KEAN UNIVERSITY
COLLEGE OF NATURAL, APPLIED and HEALTH SCIENCES
(78297) B.A. IN MATHEMATICAL SCIENCES (TEACHER CERTIFICATION P-12):132 S.H.
EFFECTIVE DATE: Fall 2017 **START TERM:** _____

NAME		TRANSFER INSTITUTIONS(X) Credits:	
STUDENT ID#		In Progress	
GENERAL EDUCATION: 48-49 Semester Hours (S.H.)		**ACADEMIC MAJOR: 40 Semester Hours (S.H.)**	
Foundation Requirements[1] 13 S.H.		****Foundation Core 18 S.H.**	
GE 1000 Transition to Kean[2] or GE 3000 Transfer Transitions[2]	1	MATH 2415 Calculus I	4
ENG 1030 Composition[3]	3	MATH 2416 Calculus II	4
MATH 1054 Precalculus[4,5]	3	MATH 2995 Matrix and Linear Algebra	3
COMM 1402 Speech Communication[3]	3	MATH 3415 Calculus III	4
GE 2024 Research & Technology	3	MATH 3544 Probability and Math Statistics	3
Disciplinary & Interdisciplinary Distribution Requirements		****Concentration 16 S.H.**	
		MATH 2526 Applied Statistics I	3
***Humanities* 9 S.H.**		MATH 2800 Mathematical Software	1
* ENG 2403 World Literature	3	MATH 3110 Intro to Proofs	3
Select two courses from different areas:		MATH 3342 Euclidean and Non-Euclidean Geometry	3
Fine Arts or Art History	3	MATH 3455 Differential Equations	3
Philosophy or Religion	3	MATH 3891 History of Mathematics	3
Foreign languages (Must take I and II for credit)	3		
Music or Theater	3		
Interdisciplinary	3	****Major Electives 6 S.H.** (with advisement, 3000-4000 level)	
		MATH	3
		MATH	3
***Social Sciences* 9 S.H.**			
* HIST 1062 Worlds of History	3		
PSY 1000 General Psychology	3	**PROFESSIONAL EDUCATION: 30 S.H.**	
SOC 1000 Intro to Soc or ANTH 1800 Cultural Anthropology	3		
		Must pass Praxis I and have a GPA of 3.0 before applying for admission to the Middle and Secondary Education (MSE) Department.	
***Science and Mathematics* 11 or 12 S.H.**			
CPS 1231 Fund of Computer Science[1]	4	**Grades of B or higher in professional education courses and**	
PHYS 2091 Gen Physics I **or** PHYS 2095 Physics I	4	**"Satisfactory" grades in EMSE 3801 and EMSE 4811 are required.**	
One course from Biology, Chemistry, Physics, Astronomy, Earth Science, Geology, Meteorology or Interdisciplinary	3,4	**Sophomore Level**	
		EMSE 2801 Intro to Field Experience/Subj K-12	3
***Health & Physical Education* 3 S.H.**		**Junior Level**	
ID 1225 Issues in Contemporary Health	3	EDUC 3000 Curriculum Evaluation & Learner	3
		EDUC 3401 Language Arts / Reading K-12	3
***/**G.E. and Major Capstone* 3 S.H.**		EMSE 3220 Mathematics Ed K-12 (WE)	3
MATH 4890 Senior Seminar in Mathematics (WE)	3	EMSE 3122 Computers in Education	3
		EMSE 3801 Field Experience / Subj Area K-12	2
ADDITIONAL REQUIRED COURSES: 13 S.H.		EMSE 3903 Eng. Lang. Learning in America (taken w/EMSE 3801)	1
CPS 2231 Comp Org and Programming	4		
PSY 2110 Psychology of Adolescence	3	**Senior Level**	
ID 2955 Disabled Persons in American Society	3		
One additional DIS/ID Course (Physics, Computer Science or Economics recommended).	3	EMSE 4811 Prof Internship/Subj Area K-12 **(Praxis II math exam must be passed before student teaching)**	9
Special notes: 1 See prerequisites and equivalencies. 2 University Requirement for Graduation for all undergraduate students that must be satisfied in one of two ways: Complete GE 1000 (all freshmen and transfers entering with 0-29 credits) OR complete GE 3000 (transfers entering with 30 credits or more) 3 ENG 1030 and COMM 1402 require a grade of B- or higher. 4 Students who do not qualify on the placement test to take MATH 1054 must take MATH 1000 first. 5 Students whose qualifying score on the placement test makes them eligible to take Math 2415 may take that course instead. In that case the student must take another 3 credits in free electives to total 132 S.H.		**Professional/GE Capstone Course**	
		EDUC 4000 Teacher and Classroom	3
		FREE ELECTIVES: 0-1 S.H.***	
		Special Notes: *G.E. required course; WE: Writing Emphasis **All major courses require a grade of C or better.	
		***No mathematics courses allowed other than MATH 1000.	
		TOTAL CREDITS:	
		Advisor Signature:	