Associate of Science Degree in Math/Science, Physics Option at Brookdale Community College

And

Bachelor of Science Degree in Mathematics at William Paterson University

AS Mathematics/Science- Physics Option			
Brookdale Courses	**Credits**	**WPU Equivalency**	**Credits**
Semester 1			
MATH 171 Calculus I	4	MATH 1600 Calculus I	4
ENGL 121 The writing process	3	ENG 1100	3
Social Sciences Credits	4	MATH 1600 Calculus I	4
Gen. Ed. Credits	3		
Semester 2			
MATH 172 Calculus II	4	MATH 1610 Calculus II	4
PHYS 121 General Physics I	4	PHYS 2600 General Physics I	4
ENGL 122 Writing and Research	3	Elective Credit	3
Humanities Credits	3		
Semester 3			
MATH 273 Calculus III	4	MATH 2010 Calculus III	4
PHYS 122 General Physics II	4	PHYS 2610 General Physics II	4
Science with Lab Credits	4 - 5		
COMP 126 Computer Logic and Design	3	CS 2010 Computer Info & Technology	3
Semester 4			
PHYS 223 General Physics III	4	PHYS 2620 General Physics III	4
Social Sciences or Humanities Credits	3		3
Gen. Ed. Credits: Math 285 Linear Algebra	3	MATH 2020 Linear Algebra	3
Elective Credits: MATH 274 Differential Equations	4	MATH 3220 Differential Equations	4
BS Mathematics (55 credits required for the major)			
		Mathematics Core Courses	
		MATH 2000 Logic and Methods of Higher Mathematics	3
		MATH 3010 Modern Algebra	3
		MATH 3240 Probability and Statistics	4
		MATH 4220 Complex Analysis	3
		MATH 4230 Real Analysis	3
		MATH 4900 Math Research Experience	2
		Mathematics Electives (Choose 4 courses. One must be at the 4000 level)	
		MATH 3110 Number Theory	3

		MATH 3230 Foundations of Geometry	3
		MATH 3260 Mathematical Models in Finance and Interest Theory	3
		MATH 3320 Statistical Computing	3
		MATH 3340 Applied Regression Analysis	3
		MATH 3350 Introduction to Numerical Analysis	3
		MATH 3800 Linear and Nonlinear Optimization	3
		MATH 3990 Selected Topics	1 - 6
		MATH 4010 Applied Algebra	3
		MATH 4110 Advanced Discrete Math	3
		MATH 4120 Time Series Modeling	3
		MATH 4130 Experimental Design for Statistics	3
		MATH 4150 Topics From Applied Math	3
		MATH 4210 Mathematical Statistics	3
		MATH 4250 Introduction to Topology	3
		MATH 4990 Independent Study	1 - 6
Notes:			
1. William Paterson University will accept all associate degree credits under this program-to-program articulation agreement, including up to have of the William Paterson University major required credits, from New Jersey community college students who enroll at William Paterson University			
2. William Paterson University recommends students to take two semesters of one foreign language at the community college. Two semesters of American Sign Language can also fulfill the foreign language requirement.			
3. Potential curriculum changes will take place in the 21-22 academic year			