Five-Year Math Education

Sample Pathway to Graduation

124 S.H. – RFI & non-RFI Tracks

Freshman Year: Summer Semester			
GE 1000: Transition to Kean	1		
Freshman Year: Fall Semester		Freshman Year: Spring Semester	
ENG 1030: Composition	3	COMM 1402: Speech Communication	3
HIST 1062: Worlds of History	3	GE 2024: Research and Technology	3
STME: 1401: Chemical Systems I OR STME 2601: Living Systems I	4	STME 1601: Chemical Systems II OR STME 2602: Living Systems II	4
STME 1903: Research Methods	1	STME 2903: Research Experience (RFI track)	2
STME 1403: Math & Computational Methods I	4	STME 1603: Math & Computational Methods II	4
	15		14 – 16
Sophomore Year: Fall Semester		Sophomore Year: Spring Semester	
STME: 1401: Chemical Systems I OR STME 2601: Living Systems I	4	STME 2402: Physical Systems II OR STME 2602: Living Systems II OR STME 1601: Chemistry II	4
STME 3903: Advanced Research Experience (RFI track)	3	EMSE 2801: Intro Field Experience	3
STME 2401: Physical Systems I	4	MATH 3415: Calculus III	4
STME 2403: Math & Computational Methods III	4	STME 2603: Probabilistic Methods of Science	4
PSY 1000: General Psychology	3	PSY 2110: Psychology of Adolescence	3
	15 – 18		18
Junior Year: Fall Semester		Junior Year: Spring Semester	
MATH 3891: History of Math OR HIST 3852: History of Science	3	STME 4805: Mathematical Modeling	3
MATH 3110: Introduction to Proofs	3	MATH 3455: Differential Equations	3
MATH 3225: Comp Methods in Matrix & Linear Algebra	3	ID 1225: Critical Issues & Values of Cont. Health	3
MATH 3342: Euclidean & Non-Euclidean Geometry	3	Free Elective	3
Major Elective* (RFI track = 2 credits/non-RFI = 3 credits)	2 – 3	ENG 2403: World Literature	3
		STME 3610: Current Issues in Sci & Tech (non-RFI track)**	1
	14 – 17		15 – 16
Senior Year: Fall Semester		Senior Year: Spring Semester	
EMSE 3220: Math Education K-12	3	STME 4610: Science & Technology Seminar (Capstone)	3
EMSE 5315: Language Arts & Reading in Teaching Content Areas	3	GE Approved Humanities Requirement	3
EMSE 5320: Computers in the School Curriculum	3	EMSE 3903: Teaching English Language Learners	1
EMSE 3801: Field Experience	2	EDUC 3000: Curriculum, Evaluation & the Learner	3
Free Elective	3	Free Elective	3
		Major Elective* (non-RFI track)	3
	14		13 – 16

**Major Electives: RFI Track = 2 cr.; non-RFI Track = 6 cr.*

***STME 3610 to be taken by students who did not complete <u>both</u> STME 2903 & 3903 (RFI Research Experience)*

5th Year Courses

Summer prior to start of 5th Year			
Graduate Education Elective	3	SPED 5024 Differentiating Instruction in the Inclusive Classroom	3
5th Year: Fall Semester		5th Year: Spring Semester	
STME 5323: Theory & Practice Teaching Math	3	EMSE 5564: Professional Internship	6
STME 5700: Research Methods in Math Education	3	EMSE 5031: Action Research Integrative Seminar	3
EMSE 5561: Foundations of Education	3	STME 5610: Advanced Science & Technology Seminar	3
Graduate Education Elective	3		
	12		12