



Republic of the Philippines  
**BATANGAS STATE UNIVERSITY**  
The National Engineering University

**Lobo Campus**

Masaguitsit Lobo, Batangas, Philippines 4229

Tel Nos.: (043) 980-385 loc. 7101

E-mail Address: [lobo.campus@g.batstate-u.edu.ph](mailto: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 Crop 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.



Republic of the Philippines  
**BATANGAS STATE UNIVERSITY**

The National Engineering University

Lobo Campus

Masaguitsit Lobo, Batangas, Philippines 4229

Tel Nos.: (043) 980-385 loc. 7101

E-mail Address: [lobo.campus@g.batstate-u.edu.ph](mailto:lobo.campus@g.batstate-u.edu.ph) | Website Address: <http://www.batstate-u.edu.ph>

**College of Agriculture and Forestry**

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
<b>A. General Education Courses</b>		<b>45 units</b>
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	



Republic of the Philippines  
**BATANGAS STATE UNIVERSITY**

The National Engineering University

Lobo Campus

Masaguitsit Lobo, Batangas, Philippines 4229

Tel Nos.: (043) 980-385 loc. 7101

E-mail Address: [lobo.campus@g.batstate-u.edu.ph](mailto:lobo.campus@g.batstate-u.edu.ph) | Website Address: <http://www.batstate-u.edu.ph>

**College of Agriculture and Forestry**

Computer Application	3	
Gender and Society	3	
Life and Works of Rizal	3	
<b>B. Core Courses</b>		<b>83 units</b>
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 Marketing	3	
Basic Farm Machinery and Mechanization	3	
Principles of Agricultural Extension and Communication	3	
Natural Resource and Environmental Management	3	
General Biochemistry	3	
Introduction to Agricultural Commodity and Enterprise Development	3	
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 Processing	3	
Undergraduate Seminar Proposal	1	
Colloquium	1	
Beneficial Arthropods and Microorganisms	3	
Post Harvest Handling and Seed Technology	3	
Pre-board	2	
<b>C. Major Courses</b>		<b>24 units</b>
Crop Physiology	3	
Crop Seed Physiology	3	
Principles & Practices of Plant Breeding, Plan Propagation & Nursery Management	3	
Vegetable Production	3	
Ornamental Landscape Horticulture	3	
Cereal Crops Production and Management	3	
Field Legumes& Root Crops Production & Management	3	
Fruit and Plantation Crop Production and Management	3	
	3	
<b>D. Thesis</b>		<b>8 units</b>
Thesis 1 (Outline Proposal)	2	



Republic of the Philippines  
**BATANGAS STATE UNIVERSITY**

The National Engineering University

Lobo Campus

Masaguitsit Lobo, Batangas, Philippines 4229

Tel Nos.: (043) 980-385 loc. 7101

E-mail Address: [lobo.campus@g.batstate-u.edu.ph](mailto:lobo.campus@g.batstate-u.edu.ph) | Website Address: <http://www.batstate-u.edu.ph>

**College of Agriculture and Forestry**

Thesis 2 (Conduct and Writing)	3	
Thesis 3 (Manuscript and Defense)	3	
<b>E. Apprenticeship/OJT/Practicum (Industry Exposure)</b>		<b>12 units</b>
On-the-Job Training 1 (Skills Development)	6	
On-the-Job Training 2 (Industry Exposure)	6	
<b>F. Physical Activities Towards Health and Fitness</b>		<b>8 units</b>
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	
<b>G. National Service Training Program</b>		<b>6 units</b>
National Service Training Program (CW) I	3	
National Service Training Program (CW) II	3	

**SUMMARY**

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



**Republic of the Philippines**  
**BATANGAS STATE UNIVERSITY**

**The National Engineering University**

**Lobo Campus**

Masaguitsit Lobo, Batangas, Philippines 4229

Tel Nos.: (043) 980-385 loc. 7101

E-mail Address: [lobo.campus@g.batstate-u.edu.ph](mailto:lobo.campus@g.batstate-u.edu.ph) | Website Address: <http://www.batstate-u.edu.ph>

**College of Agriculture and Forestry**

**PROGRAM OF STUDY**

Year	Course Code	Course Description	Credits	Lec	Lab	RLE	Pre-Requisite(s)	Co-Requisite(s)
<b>Year 1</b>	<b>FIRST SEMESTER</b>							
	<b>AGRI 100</b>	Introduction to Agriculture	1	1	0			
	<b>CRPT 101</b>	Principles of Crop Protection	3	2	3			
	<b>SOIL 101</b>	Principles of Soil Science	3	2	3			
	<b>Chem 102</b>	Organic Chemistry	3	2	3			
	<b>GEEd 101</b>	Understanding the Self	3	3	0			
	<b>GEEd 104</b>	The Contemporary World	3	3	0			
	<b>GEEd 105</b>	Readings in Philippine History	3	3	0			
	<b>NSTP 111</b>	National Service Training Program 1	3	3	0			
	<b>NSTP111CW</b>	NSTP - Civic Welfare Training Service 1	3	3	0			
	<b>NSTP111LT</b>	NSTP - Literacy Training Service 1	3	3	0			
	<b>NSTP111RO</b>	NSTP - Reserve Officers Training Corps 1	3	3	0			
	<b>PATHFit 1</b>	Movement Competence Training	2	2	0			
	<b>TOTAL</b>		<b>24</b>	<b>21</b>	<b>9</b>			
<b>Year 1</b>	<b>SECOND SEMESTER</b>							
	<b>CRPT 102</b>	Principles of Crop Production	3	2	3		CRPT 101	
	<b>SOIL 102</b>	Soil Fertility Conservation and Management	3	2	3		SOIL 101	
	<b>AnSCI 101</b>	Introduction to Animal Science	3	2	3			
	<b>GEEd 102</b>	Mathematics in the Modern World	3	3	0			
	<b>GEEd 106</b>	Purposive Communication	3	3	0			
	<b>Litr 102</b>	ASEAN Literature	3	3	0			
	<b>NSTP 121</b>	National Service Training Program 2	3	3	0		NSTP 111	
	<b>NSTP 121CW</b>	NSTP - Civic Welfare Training Service 2	3	3	0		NSTP 111CW	
	<b>NSTP 121LT</b>	NSTP - Literacy Training Service 2	3	3	0		NSTP 111LT	
	<b>NSTP 121RO</b>	NSTP - Reserve Officers Training Corps 2	3	3	0		NSTP 111RO	
	<b>PATHFit 2</b>	Exercised-Based Fitness Activities	2	2	0		PATHFit 1	
	<b>TOTAL</b>		<b>23</b>	<b>20</b>	<b>9</b>			



**Republic of the Philippines**  
**BATANGAS STATE UNIVERSITY**

**The National Engineering University**

**Lobo Campus**

Masaguitsit Lobo, Batangas, Philippines 4229

Tel Nos.: (043) 980-385 loc. 7101

E-mail Address: [lobo.campus@g.batstate-u.edu.ph](mailto:lobo.campus@g.batstate-u.edu.ph) | Website Address: <http://www.batstate-u.edu.ph>

**College of Agriculture and Forestry**

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

Year	Course Code	Course Description	Credits	Lec	Lab	RLE	Pre-Requisite(s)	Co-Requisite(s)
<b>Year 2</b>	<b>FIRST SEMESTER</b>							
	OJT 107	On-the-Job Training 1 (300 hours)	6	0	300			
	AGRI 201	Introduction to Organic Agriculture	3	3	0		AGRI 100	
	AGRI 202	Methods of Agricultural Research	3	3	0			
	CRPT 203	Approaches and Practices in Pest Management	3	2	3		CRPT 101	
	CRPT 204	Practices of Crop Production	3	2	3		CRPT 102	
	AnSCI 202	Introduction to Livestock and Poultry Production	3	2	3		AnSCI 101	
	Bio 107	Principles of Genetics	3	2	3		AnSCI 101, CRPT 101, CRPT 102	
	GEEd 108	Art Appreciation	3	3	0			
	IT 100	Computer Applications	3	2	3			
	PATHFit 3	Traditional and Recreational Games	2	2	0		PATHFit 1 and 2	
	<b>TOTAL</b>		<b>26</b>	<b>21</b>	<b>15</b>			
<b>Year 2</b>	<b>SECOND SEMESTER</b>							
	AGRI 203	Principles of Agricultural Entrepreneurship and Marketing	3	3	0			
	AGRI 204	Basic Farm Machinery and Mechanization	3	2	3			
	AGRI 205	Principles of Agricultural Extension and Communication	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			
	GEEd 109	Science, Technology and Society	3	3	0			
	GEEd 115	Gender and Society	3	3	0			
	PATHFit 4	Team Sports (Basketball and Volleyball)	2	2	0		PATHFit 1 and 2	
	<b>TOTAL</b>		<b>26</b>	<b>24</b>	<b>6</b>			





**Republic of the Philippines**  
**BATANGAS STATE UNIVERSITY**

**The National Engineering University**

**Lobo Campus**

Masagitsit Lobo, Batangas, Philippines 4229

Tel Nos.: (043) 980-385 loc. 7101

E-mail Address: [lobo.campus@g.batstate-u.edu.ph](mailto:lobo.campus@g.batstate-u.edu.ph) | Website Address: <http://www.batstate-u.edu.ph>

**College of Agriculture and Forestry**

Year	Course Code	Course Description	Credits	Lec	Lab	RLE	Pre-Requisite(s)	Co-Requisite(s)
<b>Year 3</b>	<b>FIRST SEMESTER</b>							
	<b>AGRI 307</b>	Introduction to Agricultural Commodity and Enterprise Development	3	3	0			
	<b>AGRI 308</b>	General Physiology and Toxicology	3	3	0			
	<b>CRPT 305</b>	Crop Physiology	3	2	<u>3</u>		CRPT 204	
	<b>CRPT 306</b>	Crop Seed Physiology	3	2	<u>3</u>			
	<b>AGRI RES 101</b>	Thesis 1 (Outline/Proposal)	2	2	0			
	<b>AGRI SEM 401</b>	Undergraduate Seminar (NC 2)	1	1	0			
	<b>Bio 108</b>	Basic Biotechnology	3	3	0		Chem 109	
	<b>Fili 102</b>	Filipino sa Iba't-ibang Disiplina	3	3	0			
	<b>GEEd 107</b>	Ethics	3	3	0			
	<b>TOTAL</b>		<b>24</b>	<b>22</b>	<b>6</b>			
<b>Year 3</b>	<b>SECOND SEMESTER</b>							
	<b>AGRI 309</b>	Introduction to Agricultural Policy and Development	3	3	0			
	<b>AGRI 310</b>	Introduction to Water Management and Irrigation	3	2	<u>3</u>			
	<b>AGRI 311</b>	Community-Based Agro-Ecotourism	3	2	<u>3</u>			
	<b>CRPT 307</b>	Principles and Practices of Plant Breeding, Plant Propagation and Nursery Management	3	2	<u>3</u>			
	<b>CRPT 308</b>	Vegetable Production	3	2	<u>3</u>			
	<b>AGRI RES 102</b>	Thesis 1 (Conduct and Writing)	3	3	0		AGRI RES 101	
	<b>AGRI SEM 402</b>	Undergraduate Seminar Proposal	1	1	0			
	<b>AGRI SEM 403</b>	Colloquium	1	1	0			
	<b>AnSCI 305</b>	Slaughter of Animals and Animal Products Processing	3	2	<u>3</u>		AnSCI 101	
	<b>GEEd 116</b>	Philippine Popular Culture	3	3	0			
	<b>TOTAL</b>		<b>26</b>	<b>21</b>	<b>15</b>			



**Republic of the Philippines**  
**BATANGAS STATE UNIVERSITY**  
**The National Engineering University**

**Lobo Campus**  
 Masaguitsit Lobo, Batangas, Philippines 4229  
 Tel Nos.: (043) 980-385 loc. 7101

E-mail Address: [lobo.campus@g.batstate-u.edu.ph](mailto:lobo.campus@g.batstate-u.edu.ph) | Website Address: <http://www.batstate-u.edu.ph>

**College of Agriculture and Forestry**

Year	Course Code	Course Description	Credits	Lec	Lab	RLE	Pre-Requisite(s)	Co-Requisite(s)
<b>Year 4</b>	<b>FIRST SEMESTER</b>							
	<b>AGRI 412</b>	Beneficial Arthropods and Microorganism	3	3	0			
	<b>AGRI 413</b>	Post Harvest Handling and Seed Technology	3	2	3			
	<b>CRPT 409</b>	Ornamental and Landscape Horticulture	3	2	3			
	<b>CRPT 410</b>	Cereal Crops Production and Management	3	2	3			
	<b>CRPT 411</b>	Field Legumes and Root Crops Production and Management	3	2	3			
	<b>CRPT 412</b>	Fruits and Plantation Crops Production and Management	3	2	3			
	<b>AGRI RES 103</b>	Thesis 3 (Manuscript and Defense)	3	3	0		AGRI RES 102	
	<b>GEEd 103</b>	Life and Works of Rizal	3	3	0			
	<b>TOTAL</b>		<b>24</b>	<b>19</b>	<b>15</b>			
<b>Year 4</b>	<b>SECOND SEMESTER</b>							
	<b>AGRI 414</b>	Pre-Board Review	1	1	0		Graduating Standing	
	<b>OJT 108</b>	On-the-Job Training 2 (400 hours)	6	0	400		OJT 107	
	<b>TOTAL</b>		<b>7</b>	<b>1</b>	<b>400</b>			