# Articulation Agreement by Major

Effective during the 2018-2019 Academic Year

To: University of California, Merced General Catalog, Semester From: Southwestern 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 <u>solely responsible</u> 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

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

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**CIS 115** - Introduction to Programming Using C++ (4.00)

Or

 Minimum grade required: B or better

MATH 130 - Introduction to Computer

		Programming (3.00)
CSE 20 - Introduction to Computing I (2.00) Minimum grade required: B or	$\leftarrow$	<b>CIS 115</b> - Introduction to Programming Using C++ (4.00) <b>Or</b>
better		MATH 130 - Introduction to Computer Programming (3.00)
CSE 15 - Discrete Mathematics (4.00)	$\leftarrow$	No Course Articulated
<b>CSE 30</b> - Data Structures (4.00)	$\leftarrow$	<b>MATH 140</b> - Data Structures and Algorithms (3.00)
<b>CSE 31</b> - Computer Organization and Assembly Language (4.00)	$\leftarrow$	<b>MATH 230</b> - Computer Organization and Architecture (3.00)
ENGR 65 - Circuit Theory (4.00)	$\leftarrow$	No Course Articulated
<b>MATH 21</b> - Calculus I for Physical Sciences & Engineering (4.00)	$\leftarrow$	<b>MATH 250</b> - Analytic Geometry and Calculus I (5.00)
<b>MATH 22</b> - Calculus II for Physical Sciences & Engineering (4.00)	$\leftarrow$	<b>MATH 251</b> - Analytic Geometry and Calculus II (4.00)
MATH 23 - Vector Calculus (4.00)	$\leftarrow$	<b>MATH 252</b> - Analytic Geometry and Calculus III (4.00)
<b>MATH 24</b> - Introduction to Linear Algebra and Differential Equations (4.00)	$\leftarrow$	MATH 253 - Introduction to Differential Equations (3.00) And
		MATH 254 - Introduction to Linear Algebra (3.00)
<b>MATH 32</b> - Probability and Statistics (4.00)	$\leftarrow$	No Course Articulated
<b>PHYS 8</b> - Introductory Physics I for Physical Sciences (4.00)	$\leftarrow$	PHYS 270 - Principles of Physics I (3.00) And
		<b>PHYS 271</b> - Principles of Physics Laboratory I (1.00)
<b>PHYS 9</b> - Introductory Physics II for Physical Sciences (4.00)	$\leftarrow$	PHYS 272 - Principles of Physics II (3.00)

# CHOOSE ONE OF THE FOLLOWING:

BIO 1 - Contemporary Biology (4.00)	$\leftarrow$	BIOL 100 - Principles of Biology (3.00) And
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		<b>BIOL 101</b> - Principles of Biology Laboratory (1.00)
		And
		BIOL 210 - General Zoology (4.00)
		Or
		BIOL 210 - General Zoology (4.00)
		And
		<b>BIOL 211</b> - Introduction to Cell and Molecular Biology (4.00)
		Molecular Biology (4.00)

		And BIOL 212 - Biology of Plants (4.00)
<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**