Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: University of California, Davis 2022-2023 General Catalog, Quarter

From: Orange Coast College 2022-2023 General Catalog, Semester

Computer Science B.S.

INFORMATION AND ADVISORIES

Special Advising Note:

Transfer students are strongly advised to complete as many preparatory courses as possible for their major before enrolling at UC Davis. Preparing well for the major helps students move efficiently toward graduation and significantly reduces time to degree.

Transfer students must also meet UC transfer admission requirements. For details see the <u>UC Davis Transfer Admission website</u>. UC Davis requires that students complete UC transfer admission requirements by the end of Spring term prior to Fall enrollment. In order to receive priority consideration it is strongly recommended that transfer students complete UC transfer admission requirements in English and Mathematics by the end of Fall term prior to enrollment.

REQUIREMENTS FOR ADMISSION:

The Computer Science BS major is selective and requires preparatory coursework for admission. Any required courses that are offered at your current campus must be completed by the close of Spring term prior to Fall enrollment at UC Davis. If required courses are not offered at your college, you must complete them after enrolling at UC Davis.

Transfer students must earn an overall transfer GPA of 3.10 or higher to be competitive candidates for admission to this major. Strive to achieve your highest possible GPA in order to be most competitive. Candidates must complete courses comparable to the following UC Davis courses with a GPA of at least 3.40 for each of two course groups. It is recommended that candidates have already achieved the minimum required GPAs in the course(s) from the groups below that have been completed at the time of application and through the transfer academic update filing period. Courses must be taken for a letter grade, with no grade less than C. Advanced Placement (AP) or International Baccalaureate (IB) Higher Level examinations may satisfy UC Davis course equivalents.

- -Engineering Computer Science 020, 036A, 050, 036C
- -Mathematics 021A/B/C

Intersegmental General Education Transfer Curriculum (IGETC)/UC Davis General Education (GE) Note:

Students have two choices for selection of a GE pattern: IGETC or UC Davis GE. IGETC is available only at California community colleges and works well for students planning to complete undergraduate degrees in the College of Letters and Science at UC Davis. For students pursuing a Bachelor of Science degree, IGETC also satisfies the Natural Sciences and Mathematics Area Breadth requirement of the College. UC Davis accepts partial IGETC certification and IGETC for STEM. Students not planning to complete IGETC should see important information about the UC Davis GE pattern. See additional details about IGETC/GE at ASSIST. The Dean's Office of your undergraduate college at UC Davis determines whether you have satisfied the GE requirement. See a UC Davis academic advisor to understand how to complete all of the GE components.

Advanced Placement (AP) and International Baccalaureate (IB) Examination Note:

AP and IB examination credit policies are detailed in the UC Davis <u>General Catalog</u>. Quick reference charts for AP and IB are also available <u>here.</u>

MAJOR PREPARATION

Please carefully review Information and Advisories and Course Articulation Details.

COURSE ARTICULATION DETAILS

- Please note that the community college's Computer Science courses may not be identical to UC Davis courses. Community
 college students, upon transfer to UC Davis, may need to make up any topic or language deficiencies.
- Important note: Due to the limitations of the ASSIST platform at this time, it is important to view both the department and major
 agreements for a complete picture of the articulation arrangements. <u>Please refer to the appropriate department agreements in
 conjunction with the major agreement below.</u>
- Please check the UC Transferability Lists on ASSIST for information on any credit limitations.
- Attention: Articulation agreements are California Community College specific. Lower division courses that are taken at multiple
 California Community Colleges, including those within a shared district, may articulate differently from what is indicated in the
 department or major agreements. It is recommended that series courses be completed at the same California Community
 College. Please contact your California Community College counselor for more information.

PREPARATION COURSES FOR THE MAJOR Complete entire sequence at same institution prior to transfer **ECS 020** - Discrete Mathematics For Computer Science (4.00) \leftarrow MATH A230 - Introduction to Discrete Mathematics (5.00) ECS 036A - Programming & Problem Solving (4.00) CS A122 - Programming Concepts and Methodology 1 (3.00) --- Or ---CS A131 - Python Programming 1 (4.00) --- Or ---CS A140 - Introduction to C#.NET Programming (4.00) --- Or ---CS A150 - C++ Programming Language 1 (4.00) **CS A170** - Java Programming 1 (4.00) ECS 036B - Software Development & Object-Oriented Programming CS A250 - C++ Programming Language 2 (4.00) in C++(4.00)ECS 036C - Data Structures, Algorithms, & Programming (4.00) **CS A200** - Data Structures (4.00) CS A216 - Computer Architecture (4.00) ECS 050 - Computer Organization & Machine-Dependent

Programming (4.00)

Highly recommended to complete the entire series If the entire sequence is not completed prior to transfer, students must consult an advisor prior to enrollment Complete entire sequence at same institution prior to transfer MAT 021A - Calculus (4.00) MATH A180 - Calculus 1 (4.00) --- Or ---MATH A180H - Honors Calculus 1 (4.00) MATH A182H - Honors Calculus 1 and 2 (5.00) MAT 021B - Calculus (4.00) MATH A182H - Honors Calculus 1 and 2 (5.00) --- Or ---MATH A185 - Calculus 2 (4.00) MATH A185H - Honors Calculus 2 (4.00) MAT 021C - Calculus (4.00) MATH A280 - Calculus 3 (4.00) MATH A280H - Honors Calculus 3 (5.00)

ADDITIONAL MAJOR PREPARATION COURSES

Select 1 Course from the following			
MAT 022A - Linear Algebra (3.00)		MATH A235 - Applied Linear Algebra (3.00) Or MATH A285 - Introduction to Linear Algebra and Differential Equations (4.00) Or MATH A285H - Honors Introduction to Linear Algebra and Differential Equations (5.00)	
Or			
MAT 027A - Linear Algebra with Applications to Biology (4.00) Same-As: BIS 027A	←	No Course Articulated	
Or			
MAT 067 - Modern Linear Algebra (4.00)	\leftarrow	No Course Articulated	

Select 3 Course(s) from the following BIS 002A - Introduction to Biology: Essentials of Life on Earth (5.00) BIOL A180 - Introduction to Biology for Majors 1: Cell and Molecular Biology (4.00) BIS 002B - Introduction to Biology: Principles of Ecology & Evolution (5.00) BIOL A280 - Evolutionary Ecology (4.00)

ADDITIONAL MAJOR REQUIREMENTS

BIS 002C - Introduction to Biology: Biodiversity & the Tree of Life (5.00)	←	BIOL A185 - Introduction to Biology for Majors 2: Ecology, Evolution Diversity, and Physiology (5.00)
BIS 002A - Introduction to Biology: Essentials of Life on Earth (5.00) And	1	No Course Articulated
BIS 002B - Introduction to Biology: Principles of Ecology & Evolution (5.00) And		
BIS 002C - Introduction to Biology: Biodiversity & the Tree of Life (5.00)		
CHE 002A - General Chemistry (5.00)	\leftarrow	CHEM A180 - General Chemistry A (5.00)
CHE 002B - General Chemistry (5.00)	\leftarrow	No Course Articulated
CHE 002C - General Chemistry (5.00)	←	CHEM A185 - General Chemistry B (5.00)
CHE 002A - General Chemistry (5.00) And	1	CHEM A180 - General Chemistry A (5.00) And
CHE 002B - General Chemistry (5.00)		CHEM A185 - General Chemistry B (5.00)
And CHE 002C - General Chemistry (5.00)		Articulates as a sequence only
Articulates as a sequence only]	Complete entire sequence at same institution prior to transfer
CHE 004A - General Chemistry for the Physical Sciences & Engineering (5.00)	←	No Course Articulated
CHE 004B - General Chemistry for the Physical Sciences & Engineering (5.00)	←	No Course Articulated
CHE 004C - General Chemistry for the Physical Sciences & Engineering (5.00)	←	No Course Articulated
PHY 009A - Classical Physics (5.00)	\leftarrow	PHYS A185 - Calculus-Based Physics: Mechanics (4.00)
		And
		PHYS A280 - Calculus-Based Physics: Electricity/Magnetism (4.00)
		And
		PHYS A285 - Calculus-Based Physics: Modern (4.00)
		Complete entire sequence at same institution prior to transfer
PHY 009B - Classical Physics (5.00)	←	PHYS A185 - Calculus-Based Physics: Mechanics (4.00)
		And
		PHYS A280 - Calculus-Based Physics: Electricity/Magnetism (4.00)
		And
		PHYS A285 - Calculus-Based Physics: Modern (4.00) • Complete entire sequence at same institution prior to transfer
PHY 009C - Classical Physics (5.00)	←	PHYS A185 - Calculus-Based Physics: Mechanics (4.00)
		And
		PHYS A280 - Calculus-Based Physics: Electricity/Magnetism (4.00)
		And
		PHYS A285 - Calculus-Based Physics: Modern (4.00)
		Complete entire sequence at same institution prior to transfer
PLIV 000A Classical Playsics (F.00)	1 ←	No Course Articulated
PHY 009A - Classical Physics (5.00) And		
PHY 009B - Classical Physics (5.00)		
And PHY 009C - Classical Physics (5.00)		
Classical Filysics (5.00)	1	

PHY 009B - Classical Physics (5.00)

--- And --PHY 009C - Classical Physics (5.00)

No Course Articulated

END OF AGREEMENT