KEAN UNIVERSITY

COLLEGE OF NATURAL, APPLIED and HEALTH SCIENCES

(78297) B.A. IN MATHEMATICAL SCIENCES (TEACHER CERTIFICATION K-12):132 S.H.

EFFECTIVE DATE: Fall 2018

START TERM: NAME TRANSFER INSTITUTIONS(X) Credits: STUDENT ID# In Progress GENERAL EDUCATION: 45-46 Semester Hours (S.H.) ACADEMIC MAJOR: 42 Semester Hours (S.H.) Foundation Requirements¹ 13 S.H. *Foundation Core 18 S.H. GE 1000 Transition to Kean² or GE 3000 Transfer Transitions² 1 MATH 2415 Calculus I 4 ENG 1030 College Composition³ 3 MATH 2416 Calculus II 4 MATH 1054 Precalculus^{4,5,6} 3 MATH 2995 Matrix and Linear Algebra 3 COMM 1402 Speech Communication³ 3 MATH 3415 Calculus III 4 GE 2024 Research & Technology 3 MATH 3544 Probability and Math Statistics 3 Disciplinary & Interdisciplinary Distribution Requirements **Concentration 12 S.H. MATH 2526 Applied Statistics I 3 Humanities 9 S.H. MATH 3110 Intro to Proofs ENG 2403 World Literature 3 MATH 3342 Euclidean and Non-Euclidean Geometry 3 3 Select two courses from different areas: MATH 3891 History of Mathematics Fine Arts or Art History 3 */**G.E. and Major Capstone 3 S.H. Philosophy or Religion 3 Foreign languages (Must take I and II for credit) 3 MATH 4890 Senior Seminar in Mathematics (WE) Music or Theater 3 Interdisciplinary 3 **Major Electives 9 S.H. (with advisement, 3000-4000 level) MATH 3 MATH 3 Social Sciences 9 S.H. MATH 3 HIST 1062 Worlds of History 3 PSY 1000 General Psychology 3 PROFESSIONAL EDUCATION: 31 S.H. SOC 1000 Intro to Soc or ANTH 1800 Cultural Anthropology 3 Must pass Praxis Core and have a GPA of 3.0 before applying for admission to the Secondary Education Department. Science and Mathematics 11 or 12 S.H. CPS 1231 Fund of Computer Science¹ Grades of B- or higher in all education courses and Satisfactory" grades in EMSE 4711 and EMSE 4811 are required. PHYS 2091 Gen Physics I or PHYS 2095 Physics I 4 3,4 Sophomore Level ⁶One course from Biology, Chemistry, Physics, Astronomy, Earth Science, Geology, Meteorology or Interdisciplinary EMSE 2801 Intro to Clinical Experience K-12 3 Health & Physical Education 3 S.H. Junior Level 3 EDUC 3000 Curriculum, Evaluation, & the Learner⁷ ID 1225 Issues in Contemporary Health EDUC 3401 Language Arts / Reading K-127 3 EMSE 3122 Technology in Education 3 EMSE 3903 Teaching English Language Learners Senior Level ADDITIONAL REQUIRED COURSES: 13 S.H. EMSE 3220 Mathematics Education K-12 (co-req. Clinical I) 3 CPS 2231 Comp Org and Programming 4 EMSE 4711 Clinical I Practice /Subj Area K-128,9 3 EMSE 4811 Clinical II Practice in Subj Area K-3 9 PSY 2110 Psychology of Adolescence Should be completed prior to Clinical I 3 ID 2955 Disabled Persons in American Society 8 Requires submission of application to TPC 9 Clinical I and Clinical II must be done in consecutive semesters in the final year of One additional DIS/ID Course (Physics, Computer Science or 10 No student may enter Clinical II unless Math Praxis II passing score is submitted to Economics recommended). 3 Clinical II must be completed the final semester prior to graduation Special notes: Professional/GE Capstone Course 1 See prerequisites and equivalencies. EDUC 4000 Teacher and Classroom (co-requisite EMSE 4811) ² University Requirement for Graduation for all undergraduate students that must be satisfied in on of two ways: Complete GE 1000 (all freshmen and transfers entering with 0-29 credits) OR complete GE FREE ELECTIVES: 0-1 S.H.*** 3000 (transfers entering with 30 credits or more) 3 ENG 1030 and COMM 1402 require a grade of B- or higher. *G.E. required course; WE: Writing Emphasis 4 Students who do not qualify on the placement test to take MATH 1054 must take MATH 1000 first. **All math major courses require a grade of C or better. 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 ***No mathematics courses allowed other than MATH 1000. free electives to total 132 S.H. TOTAL CREDITS: 6 C or better Advisor Signature: