

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

**Lipa Campus**

A. Tanco Drive, Brgy. Marawuoy, Lipa City, Batangas, Philippines 4217

Tel Nos.: (+63 43) 980-0385; 980-0387; 980-0392 to 94; 425-7158 to 62 loc. 3128

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**College of Teacher Education**

**CURRICULUM**

**Bachelor of Secondary Education**

**Major in Sciences**

Academic Year 2023-2024

Reference CMOs: CMO No.20, s. 2013, CMO No. 75, s. 2017, CMO No. 4, s. 2018 and CMO Nos. 39 and 40, S. 2021

**Curriculum Description**

The BSEd is an undergraduate teacher education program designed to equip learners with adequate and relevant competencies to teach in their chosen area of specialization/major in the secondary level. It aims to develop highly motivated and competent teachers specializing in the content and pedagogy for secondary education. After successful completion of all academic requirements of the degree/program, graduates of BSEd should be able to practice the teaching profession in the Secondary level.

**Program Educational Objectives (PEO)**

The BSEd program aims to produce secondary teachers who have the ability to:

1. demonstrate comprehensive and up-to-date knowledge in a specific field of specialization in the secondary education curriculum by engaging in scholarly and research activities and by maximizing opportunities for lifelong learning.
2. provide meaningful learning experiences to secondary students by using emerging educational technologies for quality and effective teaching and by creating an environment that encourages positive social interaction, active engagement and self-motivation.
3. demonstrate competence in teaching and testing through the design, adoption and utilization of teaching methods, instructional materials, and assessment tools that are appropriate to the cognitive, affective and psychomotor development of secondary learners.
4. observe the professional code of ethics for teachers and internalize the importance of continuous professional development, as well as the need to work cooperatively and harmoniously with all members of the academic community.
5. establish sustainable partnerships and linkages with the professional community and provide assistance to the under served, depressed, illiterate and less skilled members of society through extension activities and community service.

**Institutional Graduate Attributes (IGA)**

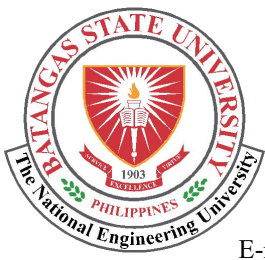
The student should achieve at least 75% for each IGA upon graduation.

**IGA1: 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.

**IGA2: Creativity and Innovation.** Experiment with new approaches, challenge existing knowledge boundaries and design novel solutions to solve problems.

**IGA3: Critical and Systems Thinking.** Identify, define, and deal with complex problems pertinent to the future professional practice or daily life through logical, analytical and critical thinking.

**IGA4: 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.



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**IGA5: 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.

**IGA6: 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.

**IGA7: Global Outlook.** Demonstrate an awareness and understanding of global issues and willingness to work, interact effectively and show sensitivity to cultural diversity.

**IGA8: 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.

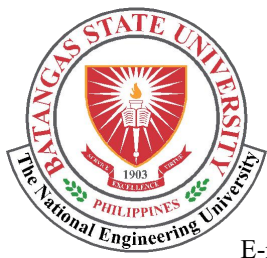
### Program Outcomes

The graduates of the program have the ability to:

- a. ability to demonstrate deep understanding of scientific concepts and principles
- b. apply scientific inquiry in teaching and learning.
- c. utilize effective science teaching and assessment methods.

### Curriculum Components

Code	Courses	Units	Total
	<b>A. General Education Courses (CMO No. 20, Series of 2013 and CMO No. 4, Series of 2018 )</b>		<b>42 units</b>
Fili 101	Kontekstwalisadong Komunikasyon sa Filipino	3	
Fili 102	Filipino sa Iba't Ibang Disiplina	3	
Fili 103	Retorika – Masining na Pagpapahayag	3	
GEd 101	Understanding the Self	3	
GEd 102	Mathematics in the Modern World	3	
GEd 103	Life and Works of Rizal	3	
GEd 104	The Contemporary World	3	
GEd 105	Reading in the Philippine History	3	
GEd 106	Purposive Communication	3	
GEd 107	Ethics	3	
GEd 108	Art Appreciation	3	
GEd 109	Science, Technology and the Society	3	
Litr 101	Sosyedad at Literatura/Panitikang Panlipunan	3	
Litr 102	ASEAN Literature	3	
	<b>B. Professional Education Courses</b>		<b>42 units</b>
	<b><i>Foundation/Theories and Concepts</i></b>		
Ed 101	The Child and Adolescent Learners and Learning Principles	3	
Ed 102	The Teaching Profession	3	
Ed 103	The Teacher and the Community, School Culture and Organizational Leadership	3	
Ed 106	Foundation of Special and Inclusive Education	3	
	<b><i>Pedagogical Content Knowledge</i></b>		
Ed 104	Assessment in Learning 1	3	
Ed 105	Facilitating Learner-Centered Teaching	3	
Ed 107	Technology for Teaching and Learning 1	3	
Ed 108	The Teacher and the School Curriculum	3	



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Ed 109	Assessment in Learning 2	3	
Ed 110	Building and Enhancing New Literacies Across the Curriculum	3	
	<b>Experiential Learning</b>		
Ed 111	Field Study 1	3	
Ed 112	Field Study 2	3	
Ed 115	Teaching Internship	6	
	<b>C. Major Courses</b>		<b>73 units</b>
SEd 111	Inorganic Chemistry	5	
SEd 121	Analytical Chemistry	5	
SEd 131	Earth Science	3	
SEd 132	Fluid Mechanics	3	
SEd 211	Thermodynamics	4	
SEd 212	Organic Chemistry	5	
SEd 221	Biochemistry	3	
SEd 222	Electricity and Magnetism	4	
SEd 223	Genetics	4	
SEd 311	Cell and Molecular Biology	4	
SEd 312	Waves and Optics	4	
SEd 313	Astronomy	3	
SEd 314	Meteorology	3	
SEd 315	Research in Sciences 1	3	
SEd 321	Technology Application in Science Teaching	3	
SEd 322	Modern Physics	3	
SEd 323	Microbiology and Parasitology	4	
SEd 324	Anatomy and Physiology	4	
SEd 325	The Teaching of Science (Teaching the Specialized Field)	3	
SEd 326	Environmental Science	3	
	<b>D. Mandated Courses</b>		<b>14 units</b>
NSTP 111	National Service Training Program 1	3	
NSTP 121	National Service Training Program 2	3	
PATHFit1	Movement Competency Training	2	
PATHFit2	Exercise-Based Fitness Activities	2	
PATHFit3	Traditional and Recreational Games	2	
PATHFit4	Team Sports (Basketball and Volleyball)	2	
	<b>E. Institutional Prerogative</b>		<b>13 units</b>
MATH 121	Precalculus	3	
Ed 113	Management of Students' Behavior and Wellness	3	
Ed 114	Special Topics in Education	3	
Ed 116	Comprehensive Examination	3	
SEd 327	Research in Sciences 2	1	

SUMMARY	
Courses	Number of Units
General Education	42
Professional Education	42
Specialization	73
Mandated	14
Institutional Prerogative	13
<b>TOTAL</b>	<b>184</b>

**PROGRAM OF STUDY**

Year	Course Code	Course Title	Credits	Lec	Lab	RLE	Pre-requisite(s)	Co-requisite(s)
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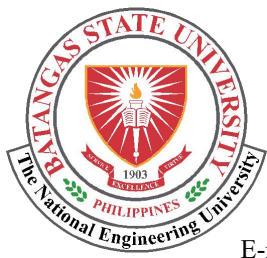
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Year 1	FIRST SEMESTER							
	<b>NSTP 111</b>	National Service Training Program 1	3	3	-		-	-
	<b>PATHFit1</b>	Movement Competency Training	2	2	-		-	-
	<b>GEEd 101</b>	Understanding the Self	3	3	-		-	-
	<b>GEEd 102</b>	Mathematics in the Modern World	3	3	-		-	-
	<b>GEEd 103</b>	Life and Works of Rizal	3	3	-		-	-
	<b>Fili 101</b>	Kontekstwalisadong Komunikasyon sa Filipino	3	3	-		-	-
	<b>Ed 101</b>	The Child and Adolescent Learners and Learning Principles	3	3	-		-	-
	<b>SEd 111</b>	Inorganic Chemistry	5	3	6		-	-
	<b>TOTAL</b>		<b>25</b>	<b>23</b>	<b>6</b>			
Year 1	SECOND SEMESTER							
	<b>NSTP 121</b>	National Service Training Program 2	3	3	-		NSTP 111	-
	<b>PATHFit2</b>	Exercise-Based Fitness Activities	2	2	-		PATHFit1	-
	<b>GEEd 104</b>	The Contemporary World	3	3	-		-	-
	<b>GEEd 105</b>	Readings in the Philippine History	3	3	-		-	-
	<b>GEEd 106</b>	Purposive Communication	3	3	-		-	-
	<b>Litr 101</b>	Sosyedad at Literatura/Panitikang Panlipunan	3	3	-		-	-
	<b>Ed 102</b>	The Teaching Profession	3	3	-		-	-
	<b>MATH 121</b>	Precalculus	3	3	-		-	-
	<b>SEd 121</b>	Analytical Chemistry	5	3	6		SEd 111	-
	<b>TOTAL</b>		<b>28</b>	<b>26</b>	<b>6</b>			
Year 1	MIDTERM							
	<b>SEd 131</b>	Earth Science	3	2	-		-	-
	<b>SEd 132</b>	Fluid Mechanics	3	3	-		MATH 121	-
	<b>TOTAL</b>		<b>6</b>	<b>6</b>	<b>-</b>			
Year 2	FIRST SEMESTER							
	<b>PATHFit3</b>	Traditional and Recreational Games	2	2	-		PATHFit1, PATHFit2	-
	<b>GEEd 107</b>	Ethics	3	3	-		-	-
	<b>GEEd 108</b>	Art Appreciation	3	3	-		-	-
	<b>Ed 103</b>	The Teacher and the Community, School Culture and Organizational Leadership	3	3	-		Ed 102	-
	<b>Ed 104</b>	Assessment in Learning 1	3	3	-		-	-
	<b>Ed 105</b>	Facilitating Learner-Centered Teaching	3	3	-		Ed 101	-
	<b>SEd 211</b>	Thermodynamics	4	3	3		MATH 121	-
	<b>SEd 212</b>	Organic Chemistry	5	3	6		SEd 111	-
	<b>TOTAL</b>		<b>26</b>	<b>23</b>	<b>9</b>			
Year 2	SECOND SEMESTER							
	<b>PATHFit4</b>	Team Sports (Basketball and Volleyball)	2	2	-		PATHFit1, PATHFit2	-



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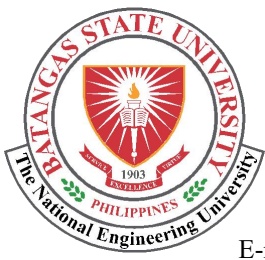
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	<b>GEd 109</b>	Science, Technology and the Society	3	3	-	-	-
	<b>Fili 102</b>	Filipino sa Iba't Ibang Disiplina	3	3	-	-	-
	<b>Ed 106</b>	Foundation on Special and Inclusive Education	3	3	-	-	-
	<b>Ed 107</b>	Technology for Teaching and Learning 1	3	3	-	-	-
	<b>Ed 108</b>	The Teacher and the School Curriculum	3	3	-	-	-
	<b>SEd 221</b>	Biochemistry	3	3	-	SEd 212	-
	<b>SEd 222</b>	Electricity and Magnetism	4	3	3	MATH 121	-
	<b>SEd 223</b>	Genetics	4	3	3	-	-
	<b>TOTAL</b>		<b>28</b>	<b>26</b>	<b>6</b>		
<b>Year 3</b>	<b>FIRST SEMESTER</b>						
	<b>Fili 103</b>	Retorika – Masining na Pagpapahayag	3	3	-	Fili 101,102	-
	<b>Ed 109</b>	Assessment in Learning 2	3	3	-	Ed 104	-
	<b>Ed 110</b>	Building and Enhancing New Literacies Across the Curriculum	3	3	-	-	-
	<b>SEd 311</b>	Cell and Molecular Biology	4	3	3	SEd 221, SEd 223	-
	<b>SEd 312</b>	Waves and Optics	4	3	3	SEd 222	-
	<b>SEd 313</b>	Astronomy	3	3	-	-	-
	<b>SEd 314</b>	Meteorology	3	3	-	SEd 131	-
	<b>SEd 315</b>	Research in Sciences 1	3	3	-	-	-
	<b>TOTAL</b>		<b>26</b>	<b>24</b>	<b>6</b>		
<b>Year 3</b>	<b>SECOND SEMESTER</b>						
	<b>Litr 102</b>	ASEAN Literature	3	3	-	-	-
	<b>SEd 321</b>	Technology Application in Science Teaching	3	3	-	Ed 107	-
	<b>SEd 322</b>	Modern Physics	3	3	-	SEd 222	-
	<b>SEd 323</b>	Microbiology and Parasitology	4	3	3	-	-
	<b>SEd 324</b>	Anatomy and Physiology	4	3	3	-	-
	<b>SEd 325</b>	The Teaching of Science (Teaching the Specialized Field)	3	3	-	Ed 105	-
	<b>SEd 326</b>	Environmental Science	3	3	-	-	-
	<b>SEd 327</b>	Research in Sciences 2	1	1	-	SEd 315	-
	<b>TOTAL</b>		<b>24</b>	<b>22</b>	<b>6</b>		
<b>Year 4</b>	<b>FIRST SEMESTER</b>						
	<b>Ed 111</b>	Field Study 1	3	3	-	Ed 101 to 110 All SEd Courses	-
	<b>Ed 112</b>	Field Study 2	3	3	-	Ed 101 to 110 All SEd Courses	-
	<b>Ed 113</b>	Management of Students' Behavior and Wellness	3	3	-	-	-
	<b>Ed 114</b>	Special Topics in Education	3	3	-	-	-
	<b>TOTAL</b>		<b>12</b>	<b>12</b>	<b>-</b>		
<b>Year 4</b>	<b>SECOND SEMESTER</b>						
	<b>Ed 115</b>	Teaching Internship	6	6	-	Ed 111, 112	
	<b>Ed 116</b>	Comprehensive Examination	3	3	-	All	



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							Academic Courses	
		<b>TOTAL</b>	<b>9</b>	<b>9</b>	<b>-</b>			