



## Five-Year Chemistry Education

### Sample Pathway to Graduation

125 S.H. – non-RFI Track  
129 S.H. – RFI Track

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
STME 2601: Living Systems I	4	STME 1603: Math & Computational Methods II	4
STME 1403: Math & Computational Methods I	4	STME 1601: Chemical Systems II	4
STME 1903: Research Methods	1	GE 2024: Research and Technology	3
STME: 1401: Chemical Systems I	4	STME 2903: Research Experience (RFI track)	2
	16		14 – 16
Sophomore Year: Fall Semester		Sophomore Year: Spring Semester	
STME 3903: Advanced Research Experience (RFI track)	3	EMSE 2801: Intro Field Experience	3
STME 2401: Physical Systems I	4	STME 2402: Physical Systems II	4
ES 1000: Observing the Earth (non-RFI track)	3	CHEM 2283: Quantitative Analysis	4
STME 2681: Organic Chemistry I	3	STME 2682: Organic Chemistry II	3
STME 2683: Organic Chemistry I Lab	2	STME 2684: Organic Chemistry II Lab	2
STME 2403: Math & Computational Methods III	4		
	16		16
Junior Year: Fall Semester		Junior Year: Spring Semester	
ENG 2403: World Literature	3	STME 2603: Probabilistic Methods of Science	4
MATH 3415: Calculus III	4	ES 1000: Observing the Earth (RFI track)	3
PHYS 2097: Physics III	4	ID 1225: Critical Issues & Values of Cont. Health	3
CHEM 2491: Inorganic Chemistry	3	PSY 2110: Psychology of Adolescence	3
PSY 1000: General Psychology	3	HIST 1062: Worlds of History	3
		STME 3610: Current Issues in Sci & Tech (non-RFI track)	1
	17		14 – 16
Senior Year: Fall Semester		Senior Year: Spring Semester	
EMSE 3230: Science 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
CHEM 3284: Instrumental Methods of Analysis	4	EMSE 3903: Teaching English Language Learners	1
EMSE 3801: Field Experience	2	EDUC 3000: Curriculum, Evaluation & the Learner	3
EMSE 5320: Computers in the School Curriculum	3	Free Elective	3
CHEM 3381: Physical Chemistry Lecture I	3		
	18		13

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

### 5<sup>th</sup> Year Courses

Summer prior to start of 5 <sup>th</sup> Year			
Graduate Education Elective	3	SPED 5024 Differentiating Instruction in the Inclusive Classroom	3
5 <sup>th</sup> Year: Fall Semester		5 <sup>th</sup> Year: Spring Semester	
STME 5330: Science Teaching Methods & Practice	3	EMSE 5564: Professional Internship	6
STME 5032: Research Methods for Science 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