# Articulation Agreement by Major

Effective during the 2018-2019 Academic Year

To: University of California, Merced General Catalog, Semester From: Mt. San Jacinto College General Catalog, Semester

# **BIOENGINEERING, B.S.**

## **REQUIREMENTS FOR ADMISSION**

For admission to the Bioengineering major, students must earn an overall GPA of 2.4 or better, demonstrate readiness for a rigorous course of study in Engineering, and <u>must</u> complete classes articulated with the following UC Merced courses prior to admission:

CHEM 2, MATH 21, MATH 22, MATH 23, MATH 24, PHYS 8 and PHYS 9

\*\*Completion of the equivalent of BIO 1 and BIO 1L prior to admission is strongly recommended for this major\*\*

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

- 1. All major preparation requirements as stated above.
- 2. All minimum admission requirements including appropriate courses in math and the equivalent of WRI 1 and WRI 10 (see articulation by department on ASSIST.org).
- 3. At least one course from the 'Arts and Humanities' or 'Social and Behavioral Sciences' section of the General Education requirements for School of Engineering, shown here:

Three courses with at least one from the arts and one from the humanities from the Arts and Humanities IGETC areas:

- Area 3A (Arts)
- Area 3B (Humanities)

#### AND

Three courses from at least two disciplines, or an interdisciplinary sequence from the Social and Behavioral Sciences IGETC area:

#### • Area 4

NOTE: Completion of IGETC (certified by your community college) satisfies all of the above requirements.

### **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 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

The School of Engineering strongly discourages completion of IGETC as students are encouraged to focus primarily on lower division major preparation.

**\*\*Please Note:** Courses used to satisfy lower-division major preparation may simultaneously satisfy lower-division gerneral education for the School of Engineering.

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>

## LOWER DIVISION MAJOR PREPARATION COURSES

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BIO 1 - Contemporary Biology (4.00) And BIO 1L - Contemporary Biology Lab (1.00) Minimum grade required: B or

better

quired: B or B

BIOL 150 - General Biology I (4.00) Or BIOL 150H - Honors General Biology I And BIOL 151 - General Biology II (4.00) Or BIOL 151H - Honors General Biology II (4.00)

BIO 2 - Introduction to Molecular	←	No Course Articulated
Biology (4.00)		
And		
BIO 2L - Introduction to Molecular		
Biology Lab (1.00)		
<b>BIOE 21</b> - Computing for Bioengineers (3.00)	$\leftarrow$	No Course Articulated
<b>BIOE 60</b> - Signals and Systems for Bioengineers (3.00)	$\leftarrow$	No Course Articulated
BIOE 65 - Biocicuits Theory (3.00)	$\leftarrow$	No Course Articulated
CHEM 2 - General Chemistry I (4.00)	$\leftarrow$	CHEM 101 - General Chemistry I (5.00)
CHEM 10 - General Chemistry II (4.00)	$\leftarrow$	CHEM 102 - General Chemistry II (5.00)
<b>CHEM 8</b> - Principles of Organic Chemistry (3.00)	$\leftarrow$	CHEM 112 - Organic Chemistry I (5.00)
<b>And</b> <b>CHEM 8L</b> - Principles of Organic Chemistry Lab (1.00)		
<b>ENGR 45</b> - Introduction to Materials (4.00)	$\leftarrow$	No Course Articulated
MATH 21 - Calculus I for Physical Sciences & Engineering (4.00)	$\leftarrow$	MATH 211 - Analytic Geometry and Calculus I (5.00)
<b>MATH 22</b> - Calculus II for Physical Sciences & Engineering (4.00)	$\leftarrow$	MATH 212 - Analytic Geometry and Calculus II (5.00) Or
		<b>MATH 212H</b> - Honors Analytic Geometr and Calculus II (5.00)
MATH 23 - Vector Calculus (4.00)	$\leftarrow$	MATH 213 - Analytic Geometry and Calculus III (5.00) Or
		MATH 213H - Honors Analytic Geometr and & Calculus III (5.00)
<b>MATH 24</b> - Introduction to Linear Algebra and Differential Equations (4.00)	$\leftarrow$	MATH 215 - Differential Equations (4.00) And
		MATH 218 - Linear Algebra (4.00)
<b>MATH 32</b> - Probability and Statistics (4.00)	$\leftarrow$	No Course Articulated
<ul> <li>Course recommended to be taken at university</li> </ul>		
<b>PHYS 8</b> - Introductory Physics I for Physical Sciences (4.00)	$\leftarrow$	<b>PHY 201</b> - Mechanics and Wave Motior (4.00)
<b>PHYS 9</b> - Introductory Physics II for Physical Sciences (4.00)	$\leftarrow$	<b>PHY 202</b> - Electricity and Magnetism (4.00)
		<b>Or</b> <b>PHY 202H</b> - Honors Electricity and Magnetism (4.00)

# **END OF AGREEMENT**