# Articulation Agreement by Major

**Effective during the 2018-2019 Academic Year** 

To: University of California, Merced General Catalog, Semester From: Los Angeles Trade Technical 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:

O 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 <u>strongly</u> recommended.
- 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

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\*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 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 <u>admissions.ucmerced.edu/transfer\_requirements.</u>

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

# 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)                | $\leftarrow$ | CHEM 101 - General Chemistry I (5.00)          |
|--|--------------|--|
| <b>CSE 20</b> - Introduction to Computing I (2.00) | $\leftarrow$ | <b>CO INFO 739</b> - PROGRAMMING IN C++ (3.00) |
|  |              | Or   |
|  |              | CO INFO 741 - Programming in C# (3.00)         |

Or

MATH 50 - MATLAB Programming (2.00) ← No Course Articulated

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| MATH 21 - Calculus I for Physical                | $\leftarrow$  | MATH 265 - Calculus with Analytic   |
|--|---|---|
| Sciences & Engineering (4.00)                    |   | Geometry I (5.00)   |
| MATH 22 - Calculus II for Physical               |   | MATH 266 - Calculus with Analytic   |
| Sciences & Engineering (4.00)                    |   | Geometry II (5.00)  |
| MATH 23 - Vector Calculus (4.00)                 | _   | MATH 267 - Calculus with Analytic   |
|  |   | Geometry III (5.00)   |
| MATH 24 - Introduction to Linear                 | <b>—</b>  | <b>MATH 270</b> - Linear Algebra (3.00)   |
| Algebra and Differential Equations (4.00)        | •   | And   |
|  |   | MATH 275 - Ordinary Differential  |
|  |   | Equations (3.00)  |
| MATH 32 - Probability and Statistics             | _   | No Course Articulated   |
| (4.00)   |   |   |
| <ul><li>Course recommended to be taken</li></ul> |   |   |
| at university                                    |   |   |
| PHYS 8 - Introductory Physics I for              | _   | PHYSICS 1 - Mechanics of Solids w/Lab   |
| Physical Sciences (4.00)                         | •   | (4.00)  |
|  |   | And   |
|  |   | PHYSICS 2 - Mechanics of Fluids, Heat   |
|  |   | and Sound w/Lab (4.00)  |
| PHYS 9 - Introductory Physics II for             | _   | PHYSICS 2 - Mechanics of Fluids, Heat   |
| Physical Sciences (4.00)                         |   | and Sound w/Lab (4.00)  |
|  |   | And   |
|  |   | PHYSICS 3 - Electricity and Magnetism   |
|  |   | w/Lab (4.00)  |
| PHYS 10 - Introductory Physics III (4.00)        | _   | PHYSICS 3 - Electricity and Magnetism   |
|  |   | w/Lab (4.00)  |
|  |   | And   |
|  |   | 7 11154   |
|  |   | PHYSICS 4 - Optics and Modern Physics   |
|  | Sciences & Engineering (4.00)  MATH 22 - Calculus II for Physical Sciences & Engineering (4.00)  MATH 23 - Vector Calculus (4.00)  MATH 24 - Introduction to Linear Algebra and Differential Equations (4.00)  MATH 32 - Probability and Statistics (4.00)  Course recommended to be taken at university  PHYS 8 - Introductory Physics I for Physical Sciences (4.00)  PHYS 9 - Introductory Physics II for Physical Sciences (4.00) | Sciences & Engineering (4.00)  MATH 22 - Calculus II for Physical Sciences & Engineering (4.00)  MATH 23 - Vector Calculus (4.00)  MATH 24 - Introduction to Linear Algebra and Differential Equations (4.00)  MATH 32 - Probability and Statistics (4.00)  Course recommended to be taken at university  PHYS 8 - Introductory Physics I for Physical Sciences (4.00)  PHYS 9 - Introductory Physics II for Physical Sciences (4.00) |

# **END OF AGREEMENT**

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