
GEC105	Readings in Philippine History	3	3	0	None	None
GEC107	Ethics	3	3	0	None	None
GEC109	Life & Works of Rizal	3	3	0	None	None
ABE141	AB Electrification and Control Systems	3	2	3	ENS181; ABE130	None
ABE143	Food Process Engineering	3	2	3	ABE132	None
ABE145	AB Waste Management Engineering	3	2	3	GEC108, ABE056, ABE130	None
ABE147	Land and Water Conservation Engineering	3	2	3	ABE137	None
TOTAL		21	17	12		

ABE142	Aquaculture Engineering	3	2	3	ABE137	None
ABE144	Design and Managementt of AB Processing System	3	2	3	ABE143, ABE056, ABE139	None
ABE146	Machine Design for AB Production	3	2	3	ENS164; ABE 136; ABE058	None
ABE148	Plant and Livestock Systems and Environmental Control Engineering	3	2	3	ABE130, ABE141, ABE145	None
ABE195	ABE Related Laws, Specs, Contracts & Ethics	2	3	0	GEC107	None
ABE196	Undergraduate Seminar and Fieldtrip for ABE	1	0	3	ABE197	None
ABE199	Undergraduate Thesis 2	3	0	3	ABE198	None
TOTAL		21	13	21		

Grand Total: 184 Units