

University of Southeastern Philippines College of Arts and Sciences

BACHELOR OF SCIENCE IN MATHEMATICS CMO No. 48, series of 2017

Approved per BOR Resolution No. 58, series of 2018
Approved per BOR Referendum No. 10, S. 2020, <u>confirmed</u> per BOR Resolution No. 63, s.2020
Effective S.Y. 2018-2019

					FIRST	YEAR						
	1s	t Semest	er			Т			2nd Sen	nester		
Course No.	Course Title	Credit					Course			Cre	dit	
		Lec	Lab	Total Units Credit	Pre/Co-Requisite		No.	Course Title	Lec	Lab	Total Units Credit	Pre/Co-Requisite
GE 113	Understanding the Self	3	0	3	None	1	GE 111	Purposive Communication	3	0	3	None
GE 114	Ethics	3	0	3	None		GE 112	Mathematics in the Modern World	3	0	3	None
Math 111	Pre-calculus	6	0	6	None		Math 121	Fundamental Concepts of Mathematics	3	0	3	Math 111
Stat 111	Descriptive Statistics	3	0	3	None		Math 122	Calculus 1	5	0	5	Math 111
Nat Sci 1	General Biology	2	1	3	None		Stat 121	Statistical Methods	3	0	3	Stat 111
PE 111	Movement Enhancement	2	0	2	None		PE 122	Fitness Exercise	2	0	2	PE 111
NSTP 111	National Service Training Program 1	3	0	3	None		NSTP 122	National Service Training Program 2	3	0	3	NSTP 111
	Total			23				Total			22	

					SECOND	YEA	R					
	1st		2nd Semester									
Course No.	Course Title	Credit					Course			Cre	edit	
		Lec	Lab	Total Units Credit	Pre/Co-Requisite	No.	Course Title	Lec	Lab	Total Units Credit	Pre/Co-Requisite	
GE 215	Life and Works of Rizal	3	0	3	None		GE 217	Science, Technology and Society	3	0	3	None
GE 216	Readings in Philippine History	3	0	3	None		GE 218	Art Appreciation	3	0	3	None
Math 211	Calculus 2	5	0	5	Math 122	1	Math 221	Calculus 3	5	0	5	Math 211
Math 212	Set Theory	3	0	3	Math 121	1	Math 222	Linear Algebra	3	0	3	Math 121
Nat Sci 2	General Chemistry	2	1	3	None	1	Phy Sci 1	General Physics	3	1	4	Math 111
Elective 1	Intro to Info Tech	2	1	3	None		CS 2	Fundamental of Computing 1	2	1	3	Math 111
PE 213	Physical Activities Towards Health & Fitness I	2	0	2	PE 122		PE 224	Physical Activities Towards Health & Fitness II	2	0	2	PE 213
	Total			22			Total 23					

	THIRD YEAR												
	1st Semester							2nd Semester					
Course No.	Course Title	Credit					Course	O Title	Credit				
		Lec	Lab	Total Units Credit	Pre/Co-Requisite		No.	Course Title	Lec	Lab	Total Units Credit	Pre/Co-Requisite	
EGE 311	General Education Elective 1	3	0	3	None	1	EGE 312	General Education Elective 2	3	0	3	None	
GE 319	Contemporary World	3	0	3	None	1	EGE 313	General Education Elective 3	3	0	3	None	
Math 311	Operations Research 1	2	1	3	Math 222		Math 321	Statistical Theory	3	0	3	Math 121 & Math 221	
Math 312	Abstract Algebra 1	3	0	3	Math 121	1	Math 322	Abstract Algebra 2	3	0	3	Math 312	
Math 313	Probability	3	0	3	Math 221	1	Math 323	Advanced Calculus 1	3	0	3	Math 221	
Math 314	Graph Theory and Applications	3	0	3	Math 121		Math 324	Mathematical Modeling	3	0	3	Math 315, CS 2, & Math 222	
Math 315	Differential Equations 1	3	0	3	Math 221		Math 325	Mathematical Research Methods	3	0	3	Math 311, Math 314, Math 316	
Math 316	Combinatorics	3	0	3	Math 212		Elective 2	Math/Stat/Computing Elective 2	3	0	3	None**	
	Total			24			Total 24						

	FOURTH											
	1s	t Semest	er									
Course No.			Cre	dit		Γ	Course					
	Course Title	Lec	Lab	Total Units Credit	Pre/Co-Requisite		No.					
Math 411	Modern Geometry	3	0	3	Math 222 & Math 312		Math 421	R				
Math 412	Elementary Number Theory	3	0	3	Math 121		Math 422	C				
Math Res 400	Thesis*	0	3	3	Math 325		Math 423	To				
Math 414	Practicum	0	3	3	Math 321, Math 322, Math 323, Math 324 & Math 325		Math Res 400	ті				
Elective 3	Math/Stat/Computing Elective 3	3	0	3	None**		Elective 4	M El				
	Total			15								

	-	2nd Sen	nester		
Course			Cre		
No.	Course Title	Lec	Lab	Total Units Credit	Pre/Co-Requisite
Math 421	Real Analysis	3	0	3	Math 323
Math 422	Complex Analysis	3	0	3	Math 323
Math 423	Topology	3	0	3	Math 323
Math Res 400	Thesis	0	3	3	Math 325 & Math 414
Elective 4	Math/Stat/Computing Elective 4	3	0	3	None**
	Total			15	

Note: Thesis*- A subject to be enrolled continuously until the last prescribed semester where student's grade will appear None** - May vary depending on the pre-requisite subject/s.

Electives: Any three allied courses

EGE Electives:
1. People and the Earth's Ecosystem
2. Environmental Science

Philippine Indigenous Communities
 Reading Visual Arts
 Foreign Language

7. Living in the IT Era

3. Gender and Society

Summary	
General Education	36 units
Core Courses	66 units
Non-Math Foundational Courses	10 units
Qualified Electives/Cognates (Descriptive Statistics, Statistical Methods, Combinatorics)	9 units
Math Electives (Set Theory, Real Analysis, Graph Theory and Applications, Operations Research 1)	12 units
Free Electives (Elective 1-4)	12 units
Thesis	6 units
Practicum	3 units
PE	8 units
NSTP	6 units
Total number of units	168 units