



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

**Bachelor & Master of Science in Science & Technology Combined Degree Program  
Five Year Pathway to Graduation in Molecular Biology & Biotechnology Option**

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

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

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

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

NJCSTM option **Molecular Biology & Biotechnology**  
**30105 Program Code**

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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 Research & Technology (NJCSTM Section, Spring Only)	3
ENG 2403 World Literature	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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**SOPHOMORE YEAR / NJCSTM-2**

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**Fall Semester Yr-2**

STME 2601 Living Systems	4
STME 2401 Physical Systems (Physics I)	4
STME 2403 Math & Comp Methods III	4
STME 2681 Organic Chemistry I H Lecture	3
STME 2683 Organic Chemistry I H Lab	2

**Spring Semester Yr-2**

CHEM 2283 Quantitative Analysis	4
GE Approved Humanities Elective	3
STME 2402 Physical Systems II (Physics II)	4
STME 2682 Organic Chemistry II H Lecture	3
STME 2684 Organic Chemistry II H Lab	2

Total Credits 17

Total Credits 16

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**JUNIOR YEAR / NJCSTM-3**

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**Fall Semester Yr-3**

BIO 3433 Anatomy & Physiology I	4
CHEM 3284 Instrumental Methods	4
BIO 3305 Microbiology	4
STME 2603 Probabilistic Methods of Science	4

**Spring Semester Yr-3**

STME 3610 Current Issues in Sci & Tech II	1
BIO 3434 Anatomy & Physiology II	4
BIO 3704 Principles of Genetics	3
BIO 3820 Basic Tissue Culture	4
Free elective*	3

Total Credits 16

Total Credits 15

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**SENIOR YEAR / NJCSTM-4**

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**Fall Semester Yr-4**

STME 5020 Ethics in Biotechnology (Fall only)	1
BIO 4105 Essentials of Biochemistry	4
BIO 3705 Principles of Genetics Lab	2
GE Approved Social Science	3
Major Elective*	3-4
Major Elective*	3-4

**Spring Semester Yr-4**

STME 4610 Sci & Tech Seminar (Capstone)	3
STME 5103 Scientific Writing & Presentation (Spring only)	3
BIO 4700 Molecular Genetics	4
Major Elective*	4

Total Credits 16-18

Total Credits 14

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**TOTAL CREDITS REQUIRED FOR THIS B.S. Science & Technology OPTION: 126-129 S.H.**

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**MASTERS YEAR / NJCSTM-5 MS SCIENCE & TECHNOLOGY/ BIOTECHNOLOGY  
PROGRAM CODE: 30961**

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**Summer Session**

STME Independent Study	3
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**Fall Semester Yr-5**

STME 5411 Internship	3
STME 5010 Molecular Cell Bio I (Fall Only)	3
STME 5510 Biostatistics (Fall Only)	3
Elective	3-4

**Spring Semester Yr-5**

STME 5412 Internship	3
STME 5240 Mol Cell Bio II (Spring Only)	3
2 Electives	3-8

Either BIO 5700 (Fall only) or STME 5140 (Spring only) 3-4 credits

Total Credits 12-16

Total Credits 12-15

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**TOTAL CREDITS REQUIRED FOR THIS M.S. Science & Technology OPTION: 30 S.H.**