Articulation Agreement by Major

Effective during the 2018-2019 Academic Year

To: University of California, Merced General Catalog, Semester From: Glendale Community 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:

 $\circ\,$ 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 withdrawals and/or repeated course work in major preparation.

All course work must be completed with a 'C' or better.

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

BIO 1 - Contemporary Biology (4.00) And BIO 1L - Contemporary Biology Lab (1.00) Minimum grade required: B or BIOL 101 - General Biology-Cell and Molecular (4.00) And BIOL 102 - General Biology-Organismal (5.00)

BIO 2 - Introduction to Molecular Biology (4.00)	\leftarrow	BIOL 101 - General Biology-Cell and Molecular (4.00) And
And BIO 2L - Introduction to Molecular Biology Lab (1.00)		BIOL 102 - General Biology-Organisma (5.00)
	-	And BIOL 103 - Molecular Biology and Genetics (4.00)
BIOE 21 - Computing for Bioengineers (3.00)	\leftarrow	No Course Articulated
BIOE 60 - Signals and Systems for Bioengineers (3.00)	\leftarrow	No Course Articulated
BIOE 65 - Biocicuits Theory (3.00)	~~	No Course Articulated
CHEM 2 - General Chemistry I (4.00)	\leftarrow	CHEM 101 - General Chemistry w/Lab (5.00)
CHEM 10 - General Chemistry II (4.00)	\leftarrow	CHEM 102 - General Chemistry w/Lab (5.00)
CHEM 8 - Principles of Organic Chemistry (3.00) And	←	CHEM 105 - Organic Chemistry w/Lab (5.00)
CHEM 8L - Principles of Organic Chemistry Lab (1.00)		
ENGR 45 - Introduction to Materials (4.00)	\leftarrow	No Course Articulated
MATH 21 - Calculus I for Physical Sciences & Engineering (4.00)	\leftarrow	MATH 103 - Calculus and Analytic Geometry (5.00) Or
		MATH 103H - Honors Calculus and Analytic Geometry (5.00)
MATH 22 - Calculus II for Physical Sciences & Engineering (4.00)	\leftarrow	MATH 104 - Calculus and Analytic Geometry (5.00) Or
		MATH 104H - Honors Calculus and Analytic Geometry (5.00)
MATH 23 - Vector Calculus (4.00)	\leftarrow	MATH 105 - Multivariable and Vector Calculus (5.00) Or
		MATH 105H - Honors Multivariable and Vector Calculus (5.00)
MATH 24 - Introduction to Linear Algebra and Differential Equations (4.00)	\leftarrow	MATH 107 - Linear Algebra (4.00) Or MATH 107H - Honors Linear Algebra (4.00)
		And MATH 108 - Ordinary Differential Equations (4.00) Or
		MATH 108H - Honors Ordinary Differential Equations (4.00)

MATH 32 - Probability and Statistics (4.00)	←	No Course Articulated
 Course recommended to be taken at university 		
PHYS 8 - Introductory Physics I for Physical Sciences (4.00)	\leftarrow	PHY 101 - Physics for Scientists and Engineers: A (5.00) Or
		PHY 101H - Honors Physics for Scientists and Engineers: A (5.00)
PHYS 9 - Introductory Physics II for Physical Sciences (4.00)	\leftarrow	PHY 102 - Physics for Scientists and Engineers: B (5.00)
		Or
		PHY 102H - Honors Engineering Physics W/Lab (4.00)

END OF AGREEMENT