



**CURRICULUM**  
**Bachelor of Secondary Education major in Sciences**  
 Academic Year 2018-2019

Reference CMOs: CMO No. 20, s. 2013, CMO No. 75, s. 2017 and CMO No. 4, s. 2018

**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 Objectives**

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; and
5. establish sustainable partnerships and linkages with the professional community and provide assistance to the underserved, depressed, illiterate and less skilled members of society through extension activities and community service.

**Program Outcomes**

The graduates of the program have the ability to:

- a. demonstrate deep understanding of scientific concepts and principles;
- b. apply scientific inquiry in teaching and learning; and
- 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	
Code	Courses	Units	Total
GEd 102	Mathematics in the Modern World	3	
GEd 103	Life and Works of Rizal	3	
GEd 104	The Contemporary World	3	

GEd 105	Readings in Philippine History	3	
GEd 106	Purposive Communication	3	
GEd 107	Ethics	3	
GEd 108	Art Appreciation	3	
GEd 109	Science, Technology and 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>
	<i>Foundation/Theories and Concepts</i>		
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	
	<i>Pedagogical Content Knowledge</i>		
Ed 105	Facilitating Learner-Centered Teaching	3	
Ed 104	Assessment in Learning 1	3	
Ed 109	Assessment in Learning 2	3	
Ed 107	Technology for Teaching and Learning 1	3	
Ed 108	The Teacher and the School Curriculum	3	
Ed 110	Building and Enhancing New Literacies Across the Curriculum	3	
	<i>Experiential Learning</i>		
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	
PE 101	Physical Fitness, Gymnastics and Aerobics	2	
PE 102	Rhythmic Activities	2	
PE 103	Individual and Dual Sports	2	
PE 104	Team Sports	2	
	<b>E. Institutional Prerogative</b>		<b>13 units</b>
Ed 113	Management of Students' Behavior and Wellness	3	
Ed 114	Special Topics in Education	3	
Ed 116	Comprehensive Examination	3	
MATH 121	Precalculus	3	
SEd 327	Research in Sciences 2	1	

<b>SUMMARY</b>	
Courses	Number of Units
General Education	42
Professional Education	42
Specialization	73

Elective/Cognates	-
Mandated	14
Institutional Prerogative	13
<b>TOTAL</b>	<b>184</b>

## PROGRAM OF STUDY

FIRST YEAR					
First Semester					
Code	Course Title	Units	Lec	Lab	Prerequisite
NSTP 111	National Service Training Program 1	3	3	-	-
PE 101	Physical Fitness, Gymnastics and Aerobics	2	2	-	-
GEEd 101	Understanding the Self	3	3	-	-
GEEd 102	Mathematics in the Modern World	3	3	-	-
GEEd 103	Life and Works of Rizal	3	3	-	-
Fili 101	Kontekstwalisadong Komunikasyon sa Filipino	3	3	-	-
Ed 101	The Child and Adolescent Learners and Learning Principles	3	3	-	-
SEd 111	Inorganic Chemistry	5	3	6	-
	<b>TOTAL</b>	<b>25</b>	<b>23</b>	<b>6</b>	

Second Semester					
Code	Course Title	Units	Lec	Lab	Prerequisite
NSTP 121	National Service Training Program 2	3	3	-	NSTP 111
PE 102	Rhythmic Activities	2	2	-	PE 101
GEEd 104	The Contemporary World	3	3	-	-
GEEd 105	Readings in Philippine History	3	3	-	-
GEEd 106	Purposive Communication	3	3	-	-
Litr 101	Sosyedad at Literatura/Panitikang Panlipunan	3	3	-	-
Ed 102	The Teaching Profession	3	3	-	-
MATH 121	Precalculus	3	3	-	-
SEd 121	Analytical Chemistry	5	3	6	SEd 111
	<b>TOTAL</b>	<b>28</b>	<b>26</b>	<b>6</b>	

Midyear Term					
Code	Course Title	Units	Lec	Lab	Prerequisite
SEd 131	Earth Science	3	3	-	-
SEd 132	Fluid Mechanics	3	3	-	MATH 121
	<b>TOTAL</b>	<b>6</b>	<b>6</b>	<b>-</b>	

SECOND YEAR					
First Semester					
Code	Course Title	Units	Lec	Lab	Prerequisite
PE 103	Individual and Dual Sports	2	2	-	PE 101
GEEd 107	Ethics	3	3	-	-
GEEd 108	Art Appreciation	3	3	-	-
Ed 103	The Teacher and the Community, School Culture and Organizational Leadership	3	3	-	Ed 102
Ed 104	Assessment in Learning 1	3	3	-	-
Ed 105	Facilitating Learner-Centered Teaching	3	3	-	Ed 101
SEd 211	Thermodynamics	4	3	3	MATH 121
SEd 212	Organic Chemistry	5	3	6	SEd 111
	<b>TOTAL</b>	<b>26</b>	<b>23</b>	<b>9</b>	

Second Semester					
Code	Course Title	Units	Lec	Lab	Prerequisite
PE 104	Team Sports	2	2	-	PE 101
GEEd 109	Science, Technology and Society	3	3	-	-
Fili 102	Filipino sa Iba't-Ibang Disiplina	3	3	-	-
Ed 106	Foundation of Special and Inclusive Education	3	3	-	-
Ed 107	Technology for Teaching and Learning 1	3	3	-	-
Ed 108	The Teacher and the School Curriculum	3	3	-	-
SEd 221	Biochemistry	3	3	-	SEd 212
SEd 222	Electricity and Magnetism	4	3	3	MATH 121
SEd 223	Genetics	4	3	3	-
	<b>TOTAL</b>	<b>28</b>	<b>26</b>	<b>6</b>	

<b>THIRD YEAR</b>					
<b>First Semester</b>					
<b>Code</b>	<b>Course Title</b>	<b>Units</b>	<b>Lec</b>	<b>Lab</b>	<b>Prerequisite</b>
Fili 103	Retorika – Masining na Pagpapahayag	3	3	-	Fili 101, Fili 102
Ed 109	Assessment in Learning 2	3	3	-	Ed 104
Ed 110	Building and Enhancing New Literacies Across the Curriculum	3	3	-	-
SEd 311	Cell and Molecular Biology	4	3	3	SEd 221, SEd 223
SEd 312	Waves and Optics	4	3	3	SEd 222
SEd 313	Astronomy	3	3	-	-
SEd 314	Meteorology	3	3	-	SEd 131
SEd 315	Research in Sciences 1	3	3	-	-
<b>TOTAL</b>		<b>26</b>	<b>24</b>	<b>6</b>	

<b>Second Semester</b>					
<b>Code</b>	<b>Course Title</b>	<b>Units</b>	<b>Lec</b>	<b>Lab</b>	<b>Prerequisite</b>
Litr 102	ASEAN Literature	3	3	-	-
SEd 321	Technology Application in Science Teaching	3	3	-	Ed 107
SEd 322	Modern Physics	3	3	-	SEd 222
SEd 323	Microbiology and Parasitology	4	3	3	-
SEd 324	Anatomy and Physiology	4	3	3	-
SEd 325	The Teaching of Science (Teaching the Specialized Field)	3	3	-	Ed 105
SEd 326	Environmental Science	3	3	-	-
SEd 327	Research in Sciences 2	1	1	-	SEd 315
<b>TOTAL</b>		<b>24</b>	<b>22</b>	<b>6</b>	

<b>FOURTH YEAR</b>					
<b>First Semester</b>					
<b>Code</b>	<b>Course Title</b>	<b>Units</b>	<b>Lec</b>	<b>Lab</b>	<b>Prerequisite</b>
Ed 111	Field Study 1	3	3	-	Ed 101 to Ed 110, All SEd courses
Ed 112	Field Study 2	3	3	-	Ed 101 to Ed 110, All SEd courses
Ed 113	Management of Students' Behavior and Wellness	3	3	-	-
Ed 114	Special Topics in Education	3	3	-	-
<b>TOTAL</b>		<b>12</b>	<b>12</b>	<b>-</b>	

<b>Second Semester</b>					
<b>Code</b>	<b>Course Title</b>	<b>Units</b>	<b>Lec</b>	<b>Lab</b>	<b>Prerequisite</b>
Ed 115	Teaching Internship	6	6	-	Ed 111, Ed 112
Ed 116	Comprehensive Examination	3	3	-	All Academic Courses
<b>TOTAL</b>		<b>9</b>	<b>9</b>	<b>-</b>	