Articulation Agreement by Major

Effective during the 2018-2019 Academic Year

To: University of California, Merced
General Catalog, Semester

From: City College of San Francisco
General Catalog, Semester

PHYSICS, B.S.

SCHOOL OF NATURAL SCIENCES

**Physics, B.S. offers emphasis tracks in: Atomic/Molecular/Optical/Condensed Matter, Physics, Biophysics, Mathematical Physics, and Custom emphasis. Transfer applicants must choose an emphasis in this major.

REQUIREMENTS FOR ADMISSION

For admission to the Physics B.S. major, students must earn a minimum overall GPA of 2.8 or better, and must complete classes articulated with the following UC Merced courses prior to admission:

- CHEM 2, MATH 21, MATH 22, PHYS 8, and PHYS 9

Transfer students seeking fall admission should have the following completed by the spring term preceding fall enrollment at UC Merced:

1. All minimum admissions requirements including appropriate courses in math and the equivalent of WRI 1 and WRI 10 ((see articulation by department on ASSIST.org).
2. At least one social science, Humanities or Arts course listed in the general education information for the School of Natural Sciences. Two courses (one from each area) is strongly recommended.
3. All major preparation requirements as stated above.

ADVANCED PLACEMENT INFORMATION

Advanced Placement (AP) and International Baccalaureate (IB) Examination note:

AP and IB examination credit policies are detailed in the 2017-18 UC Merced general catalog viewable online at:

http://catalog.ucmerced.edu/content.php?catoid=7&navoid=647#AP_IB

ALERT It is strongly recommended that you obtain a full transcript of your academic records from each of the colleges and universities you have attended before you start your UC application. **Applicants must report ALL grades in ALL courses--transferable and not transferable--from all institutions attended.** Applicants are solely responsible for the integrity of their self-reported academic record in the UC application.

Applicants are encouraged to clear any No Pass, D, or F letter grade received in UC Transfer course. Applicants are most competitive in the Admissions Process with fewer withdrawls and/or repeated coursework in major preparation.

All course work must be completed with a 'C' or better.

Following these guidelines will assist you to be more competitive for admission to your UC Merced major.

If you have any questions abour UC Merced admissions policy, please email: **admissions@ucmerced.edu**

Completion of IGETC is not recommended but is accepted for this major.

All course work must be completed with a letter grade of "C" or better.

For the most up-to-date information about transferring to UC Merced, please visit admissions.ucmerced.edu/transfer_requirements

Information about applying for a Transfer Admission Guarantee is available at admissions.ucmerced.edu/tag

ADDITIONAL LOWER DIVISION REQUIREMENT

**In addition to the lower division courses listed below, students must complete one "breadth" UC transferable science or engineering elective that is not a physics or math course, and must be 3-4 semester units.

LOWER DIVISION MAJOR PREPARATION COURSES

CHEM 2 - General Chemistry I (4.00)	←	**CHEM 101A** - General College Chemistry (6.00) **Or** **CHEM 103A** - General Chemistry for Engineering (5.00)

CSE 20 - Introduction to Computing I (2.00)	←	**CS 110A** - Intro to Programming (4.00) **Or** **CS 111A** - Introduction to Programming: Java (4.00) **Or** **CS 131A** - Python Programming (4.00) **Or** **ENGN 38** - Introduction to Programming Concepts and Methodologies for Engineers (3.00)
	Or	
MATH 50 - MATLAB Programming (2.00)	←	No Course Articulated
MATH 21 - Calculus I for Physical Sciences & Engineering (4.00)	←	**MATH 110A** - Calculus I (5.00)
MATH 22 - Calculus II for Physical Sciences & Engineering (4.00)	←	**MATH 110B** - Calculus II (5.00)
MATH 23 - Vector Calculus (4.00)	←	**MATH 110C** - Calculus III (5.00)
MATH 24 - Introduction to Linear Algebra and Differential Equations (4.00)	←	**MATH 130** - Linear Algebra and Differential Equations (5.00) **Or** **MATH 120** - Linear Algebra (3.00) **And** **MATH 125** - Differential Equations (3.00)
MATH 32 - Probability and Statistics (4.00) ▪ Course recommended to be taken at university	←	No Course Articulated
PHYS 8 - Introductory Physics I for Physical Sciences (4.00)	←	**PHYC 2A** - Introductory Physics (3.00) **And** **PHYC 2AL** - Introductory Physics Laboratory (1.00) **And** **PHYC 2AC** - Introductory Physics - Calculus Supplement (0.50) **Or** **PHYC 4A** - Classical Mechanics for Scientists and Engineers (3.00) **And** **PHYC 4AL** - Mechanics Laboratory for Scientists and Engineers (1.00)
PHYS 9 - Introductory Physics II for Physical Sciences (4.00)	←	**PHYC 2B** - Introductory Physics (3.00) **And** **PHYC 2BL** - Introductory Physics Laboratory (1.00) **And**

	PHYC 2BC - Introductory Physics - Calculus Supplement (0.50) **Or** **PHYC 4B** - Electromagnetism for Scientists and Engineers (3.00) **And** **PHYC 4BL** - Electromagnetism Laboratory for Scientists and Engineers (1.00)
PHYS 10 - Introductory Physics III (4.00) ←	**PHYC 4C** - Waves and Thermodynamics for Scientists and Engineers (3.00) **And** **PHYC 4CL** - Waves and Thermodynamics Laboratory for Scientists and Engineers (1.00) **And** **PHYC 4D** - Modern Physics for Scientists and Engineers (3.00) **And** **PHYC 4DL** - Modern Physics Laboratory for Scientists and Engineers (1.00)

END OF AGREEMENT