Transfer Model Curriculum (TMC) Template for Physics
CCC Major or Area of Emphasis: Physics
TOP Code: 190200
CSU Major(s): Physics; Physics Education
Total Units: 24 *(all units are minimum semester units)*

In the four columns to the right under the **College Program Requirements**, enter the college's course identifier, title and the number of units comparable to the course indicated for the TMC. If the course may be double-counted with either CSU-GE or IGETC, enter the GE Area to which the course is articulated. To review the GE Areas and associated unit requirements, please go to Chancellor's Office Academic Affairs page, RESOURCE section located at: http://extranet.cccco.edu/Divisions/AcademicAffairs/CurriculumandInstructionUnit/TransferModelCurriculum.aspx or the ASSIST website: http://web1.assist.org/web-assist/help/help-csu_ge.html.

The units indicated in the template are the **minimum** semester units required for the prescribed course or list. All courses must be CSU transferable. ***All courses with an identified C-ID Descriptor must be submitted to C-ID prior to submission of the Associate Degree for Transfer (ADT) proposal to the Chancellor's Office.***

Associate in Science in Physics for Transfer Degree
College Name: Santa Rosa Junior College

TRANSFER MODEL CURRICULUM (TMC)		COLLEGE PROGRAM REQUIREMENTS				
Course Title (units)	**C-ID Descriptor**	**Course ID**	**Course Title**	**Units**	**GE Area**	
					CSU	**IGETC**
REQUIRED CORE: (24 units)						
Calculus-Based Physics for Scientists and Engineers: ABC (12)	PHYS 200S	PHYS 40 PHYS 41 PHYS 42 PHYS 43	Classical Mechanics for Scientists and Engineers Waves, Optics, and Thermodynamics for Scientists and Engineers Electricity and Magnetism for Scientists and Engineers Modern Physics for Scientists and Engineers	5 4 4 3		5A, 5C 5A, 5C 5A, 5C
OR						
Calculus-Based Physics for Scientists and Engineers: A (4) Calculus-Based Physics for Scientists and Engineers: B (4) Calculus-Based Physics for Scientists and Engineers: C (4)	PHYS 205 PHYS 210 PHYS 215					
Select 1 of 2 options **Option 1:** (12 units)						
Single Variable Calculus I – Early Transcendentals (4) **OR** Single Variable Calculus I – Late Transcendentals (4)	MATH 210 **OR** MATH 211					
Single Variable Calculus II – Early Transcendentals (4) **OR** Single Variable Calculus II – Late Transcendentals (4)	MATH 220 **OR** MATH 221					
Multivariable Calculus (4)	MATH 230					
OR						
Option 2: (12 units)						
Single Variable Calculus Sequence (8) Multivariable Calculus (4)	MATH 900S MATH 230	MATH 1A MATH 1B	Calculus, First Course Calculus, Second Course	5 5		2A 2A

		MATH 1B MATH 1C	Calculus, Second Course Calculus, Third Course	4		
Total Units for the Major:	**24**	**Total Units for the Major:**		30		
		Total Units that may be double-counted ***(The transfer GE Area limits must not be exceeded)***				7
		General Education (CSU-GE or IGETC) Units			**39**	**37**
		Elective (CSU Transferable) Units				0
		Total Degree Units (maximum)			**60**	

***NOTE – to keep this major degree under 60 units, only the GE IGETC pattern can be used**