# Articulation Agreement by Major

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

To: University of California, Merced General Catalog, Semester From: City College of San Francisco 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).
  - At least one course from the 'Arts and Humanities' or 'Social and Behavioral Sciences' section of
- 3. 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.

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#### **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 coursework 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)

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CS 110A - Intro to Programming (4.00)

Or

**CS 111A** - Introduction to Programming: Java (4.00)

Minimum grade required: B or better

		Or
		CS 131A - Python Programming (4.00)
<b>CSE 20</b> - Introduction to Computing I (2.00)	$\leftarrow$	<b>CS 110A</b> - Intro to Programming (4.00) <b>Or</b>
Minimum grade required: B or better		<b>CS 111A</b> - Introduction to Programmin Java (4.00)
		Or
		CS 131A - Python Programming (4.00)
		Or
		ENGN 38 - Introduction to Programmi
		Concepts and Methodologies for
CSE 15 - Discrete Mathematics (4.00)		Engineers (3.00)  No Course Articulated
CSE 30 - Data Structures (4.00)	<del></del>	<b>CS 110C</b> - Data Structures and
CSE 30 - Data Structures (4.00)	$\leftarrow$	Algorithms: C++ (4.00)
CSE 31 - Computer Organization and		CS 270 - Computer Architecture with
Assembly Language (4.00)	$\leftarrow$	Assembly Language (4.00)
ENGR 65 - Circuit Theory (4.00)		<b>ENGN 20</b> - Introduction to Circuit
ENGR 05 Circuit Theory (4.00)		Analysis (3.00)
		And
		<b>ENGN 20L</b> - Introduction to Circuit
		Analysis Laboratory (1.00)
MATH 21 - Calculus I for Physical Sciences & Engineering (4.00)	$\leftarrow$	<b>MATH 110A</b> - Calculus I (5.00)
MATH 22 - Calculus II for Physical		<b>MATH 110B</b> - Calculus II (5.00)
Sciences & Engineering (4.00)	$\leftarrow$	,
MATH 23 - Vector Calculus (4.00)	$\leftarrow$	<b>MATH 110C</b> - Calculus III (5.00)
MATH 24 - Introduction to Linear Algebra and Differential Equations (4.00)	$\leftarrow$	MATH 130 - Linear Algebra and
		Differential Equations (5.00)
		<b>Or MATH 120</b> - Linear Algebra (3.00)
		And
		MATH 125 - Differential Equations
		(3.00)
MATH 32 - Probability and Statistics (4.00)	$\leftarrow$	No Course Articulated
PHYS 8 - Introductory Physics I for	<b>←</b>	PHYC 2A - Introductory Physics (3.00)
Physical Sciences (4.00)	•	And
		PHYC 2AL - Introductory Physics
		Laboratory (1.00)
		And
		PHYC 2AC - Introductory Physics -
		Calculus Supplement (0.50)
		Or
		PHYC 4A - Classical Mechanics for
		Scientists and Engineers (3.00)

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	And PHYC 4AL - Mechanics Laboratory for Scientists and Engineers (1.00)
PHYS 9 - Introductory Physics II for Physical Sciences (4.00)	PHYC 2B - Introductory Physics (3.00)  And PHYC 2BL - Introductory Physics Laboratory (1.00)  And PHYC 2BC - Introductory Physics - Calculus Supplement (0.50)  Or PHYC 4B - Electromagnetism for Scientists and Engineers (3.00)  And
	PHYC 4BL - Electromagnetism Laboratory for Scientists and Engineer (1.00)

# **CHOOSE ONE OF THE FOLLOWING:**

BIO 1 - Contemporary Biology (4.00)	<b>←</b>	BIO 100A - General Biology (5.00)  And BIO 100B - General Biology (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**

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