# Articulation Agreement by Major

Effective during the 2018-2019 Academic Year

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

## **MECHANICAL ENGINEERING, B.S.**

## **REQUIREMENTS FOR ADMISSION**

For admission to the Mechanical Engineering, B.S. 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

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

CHEM 2 - General Chemistry I (4.00)	$\leftarrow$	CHEM 1A - General Chemistry I (5.00)
<b>ENGR 45</b> - Introduction to Materials (4.00)	←	<b>ENGR 45</b> - Engineering Materials (4.00)

ENGR 57 - Statics and Dynamics (4.00)	$\leftarrow$	No Course Articulated
ENGR 65 - Circuit Theory (4.00)	$\leftarrow$	ENGR 15 - Circuits (4.00)
ME 21 - Engineering Computing (4.00)	$\leftarrow$	<b>ENGR 30</b> - Computer Applications in Engineering (4.00)
<b>MATH 21</b> - Calculus I for Physical Sciences & Engineering (4.00)	$\leftarrow$	<b>MATH 5A</b> - Analytic Geometry and Calculus I (5.00)
<b>MATH 22</b> - Calculus II for Physical Sciences & Engineering (4.00)	$\leftarrow$	<b>MATH 5B</b> - Analytic Geometry and Calculus II (5.00)
MATH 23 - Vector Calculus (4.00)	$\leftarrow$	<b>MATH 5C</b> - Analytic Geometry and Calculus III (5.00)
<b>MATH 24</b> - Introduction to Linear Algebra and Differential Equations (4.00)	$\leftarrow$	<b>MATH 6</b> - Introduction to Linear Algebra (3.00)
		<b>And</b> <b>MATH 7</b> - Introduction to Differentia Equations (3.00)
<ul> <li>MATH 32 - Probability and Statistics</li> <li>(4.00)</li> <li>Course recommended to be taken</li> </ul>	$\leftarrow$	No Course Articulated
at university <b>PHYS 8</b> - Introductory Physics I for Physical Sciences (4.00)	<del>~~</del>	<b>PHYS 4A</b> - Physics for Scientists and Engineers I (5.00)
<b>PHYS 9</b> - Introductory Physics II for Physical Sciences (4.00)	←	<b>PHYS 4B</b> - Physics for Scientists and Engineers II (5.00)

BIO 1 - Contemporary Biology (4.00)	$\leftarrow$	BIO 4 - Human Anatomy (4.00) Or
		<b>BIO 9A</b> - Molecular, Cellular, and Animal Biology (5.00)
		Animal Biology (5.00)
		And
		BIO 9B - Ecology, Evolution, and Plant
		Biology (5.00)
<b>BIO 5</b> - Concepts & Issues in Biology Today (4.00)	$\leftarrow$	No Course Articulated
ESS 1 - Introduction to Earth Systems	←	ES 10 - Introduction to Environmental
Science (4.00)		Science (3.00)
		And
		ES 10L - Introduction to Environmental
		Science Lab (1.00)
<b>ESS 5</b> - Introduction to Biological Earth Systems (4.00)	$\leftarrow$	No Course Articulated