



KEAN UNIVERSITY - N.J. CENTER FOR SCIENCE, TECHNOLOGY & MATHEMATICS  
**(30112) B.S. IN SCIENCE & TECHNOLOGY (Computational Science & Engineering  
 Option) 124 S.H. (3.0 minimum GPA required for Graduation).**

EFFECTIVE DATE: FALL 2016

START TERM: \_\_\_\_\_

TRACK SPECIFIC REQUIREMENTS: APPLIED MATH: 34 S.H.				TRACK SPECIFIC REQUIREMENTS: BIOINFORMATICS: 34 S.H.			
Program Track Requirements <sup>5</sup> : 25-29 S.H.				Program Track Requirements <sup>5</sup> : 30-34 S.H.			
STME 2402	Physical Systems II	4		STME 2602	Living Systems II	4	
MATH 3225	Computational Methods Linear Algebra II	3		STME 1601	Chemical Systems II	4	
MATH 3451	Calculus III	4		STME 2681	Organic Chemistry Honors Lecture I	3	
MATH 3455	Differential Equations	3		STME 2683	Organic Chemistry Honors Lab I	2	
MATH 3940	Numerical Analysis	3		BIO 3709	Genetics	4	
MATH 4805	Math Modeling with Applications	3		BIO 4105	Essentials of Biochemistry <sup>6</sup>	4	
STME 3610	Current Issues <sup>6</sup>	1		OR			
	OR			STME 3401	Biochemistry Honors I <sup>7</sup>	4	
STME 2903	Research Experience-RFI <sup>7</sup>	2		BIO 4700	Molecular Genetics	4	
STME 3903	Advanced Research Experience-RFI <sup>7</sup>	3		BIO 3305	Principles of Microbiology	4	
<i>Select ONE course from below</i>				STME 3610	Current Issues <sup>6</sup>	1	
				OR			
STME 1601	Chemical Systems II	4		STME 2903	Research Experience-RFI <sup>7</sup>	2	
STME 2602	Living Systems II	4		STME 3903	Advanced Research Experience-RFI <sup>7</sup>	3	
MAJOR ELECTIVES <sup>5</sup> : 5-9 S.H. (Select major elective courses with advisement)				MAJOR ELECTIVES <sup>5</sup> : 0-4 S.H. (Select major elective courses with advisement)			
TRACK SPECIFIC REQUIREMENTS: PHYSICS: 37 S.H.							
Program Track Requirements <sup>5</sup> : 33-37 S.H.							
STME 1603	Chemical Systems II	4					
STME 2402	Physical Systems II	4					
PHYS 2907	Physics III	4					
PHYS 4592	Modern Physics	4					
PHYS 4593	Landmarks in 20 <sup>th</sup> Century Physics or PHYS 4901 Independent Research in Physics	3					
MATH 3451	Calculus III	4					
MATH 3455	Differential Equations	3					
MATH 3940	Numerical Analysis	3					
MATH 4805	Mathematical Modeling	3					
STME 3610	Current Issues <sup>6</sup>	1					
	OR						
STME 2903	Research Experience-RFI <sup>7</sup>	2					
STME 3903	Advanced Research Experience-RFI <sup>7</sup>	3					
MAJOR ELECTIVES <sup>5</sup> : 0-4 S.H. (Select major elective courses with advisement)							

<p><b>Special Notes:</b></p> <p><sup>1</sup> University Requirement for Graduation for all undergraduate students that must be satisfied in one of two ways: Complete GE 1000 (all freshmen &amp; transfers entering with 0-29 credits) OR complete GE 3000 (transfers entering with 30 credits or more)</p> <p><sup>*</sup> (G.E.) General Education required course.</p> <p><sup>2</sup> Foundation &amp; Additional Requirements require a grade of C or better, except ENG 1030 requires B or better.</p> <p><sup>3</sup> Prerequisite of qualifying placement test score or the equivalent of MATH 1054.</p>	<p><sup>4</sup> Credit granted only upon completion of two semesters of elementary or intermediate foreign language.</p> <p><sup>5</sup> A minimum grade of C in no more than two major courses, including capstone. A grade of B- or higher in remaining major courses.</p> <p><sup>6</sup> Non-RFI students only.</p> <p><sup>7</sup> Required for RFI students – must complete with RFI sponsor faculty. WE: Writing Emphasis course.</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------