# Articulation Agreement by Major

Effective during the 2018-2019 Academic Year

To: University of California, Merced General Catalog, Semester From: Santa Barbara City 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:

o 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:

O Area 4

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

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# 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 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

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 admissions.ucmerced.edu/transfer\_requirements.

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

# **LOWER DIVISION MAJOR PREPARATION COURSES**

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

### And

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

Minimum grade required: B or better

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**BIOL 101** - Plant Biology (4.00)

### And

**BIOL 102** - Animal Biology (5.00)

# And

**BIOL 103** - Cell Biology (5.50)

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| BIO 2 - Introduction to Molecular<br>Biology (4.00)  And                                    | <b>←</b>     | BIOL 104 - Molecular Biology (4.00)                                      |
|---|--------------|--|
| <b>BIO 2L</b> - Introduction to Molecular Biology Lab (1.00)                                |              |  |
| <b>BIOE 21</b> - Computing for Bioengineers (3.00)  | <b>←</b>     | No Course Articulated  |
| <b>BIOE 60</b> - Signals and Systems for Bioengineers (3.00)                                | $\leftarrow$ | No Course Articulated  |
| <b>BIOE 65</b> - Biocicuits Theory (3.00)   | $\leftarrow$ | No Course Articulated  |
| CHEM 2 - General Chemistry I (4.00)   | <b>←</b>     | CHEM 155 - General Chemistry I (5.00)                                    |
| CHEM 10 - General Chemistry II (4.00)   | <b>←</b>     | CHEM 156 - General Chemistry II (5.00)                                   |
| <b>CHEM 8</b> - Principles of Organic Chemistry (3.00)                                      | <b>←</b>     | CHEM 211 - Organic Chemistry I (3.00)  And  CHEM 221 - Organic Chemistry |
| And CHEM 8L - Principles of Organic Chemistry Lab (1.00)                                    |              | Laboratory I (2.30)  |
| <b>ENGR 45</b> - Introduction to Materials (4.00)   | <b>←</b>     | No Course Articulated  |
| MATH 21 - Calculus I for Physical Sciences & Engineering (4.00)                             | $\leftarrow$ | <b>MATH 150</b> - Calculus with Analytic Geometry I (5.00)               |
| MATH 22 - Calculus II for Physical Sciences & Engineering (4.00)                            | $\leftarrow$ | <b>MATH 160</b> - Calculus with Analytic Geometry II (5.00)              |
| MATH 23 - Vector Calculus (4.00)  | $\leftarrow$ | MATH 200 - Multivariable Calculus (4.0                                   |
| <b>MATH 24</b> - Introduction to Linear<br>Algebra and Differential Equations (4.00)        | $\leftarrow$ | MATH 210 - Linear Algebra (4.00) And                                     |
|   |              | <b>MATH 220</b> - Differential Equations (4.00)                          |
| MATH 32 - Probability and Statistics (4.00)  ■ Course recommended to be taken at university | <b>←</b>     | No Course Articulated  |
| PHYS 8 - Introductory Physics I for<br>Physical Sciences (4.00)                             | <b>←</b>     | <b>PHYS 121</b> - Mechanics of Solids and Fluids (5.00)                  |
| <b>PHYS 9</b> - Introductory Physics II for Physical Sciences (4.00)                        | $\leftarrow$ | <b>PHYS 122</b> - Electricity and Magnetism (5.00)                       |

# **END OF AGREEMENT**

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