# Articulation Agreement by Major

Effective during the 2018-2019 Academic Year

To: University of California, Merced General Catalog, Semester From: East Los Angeles College General Catalog, Semester

## **COMPUTER SCIENCE AND ENGINEERING, B.S.**

## **REQUIREMENTS FOR ADMISSION**

For admission to the Computer Science & 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:

CSE 20 & 21, (CSE major must complete CSE 20 & 21 with grades of B or better), 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 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

**CSE 21** - Introduction to Computing II (2.00)

 Minimum grade required: B or better CO SCI 243 - Programming in C++ (3.00) Or CO SCI 290 - Programming in JAVA (3.00) Or

**MATH 173** - Object-Oriented Programming and Design (4.00)

<b>CSE 20</b> - Introduction to Computing I (2.00)	$\leftarrow$	<b>CO SCI 243</b> - Programming in C++ (3.00 <b>Or</b>
<ul> <li>Minimum grade required: B or better</li> </ul>		<b>CO SCI 290</b> - Programming in JAVA (3.00 <b>Or</b>
		MATH 173 - Object-Oriented
		Programming and Design (4.00)
CSE 15 - Discrete Mathematics (4.00)	<del>~~</del>	No Course Articulated
<b>CSE 30</b> - Data Structures (4.00)	_	MATH 273 - Introduction to Data
		Structures and Algorithms (4.00)
CSE 31 - Computer Organization and	←	No Course Articulated
Assembly Language (4.00)		
ENGR 65 - Circuit Theory (4.00)	$\leftarrow$	ENG GEN 220 - Electrical Circuits I (4.00)
MATH 21 - Calculus I for Physical		MATH 261 - Calculus I (5.00)
Sciences & Engineering (4.00)		
MATH 22 - Calculus II for Physical	$\leftarrow$	MATH 262 - Calculus II (5.00)
Sciences & Engineering (4.00)		
MATH 23 - Vector Calculus (4.00)	$\leftarrow$	MATH 263 - Calculus III (5.00)
MATH 24 - Introduction to Linear	←	MATH 270 - Linear Algebra (3.00)
Algebra and Differential Equations (4.00)		And
		MATH 275 - Ordinary Differential
		Equations (3.00)
<b>MATH 32</b> - Probability and Statistics (4.00)	$\leftarrow$	No Course Articulated
PHYS 8 - Introductory Physics I for		PHYSICS 1 - Mechanics of Solids (4.00)
Physical Sciences (4.00)		And
		PHYSICS 2 - Mechanics of Fluids, Heat
		and, Sound (4.00)
PHYS 9 - Introductory Physics II for	←	PHYSICS 2 - Mechanics of Fluids, Heat
Physical Sciences (4.00)	*	and, Sound (4.00)
		And
		<b>PHYSICS 3</b> - Electricity and Magnetism
		(4.00)

# CHOOSE ONE OF THE FOLLOWING:

<b>BIO 1</b> - Contemporary Biology (4.00)	$\leftarrow$	BIOLOGY 6 - General Biology I (5.00) And BIOLOGY 7 - General Biology II (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)	$\leftarrow$	No Course Articulated

## **END OF AGREEMENT**