



KEAN UNIVERSITY – COLLEGE OF NATURAL, APPLIED and HEALTH SCIENCES
(78200) B.A. IN MATHEMATICAL SCIENCES: 124 SEMESTER HOURS (S.H.)



For students graduating from Ocean County College with the A.A. in Liberal Arts or the A.S. General Studies with a Mathematics Concentration and transferring to Kean University

Kean University Courses are in Blue (57 S. H.) Ocean County College Courses are in Green (67 S. H.)

EFFECTIVE DATE: Fall 2016

KEAN DECLARATION AND GRADUATION GPA REQUIREMENT: 2.0

GENERAL EDUCATION REQUIREMENTS: 49 S.H.			ACADEMIC MAJOR COURSES ¹ : 40 S.H.		
Foundation Requirements: 13 S.H.			Required: Foundation Core ¹: 18 S.H.		
GE 3000 Transfer Transitions		1	MATH 2415 Calculus I	MATH 265 Calculus I	
ENG 1030 English Comp ¹	ENGL 151 English I ¹	3	MATH 2415 Calculus II	MATH 266 Calculus II	
MATH 1054 Precalculus ^{1,2}	MATH 192 Pre-Calculus II ^{1,2}	3	MATH 2995 Matrix & Lin. Algebra	MATH 275 Linear Algebra	
COMM 1402 Speech Comm	COMM 154 Public Speaking	3	MATH 3415 Calculus III	MATH 267 Calculus III	
GE 2024 Research & Technology	ENGL 152 English II	3	MATH 3544 Probability and Math Statistics		
DISCIPLINARY & INTERDISCIPLINARY DISTRIBUTION COURSES			Required: Concentration¹: 13 S.H.		
Humanities: 9 S.H.			MATH 2800 Mathematical Software	1	
ENG 2403 World Literature	General Education Literature (GHUM)	3	MATH 3110 Introductions to Proofs	3	
Select Two courses from below			MATH 3455 Differential Equations	MATH 280 Differential Equations	
Fine Arts or Art History	Select two courses from the OCC GHUM courses, excluding English and History. Note: Credit for a foreign language is granted upon completion of 6 credits of the same language, with 3 credits used here and 3 credits used in free electives.	3	MATH 3247 Abstract Algebra or MATH 4451 Advanced Calculus	3	
Philosophy or Religion			Math 4451 Advanced Calculus	3	
Foreign Languages			Required: Major Electives¹: 9 S.H. (With advisement, from the 3000-4000 level)		
Music or Theatre			MATH 3000-4000 level course	3	
Interdisciplinary			MATH 3000-4000 level course	3	
Social Sciences: 9 S.H.			MATH 3000-4000 level course	3	
HIST 1000 or HIST 1062	General Education History (GHIS)	3			
Select Two courses from below					
Psychology	Select two courses from the OCC GSOC list of approved courses.	3	FREE ELECTIVES: 31 S.H. Additional courses in Computer Science, Physics, or other Sciences, Technology, Economics or Management Science recommended. No Mathematics courses allowed other than prerequisites for MATH 1054 (MATH 192 at OCC). At least 50% must be at the 3000/4000 level		
Geography					
Political Science					
Sociology or Anthropology					
Interdisciplinary					
			Any Kean University Course	3	
Science and Mathematics: 12 S.H.			Any Kean University Course	3	
CPS 1231 Fund. Comp. Sci.	CSIT 165 Programming I	4	Any Kean University Course	3	
Lab Science			Any Kean University Course	3	
PHYS 2091 Gen. Physics I or PHYS 2095 (recommended)	PHYS 171 Physics I or PHYS 281 General Physics I (recommended)	4	Any Kean University Course	3	
Second Science Class			Any Kean University Course	1	
			Any 3000/4000 level Kean University Course	3	
Select a class from Biology, Physics, Chemistry or Astronomy	Select any science class from the OCC GSCL list.	4	Any 3000/4000 level Kean University Course	3	
			Any 3000/4000 level Kean University Course	3	
Health/Physical Education: 3 S.H.			Any 3000/4000 level Kean University Course	3	
ID 1010 or ID 1225	MATH 191 Pre-Calculus I ^{1,2}	3			
			TOTAL CREDITS	124 S.H.	
GE and Major Capstone¹: 3 S.H.					
MATH 4890 Senior Seminar in Mathematics (WE) ^{1,3}		3	² Students whose qualifying score on the placement test makes them eligible to take MATH 2415 (MATH 265 at OCC) can start with that course, and will have an additional 3 credits of free electives to total 124 degree credits. Students whose qualify score does not make them eligible to take MATH MATH 192 or MATH 191 will need to take the appropriate pre-requisite courses.		
Additional Required Course: 4 S.H.					
CPS 2231 Comp. Org. & Prog.	CSIT 166 Programming II	4	³ WE = Writing Emphasis course.		
¹ Requires a grade of C or better.					