



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

Bachelor of Science in Science & Technology / Biology  
Master of Arts in Instruction & Curriculum / Science & Technology Option / Biology Education  
Five Year Pathway to Graduation in the Biology 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 **Program Code 30101 Bio Educ**

**FRESHMAN YEAR / NJCSTM-1**

**Summer Session II Incoming Yr-1**

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

**Fall Semester Year 1**

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

**Spring Semester Year 2**

COMM 1402	Speech Communication	3
GE 2024	Res& Tech(NJCSTM section)	3
PSY 1000	Intro to Psychology	3
STME 1603	Math & Comp Methods II	4
STME 1601	Chemical Systems II	4

Total Credits 16 (includes entering summer credit)

Total Credits 17

**SOPHMORE YEAR / NJCSTM-2**

**Fall Semester Yr-2**

STME 2601	Living Systems	4
ENG 2403	World Literature	3
STME 2603	Prob Methods of Science	4
EMSE 2801	Intro Field Experience	2
Free Elective		3

**Spring Semester Yr-2**

BIO 2500	Principles of Botany	4
PSY 2110	Psychology of Adolescence	3
GE Approved	Humanities	3
ID 1225	Health	3
ES 1000	Observing the Earth	3
+ <i>Take Praxis I Exam</i>		
+ <i>Apply to College of Education</i>		

Total Credits 17

Total Credits 16

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**JUNIOR YEAR / NJCSTME-3**

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**Fall Semester Yr-3**

STME 2403 Math & Comp Methods III	4
BIO 3403 Anatomy & Physiology I	4
CHEM 2180 Prin. of Organic Chemistry	4
STME 2401 Physical Systems (Physics I)	4

Total Credits 16

**Spring Semester Yr-3**

STME 3610 Current Issues in Sci & Tech II	1
BIO 3404 Anatomy & Physiology II	4
BIO 3614 Principles of Ecology	4
BIO 3704 Principles of Genetics	3
EMSE 3230 Science Education K-12	3
<i>+ Apply by Feb 1st for Fall Jr Field placement</i>	

Total Credits 15

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**SENIOR YEAR / NJCSTME-4**

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**Fall Semester Yr-4**

EDUC 3000 Curriculum, Eval & Learner	3
BIO 3305 Principles of Microbiology	4
BIO 3400 Zoology Form & Function	4
EMSE 5315 Reading in Content Areas	3
EMSE 3801 Junior Field Placement	2

Total Credits 16

**Spring Semester Yr-4**

STME 4610 Sci & Tech Seminar (Capstone)	3
BIO 4105 Essentials of Biochemistry	4
EMSE 5320 Computers in Schools Cur I	3
Major Elective	3-4
EMSE 3903 Teaching ELL	1
<i>+ Apply by April 15<sup>th</sup> for Spring Student Teaching placement</i>	

Total Credits 14-15

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**TOTAL CREDITS REQUIRED FOR THIS B.S. Science & Technology OPTION: 127-128 S.H.**

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**MASTERS YEAR / NJCSTM-5 MA INSTRUCTION & CURRICULUM / SCI & TECH / BIOLOGY**  
**Program code: 30660**

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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