# **Articulation Agreement by Major**

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

To: University of California, Merced General Catalog, Semester From: Norco College General Catalog, Semester

# **APPLIED MATHEMATICAL SCIENCES, B.S.**

#### SCHOOL OF NATURAL SCIENCES

\*\*Applied Mathematical Sciences, B.S. offers emphases in: Computational Biology, Computer Science, Computational & Data Sciences, Economics, Engineering, Environmental, and Physics. Transfer applicants must choose an emphasis in the major.\*\*

## REQUIREMENTS FOR ADMISSION

For admission to the Applied Mathematical Sciences 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 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.
- 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\_IBAP\_IB

1 of 4 7/25/2018, 1:09 PM

\*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 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 admissions.ucmerced.edu/transfer\_requirements.

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

# ADDITIONAL LOWER DIVISION REQUIREMENTS

\*\*For the Applied Mathematical Sciences and Computational Biology emphasis tracks, students must take BIO 1 and BIO 1L and earn a grade of B or better.\*\*

\*\*For the Applied Mathematical Sciences and Environmental emphasis tracks, students will take ESS 1 to fulfill emphasis track requirements, and must take a different course to fulfill the lower division course requirement\*\*

#### COMPLETE ONE OF THE FOLLOWING

**BIO 1** - Contemporary Biology (4.00)

#### And

**BIO 1L** - Contemporary Biology Lab (1.00)

- \*\*REFER TO TOP OF AGREEMENT\*\*
- Depending on the area of concentration

 $\leftarrow$ 

**BIO 60** - Introduction to Molecular and Cellular Biology (5.00)

#### And

**BIO 61** - Introduction to Organismal and Population Biology (Majors) (5.00)

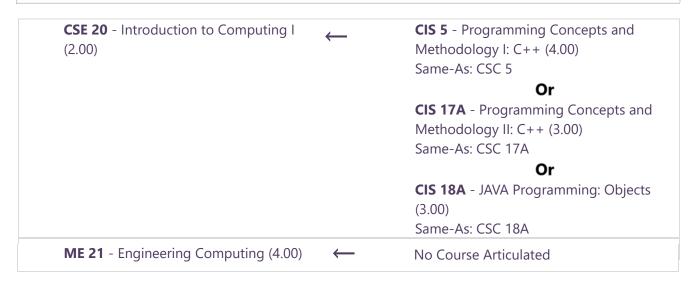
2 of 4 7/25/2018, 1:09 PM

Science (4.00)  **REFER TO TOP OF AGREEMENT**  Depending on the area of concentration	k	
<b>ESS 5</b> - Introduction to Biological Earth Systems (4.00)	<b>←</b>	No Course Articulated

# MATHEMATICS REQUIREMENT (COMPLETE THE FOLLOWING FIVE COURSES):

<b>MATH 21</b> - Calculus I for Physical Sciences & Engineering (4.00)	$\leftarrow$	<b>MAT 1A</b> - Calculus I (4.00)
<b>MATH 22</b> - Calculus II for Physical Sciences & Engineering (4.00)	<b>←</b>	MAT 1B - Calculus II (4.00)
MATH 23 - Vector Calculus (4.00)	<b>←</b>	MAT 1C - Calculus III (4.00)
<b>MATH 24</b> - Introduction to Linear Algebra and Differential Equations (4.00)	<b>←</b>	MAT 2 - Differential Equations (4.00)  And  MAT 3 - Linear Algebra (3.00)
MATH 32 - Probability and Statistics (4.00) ■ Course recommended to be taken at university	<b>←</b>	No Course Articulated

### COMPLETE ONE OF THE FOLLOWING



# **CHEMISTRY REQUIREMENT**

CHEM 2 - General Chemistry I (4.00) — CHE 1A - General Chemistry, I (5.00)

3 of 4 7/25/2018, 1:09 PM

PHYSICS REQUIREMENT			
<b>PHYS 8</b> - Introductory Physics I for Physical Sciences (4.00)	<b>←</b>	<b>PHY 4A</b> - Mechanics (4.00)	
<b>PHYS 9</b> - Introductory Physics II for Physical Sciences (4.00)	<b>←</b>	<b>PHY 4B</b> - Electricity and Magnetism (4.00)	
		And PHY 4C - Heat, Light and Waves (4.00)	

# **END OF AGREEMENT**

4 of 4