

# Articulation Agreement by Major

Effective during the 2018-2019 Academic Year

To: University of California, Merced  
General Catalog, Semester

From: El Camino College  
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](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 withdrawals and/or repeated course work 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 about UC Merced admissions policy, please email: [admissions@ucmerced.edu](mailto: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](https://admissions.ucmerced.edu/transfer_requirements).

Information about applying for a Transfer Admission Guarantee is available at [admissions.ucmerced.edu/tag](https://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 1A** - General Chemistry I (5.00)

**CSE 20** - Introduction to Computing I (2.00)



**COMP SCI 1** - Problem Solving and Program Design Using C++ (4.00)

**Or**

**COMP SCI 3** - Computer Programming in Java (4.00)

**Or**

<b>MATH 50</b> - MATLAB Programming (2.00) ←	No Course Articulated
<b>MATH 21</b> - Calculus I for Physical Sciences & Engineering (4.00) ←	<b>MATH 190</b> - Single Variable Calculus and Analytic Geometry I (5.00)
<b>MATH 22</b> - Calculus II for Physical Sciences & Engineering (4.00) ←	<b>MATH 191</b> - Single Variable Calculus and Analytic Geometry II (5.00)
<b>MATH 23</b> - Vector Calculus (4.00) ←	<b>MATH 220</b> - Multi-Variable Calculus (5.00)
<b>MATH 24</b> - Introduction to Linear Algebra and Differential Equations (4.00) ←	<b>MATH 270</b> - Differential Equations with Linear Algebra (5.00)
<b>MATH 32</b> - Probability and Statistics (4.00) ← <ul style="list-style-type: none"> <li>▪ Course recommended to be taken at university</li> </ul>	No Course Articulated
<b>PHYS 8</b> - Introductory Physics I for Physical Sciences (4.00) ←	<b>PHYS 1A</b> - Mechanics of Solids (4.00) <b>And</b> <b>PHYS 1B</b> - Fluids, Heat and Sound (3.00)
<b>PHYS 9</b> - Introductory Physics II for Physical Sciences (4.00) ←	<b>PHYS 1B</b> - Fluids, Heat and Sound (3.00) <b>And</b> <b>PHYS 1C</b> - Electricity and Magnetism (4.00)
<b>PHYS 10</b> - Introductory Physics III (4.00) ←	<b>PHYS 1D</b> - Optics and Modern Physics (4.00)

**END OF AGREEMENT**