

The National Engineering University

Lobo Campus

Masaguitsit Lobo, Batangas, Philippines 4229
Tel Nos.: (043) 980-0385 loc. 7101

E-mail Address: lobo.campus@g.batstate-u.edu.ph | Website Address: http://www.batstate-u.edu.ph

College of Agriculture and Forestry

CURRICULUM

Bachelor of Science in Agriculture (BSA) Major in Animal Science

Academic Year 2023-2024 Reference CMOs: CMO No.18, Series of 2008, CMO No.20, S. 2013, CMO No. 04, S. 2018, CMO No. 39, S. 2021, CMO No. 40, S.2021

Curriculum Description

The BSA curriculum is based on competency standards for agriculture considering the latest development of the Agriculture landscape of the Southeast Asian region and beyond. It emphasizes carrying out the science, art, ethics, management, and entrepreneurial business in the production, processing and marketing of plants, animals and other organisms utilized for food fiber, recreation, biomedicine, industrial and other purposes within the context of integrated and sustainable agriculture resource systems.

Program Educational Objectives

The BSA program aims to develop:

• Entrepreneurial and Technical Skills

The BSA program aims to educate students in the scientific habit of thought and entrepreneurial skills and prepare them to become globally competitive professionals with entry-level competencies in technical agriculture

• Development and Conservation

The BSA program aims to emphasize the processes and techniques of identifying, diagnosing and analyzing problems, and in designing, packaging, and applying technologies needed in the development and conservation of the agriculture and food system resources.

Institutional Graduate Attributes

The students should achieve at least 75% for each IGA upon graduation.

- 1. **Knowledge Competence** Demonstrate a mastery of the fundamental knowledge and skills required for functioning effectively as a professional in the discipline, and an ability to integrate and apply them effectively to practice in the workplace.
- 2. **Creativity and Innovation** Experiment with new approaches, challenge existing knowledge boundaries and design novel solutions to solve problems.
- 3. **Critical and Systems -** Identify, define, and deal with complex problems pertinent to the future professional practice or daily life through logical, analytical and critical thinking.
- 4. **Communication -** Communicate effectively (both orally and in writing) with a wide range of audiences, across a range of professional and personal contexts, in English and Pilipino
- 5. **Lifelong learning** Identify own learning needs for professional or personal development; demonstrate an eagerness to take up opportunities for learning new things as well as the ability to learn effectively on their own.

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- 6. **Leadership, teamwork, and Interpersonal Skills -** Function effectively both as a leader and as a member of a team; motivate and lead a team to work towards goal; work collaboratively with other team members; as well as connect and interact socially and effectively with diverse culture.
- 7. **Global Outlook -** Demonstrate an awareness and understanding of global issues and willingness to work, interact effectively and show sensitivity to cultural diversity.
- 8. **Social and National Responsibility -** Demonstrate an awareness of their social and national responsibility; engage in activities that contribute to the betterment of the society; and behave ethically and responsibly in social, professional and work environments.

Program Outcomes

- 1. Articulate and discuss the latest developments in the specific field of practice. (**Information Oriented**)
- 2. Effectively communicate orally and in writing using both English and Filipino. (Communication)
- 3. Work effectively and independently in multi-disciplinary and multi-cultural teams. (**Teamwork**)
- 4. Act in recognition of professional, social, and ethical responsibilities. (**Professional, Social, and Ethical Responsibility**)
- 5. Preserve and promote "Filipino historical and cultural heritage. (Historical and Cultural Preservation)
- 6. Generate and share knowledge relevant to specific fields in the study of agriculture. (**Knowledge Generation and Sharing**)
- 7. Formulate and implement agricultural development plans and programs. (Critical/Logical Thinking)
- **8.** Apply scientific methods in knowledge generation and knowledge application. (**Scientific Creativity**)
- 9. Understand the concepts of agricultural productivity and sustainability in the context of national, regional, and global developments. (National, Regional, and Global Outlook)
- 10. Engage in agricultural production and post-production activities. (Agricultural Production Engagement)
- 11. Promote sound agricultural technologies to various clients and in manpower development for agriculture. (**Agricultural Innovation**)
- 12. Employ relevant tools in information technology in solving agriculture-related problems. (**Problem Solving Skill**)

Curriculum Components

Courses	Units	Total
A. General Education Courses		45 units
Understanding the Self	3	
Readings in Philippine History	3	
The Contemporary World	3	
Mathematics in the Modern World	3	
Purposive Communication	3	
Art Appreciation	3	
Science, Technology, and Society	3	
Ethics	3	
Kontekstwalisadong Komunikasyon sa Filipino	3	
Filipino sa Ibat ibang Disiplina	3	
ASEAN Literature	3	
Philippine Popular Culture	3	



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	of Agriculture and Forestry		
(Computer Application	3	
(Gender and Society	3	
]	Life and Works of Rizal	3	
В.	Core Courses		83 units
	Introduction to Agriculture	1	
	Principles of Crop Protection	3	
	Principles of Soil Science	3	
	Organic Chemistry	3	
	Introduction to Animal Science	3	
]	Principles of Crop Production	3	
	Soil Fertility and Conservation	3	
	Introduction to Organic Agriculture	3	
	Methods of Agricultural Research	3	
	Introduction to Livestock and poultry Production	3	
	Approaches and Practices in pest management	3	
	Principles of Genetics	3	
	Practices of Crop Production	3	
	Principles of Agricultural Entrepreneurship and	3	
	Marketing		
	Basic Farm Machinery and Mechanization	3	
	Principles of Agricultural Extension and	3	
	Communication		
	Natural Resource and Environmental Management	3	
	General Biochemistry	3	
	Introduction to Agricultural Commodity and	3	
	Enterprise Development		
	General Physiology and Toxicology	3	
	Undergraduate Seminar (NC 2)	1	
	Basic Biotechnology	3	
	Introduction to Agricultural Policy and Development	3	
	Introduction to Water Management and Irrigation	3	
	Community-Based Agro-Ecotourism	3	
	Slaughter of Animals and Animals Products	3	
]	Processing		
	Undergraduate Seminar Proposal	1	
(Colloquium	1	
	Beneficial Arthropods and Microorganisms	3	
	Post Harvest Handling and Seed Technology	3	
	Pre-board	2	
C. 3	Major Courses		24 units
	Animal Nutrition and Feeding	3	
	Animal Breeding and Biotechnology	3	
	Forage and Pasture Management	3	
	Swine Production and Management	3	
	Poultry Production and Management	3	
	Ruminant Production and Management	3	
	Animal Products Processing	3	
	Animal Health and Disease Control	3	
	Thesis	-	8 units
	Thesis 1 (Outline Proposal)	2	
	Thesis 2 (Conduct and Writing)	3	
	Thesis 3 (Manuscript and Defense)	3	



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E. Apprenticeship/OJT/Practicum (Industry		12 units
Exposure)		
On-the-Job Training 1 (Skills Development)	6	
On-the-Job Training 2 (Industry Exposure)	6	
F. Physical Activities Towards Health and Fitness		8 units
PATHFit 1- Movement Competency Training	2	
PATHFit 2- Exercised-Based Fitness Activities	2	
PATHFit 3- Traditional and Recreational Games	2	
PATHFit 4- Team Sports (Basketball and Volleyball)	2	
G. National Service Training Program		6 units
National Service Training Program (CW) I	3	
National Service Training Program (CW) II	3	

SUMMARY

Courses	Number of Units
General Education Courses	45 units
Core Courses	83 units
Major Courses	24 units
Thesis	8 units
Apprenticeship/OJT/Practicum (Industry Exposure)	12 units
Physical Activities Towards Health and Fitness	8 units
National Service Training Program	6 units
TOTAL NO. OF UNITS	186 units



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PROGRAM OF STUDY

Year	Course Code	Course Description	Credits	Lec	Lab	RLE	Pre- Requisite(s)	Co- Requisite(s)
Year 1	FIRST SEMES	STER						
	AGRI 100	Introduction to Agriculture	1	1	0			
	CRPT 101	Principles of Crop Protection	3	2	<u>3</u>			
	SOIL 101	Principles of Soil Science	3	2	<u>3</u>			
	Chem 102	Organic Chemistry	3	2	<u>3</u>			
	GEd 101	Understanding the Self	3	3	0			
	GEd 104	The Contemporary World	3	3	0			
	GEd 105	Readings in Philippine History	3	3	0			
	NSTP 111	National Service Training Program 1	3	3	0			
	NSTP	NSTP - Civic Welfare	3	3	0			
	NSTP 111LT	Training Service 1 NSTP - Literacy Training Service 1	3	3	0			
	NSTP 111RO	NSTP - Reserve Officers Training Corps 1	3	3	0			
	PATHFit 1	Movement Competence Training	2	2	0			
	TOTAL		24	21	9			
Year 1	SECOND SEM	MESTER						
	AnSCI 101	Introduction to Animal Science	3	2	<u>3</u>			
	CRPT 102	Principles of Crop Production	3	2	<u>3</u>		CRPT 101	
	SOIL 102	Soil Fertility Conservation and Management	3	2	<u>3</u>		SOIL 101	
	GEd 102	Mathematics in the Modern World	3	3	0			
	GEd 106	Purposive Communication	3	3	0			
	Litr 102	ASEAN Literature	3	3	0			
	NSTP 121	National Service Training Program 2	3	3	0		NSTP 111	
	NSTP 121CW	NSTP - Civic Welfare Training Service 2	3	3	0		NSTP 111CW	
	NSTP121LT	NSTP - Literacy Training Service 2	3	3	0		NSTP 111LT	
	NSTP121RO	NSTP - Reserve Officers Training Corps 2	3	3	0		NSTP 111RO	
	PATHFit 2	Exercised-Based Fitness Activities	2	2	0		PATHFit 1	
	TOTAL		23	20	9			



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Year	Course Code	Course Description	Credits	Lec	Lab	RLE	Pre- Requisite(s)	Co- Requisite(s)
Year 1	SUMMER							
	OJT 107	On-the-Job Training 1 (300 hours)	6	0	300		1 st Year Standing	
TOTAL			6	0	300	·		

Year	Course Code	Course Description	Credits	Lec	Lab	RLE	Pre- Requisite(s)	Co- Requisite(s)
Year 2	FIRST SEME	STER			_	_		
	OJT 107	On-the-Job Training 1 (300 hours)	6	0	300		AGRI 100	
	AGRI 201	Introduction to Organic Agriculture	3	3	0			
	AGRI 202	Methods of Agricultural Research	3	3	0			
	AnSCI 202	Introduction to Livestock and Poultry Production	3	2	<u>3</u>		CRPT 101	
	CRPT 203	Approaches and Practices in Pest Management	3	2	<u>3</u>		CRPT 102	
	CRPT 204	Practices of Crop Production	3	2	<u>3</u>			
	Bio 107	Principles of Genetics	3	3	0			
	GEd 108	Art Appreciation	3	3	0			
	IT 100	Computer Applications	3	2	<u>3</u>			
	PATHFit 3	Traditional and Recreational Games	2	2	0		PATHFit 1 and 2	
	TOTAL		26	22	12			
Year 2	SECOND SEM	MESTER			•			
	AGRI 203	Principles of Agricultural Entrepreneurshipand Marketing	3	3	0			
	AGRI 204	Basic Farm Machinery and Mechanization	3	2	<u>3</u>			
	AGRI 205	Principles of Agricultural Extension andCommunication	3	3	0		AGRI 100, GEd 106	
	AGRI 206	Natural Resource and Environmental Management	3	3	0			
	Chem 109	General Biochemistry	3	2	3		Chem 102	
	Fili 101	Kontekstwalisadong Komunikasyon sa Filipino	3	3	0			
	GEd 109	Science, Technology and Society	3	3	0			
	GEd 115	Gender and Society	3	3	0			
	PATHFit 4	Team Sports (Basketball and Volleyball)	2	2	0		PATHFit 1 and 2	
	TOTAL		26	24	6			



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Year	Course Code	Course Description	Credits	Lec	Lab	RLE	Pre- Requisite(s)	Co- Requisite(s)
Year 3	FIRST SEMES	STER					Kequisite(s)	Kequisite(s)
	AGRI 307	Introduction to Agricultural Commodity and Enterprise Development	3	3	0			
	AGRI 308	General Physiology and Toxicology	3	3	0			
	AnSCI 303	Animal Nutrition and Feeding	3	2	<u>3</u>		AnSCI 202	
	AnSCI 304	Animal Breeding and Biotechnology	3	2	<u>3</u>			
	AGRI RES 101	Thesis 1 (Outline/Proposal)	2	2	0			
	AGRI SEM 401	Undergraduate Seminar (NC 2)	1	1	0			
	Bio 108	Basic Biotechnology	3	3	0		Chem 109	
	Fili 102	Filipino sa Iba't-ibang Disiplina	3	3	0			
	GEd 107	Ethics	3	3	0			
	TOTAL		24	22	6			
Year 3	SECOND SEM	MESTER						
	AGRI 309	Introduction to Agricultural Policy and Development	3	3	0			
	AGRI 310	Introduction to Water Management and Irrigation	3	2	<u>3</u>			
	AGRI 311	Community-Based Agro- Ecotourism	3	2	<u>3</u>			
	AnSCI 305	Slaughter of Animals and Animal Products Processing	3	2	<u>3</u>		AnSCI 101	
	AnSCI 306	Forage and Pasture Management	3	2	<u>3</u>			
	AnSCI 307	Swine Production and Management	3	2	<u>3</u>			
	AGRI RES 102	Thesis 2 (Conduct and Writing)	3	3	0		AGRI RES 101	
	AGRI SEM 402	Undergraduate Seminar Proposal	1	1	0			
	AGRI SEM 403	Colloquium	1	1	0			
	GEd 116	Philippine Popular Culture	3	3	0			
	TOTAL		26	21	15			



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Year	Course Code	Course Description	Credits	Lec	Lab	RLE	Pre- Requisite(s)	Co- Requisite(s)
Year 4	FIRST SEMES	STER					-	
	AGRI 412	Beneficial Arthropods and Microorganism	3	3	0			
	AGRI 413	Post Harvest Handling and SeedTechnology	3	2	<u>3</u>			
	AnSCI 408	Poultry Production and Management	3	2	<u>3</u>		AnSCI 202	
	AnSCI 409	Ruminant Production and Management	3	2	<u>3</u>			
	AnSCI 410	Animal Products Processing	3	2	<u>3</u>			
	AnSCI 411	Animal Health and Disease Control	3	2	<u>3</u>			
	AGRI RES 103	Thesis 3 (Manuscript and Defense)	3	3	0		AGRI RES 102	
	GEd 103	Life and Works of Rizal	3	3	0			
	AGRI 412	Beneficial Arthropods and Microorganism	3	3	0			
	TOTAL		24	19	15			
Year 4	SECOND SEM	1ESTER			1	1		,
	AGRI 414	Pre-Board Review	1	1	0		Graduating Standing	
	OJT 108	On-the-Job Training 2 (400 hours)	6	0	400		OJT 107	
	TOTAL		7	7	400			