# **Articulation Agreement by Major**

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

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

O 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)

CHEM 219 - General Chemistry (5.00)

Or

**CHEM 219H** - Honors General Chemistry (5.00)

<b>ENGR 45</b> - Introduction to Materials (4.00)	$\leftarrow$	No Course Articulated
ENGR 57 - Statics and Dynamics (4.00)	$\leftarrow$	ENGR 235 - Statics (3.00)  And  ENGR 240 - Dynamics (3.00)
ENGR 65 - Circuit Theory (4.00)	$\leftarrow$	No Course Articulated
ME 21 - Engineering Computing (4.00)	$\leftarrow$	No Course Articulated
MATH 21 - Calculus I for Physical Sciences & Engineering (4.00)	<b>←</b>	MATH 180 - Single Variable Calculus I (4.00)
		Or MATH 180H - Honors Single Variable Calculus I (4.00)
<b>MATH 22</b> - Calculus II for Physical Sciences & Engineering (4.00)	$\leftarrow$	MATH 185 - Single Variable Calculus II (4.00)
MATH 23 - Vector Calculus (4.00)	$\leftarrow$	MATH 280 - Intermediate Calculus (4.00)
MATH 24 - Introduction to Linear Algebra and Differential Equations (4.00)	<b>←</b>	MATH 287 - Introduction to Linear Algebra and Differential Equations (5.00)
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 Physical Sciences (4.00)	←	PHYS 217 - Engineering Physics I (4.00)
<b>PHYS 9</b> - Introductory Physics II for Physical Sciences (4.00)	$\leftarrow$	PHYS 227 - Engineering Physics II (4.00)

# **COMPLETE ONE OF THE FOLLOWING**

BIO 1 - Contemporary Biology (4.00)	<b>←</b>	BIOL 211 - Cellular and Molecular Biology (5.00)  And BIOL 212 - Animal Diversity and
		And BIOL 214 - Plant Diversity and Evolution (5.00)
<b>BIO 5</b> - Concepts & Issues in Biology Today (4.00)	$\leftarrow$	No Course Articulated
<b>ESS 1</b> - Introduction to Earth Systems Science (4.00)	$\leftarrow$	No Course Articulated
<b>ESS 5</b> - Introduction to Biological Earth Systems (4.00)	<b>←</b>	No Course Articulated