



New Jersey Center for Science, Technology & Mathematics (NJCSTM)

Bachelor of Science in Science & Technology / Chemistry  
Master of Art in Instruction & Curriculum / Science & Technology Option / Chemistry Education  
Five Year Pathway to Graduation in the Chemistry Education Option

*This prototype should be used only as a guide; consult with your NJCSTM academic advisor for individual plans.*

Name: \_\_\_\_\_

Date of Matriculation \_\_\_\_\_

Student ID: \_\_\_\_\_

NJCSTM option **30102 Program Code Chem Educ**

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**FRESHMAN YEAR / NJCSTM-1**

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**Summer Session II Incoming Yr-1**

GE 1000 Transition to Kean NJCSTM section \_\_\_1\_\_\_

**Fall Semester Yr-1**

ENG 1030 Composition	3
HIST 1062 Worlds of History	3
STME 1403 Math & Computational Methods I	4
STME 2610 Current Issues Sci & Tech I	1
STME 1401 Chemical Systems I	4

**Spring Semester Yr-1**

COMM 1402 Speech Communication	3
GE 2024 Res & Tech (NJCSTM section)	3
EMSE 2801 Intro to Field Exp	3
STME 1603 Math & Comp Methods II	4
STME 1601 Chemical Systems II	4

Total Credits 16 (includes entering summer credit)

Total Credits 17

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**SOPHMORE YEAR / NJCSTM-2**

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**Fall Semester Yr-2**

CHEM 2283 Quantitative Analysis	4
STME 2401 Physical Systems (Physics I)	4
STME 2403 Math & Comp Methods III	4
STME 2681 Organic Chem I Honors Lecture	3
STME 2683 Organic Chem I Honors Lab	2

+ *Take Praxis I exam*

+ *Apply to College of Education*

Total Credits 17

**Spring Semester Yr-2**

ENG 2403 World Literature	3
STME 2682 Organic Chem II Honors Lec	3
STME 2402 Physical Systems II (Physics II)	4
STME 2684 Organic Chem II Honors Lab	2
PSY 1000 Intro to Psychology	3

Total Credits 15

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**JUNIOR YEAR / NJCSTM-3**

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**Fall Semester Yr-3**

STME 2601 Living Systems	4
CHEM 2491 Inorganic Chemistry	3
MATH 3451 Calculus III (free elective)	3
STME 2603 Probabilistic Methods of Science	4
EMSE 3903 Teaching ELL	1

Total Credits 15

**Spring Semester Yr-3**

STME 3610 Current Issues in Sci & Tech II	1
PSY 2110 Psychology of Adolescence	3
EDUC 3000 Curric., Eval., and Learner	3
ID 1225 Health	3
CHEM 3284 Instrumental Methods	4
Free Elective	3
+ <i>Apply for Jr. Field placement by April 15th</i>	

Total Credits 17

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**SENIOR YEAR / NJCSTM-4**

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**Fall Semester Yr-4**

CHEM 3381 Physical Chemistry	3
PHYS 2097 Physics III	4
EMSE 3230 Science Education K-12	3
ES 1000 Observing the Earth	3
GE Approved Humanities	3

Total Credits 16

**Spring Semester Yr-4**

STME 4610 Sci & Tech Seminar	3
EMSE 5315 Reading in Content Areas	3
CHEM 4908 Seminar in Chemistry	3
EMSE 5320 Computers in Schools	3
EMSE 3801 Junior Field Placement	2
CHEM 3901 Independent Research	1

+ apply for student teaching placement by April 15th

Total Credits 15

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**TOTAL CREDITS REQUIRED FOR THIS B.S. Science & Technology OPTION: 128 S.H.**

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**MASTERS YEAR / NJCSTM-5 MA INSTRUCTION & CURRICULUM / SCI & TECH / CHEM**  
**Program code: 30661**

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**Summer Session I Yr-5**

Graduate Education Elective	3
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**Summer Session II Yr-5**

SPED 5024 Differentiating Instruction in the Inclusive Classroom	3
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**Fall Semester Yr-5**

EMSE 5330 Theory & Practice Teaching Science	3
EMSE 5561 Foundations of Education	3
EMSE 5032 Research Methods For Science Educ	3
Graduate Education Elective	3

Total Credits 12

**Spring Semester Yr-5**

EMSE 5564 Professional Internship	6
EMSE 5031 Action Research Integ. Seminar	3
STME 5610 Adv Science & Tech Seminar	3

Total Credits 12