

# Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

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

From: El Camino 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 [UC Davis Transfer Admission website](#). 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 [General Catalog](#). Quick reference charts for AP and IB are also available [here](#).

### 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. [Please refer to the appropriate department agreements in conjunction with the major agreement below.](#)
- 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

<b>ECS 020</b> - Discrete Mathematics For Computer Science (4.00)	←	<b>MATH 210</b> - Introduction to Discrete Structures (5.00)
<b>ECS 036A</b> - Programming & Problem Solving (4.00)	←	<b>COMP SCI 1</b> - Problem Solving and Program Design Using C++ (4.00)
		--- Or ---
		<b>COMP SCI 3</b> - Object-Oriented Programming in Java (4.00)
<b>ECS 036B</b> - Software Development & Object-Oriented Programming in C++ (4.00)	←	<b>COMP SCI 30</b> - Advanced Programming in C++ (4.00)
<b>ECS 036C</b> - Data Structures, Algorithms, & Programming (4.00)	←	No Course Articulated
<b>ECS 050</b> - Computer Organization & Machine-Dependent Programming (4.00)	←	No Course Articulated

## ADDITIONAL MAJOR PREPARATION COURSES

### 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

<b>MAT 021A</b> - Calculus (4.00)	←	<b>MATH 190</b> - Single Variable Calculus and Analytic Geometry I (5.00)
<b>MAT 021B</b> - Calculus (4.00)	←	<div> <b>MATH 190</b> - Single Variable Calculus and Analytic Geometry I (5.00) </div> <div>--- And ---</div> <div> <b>MATH 191</b> - Single Variable Calculus and Analytic Geometry II (5.00) <ul style="list-style-type: none"> <li>Complete entire sequence at same institution prior to transfer</li> </ul> </div>
<b>MAT 021C</b> - Calculus (4.00)	←	<div> <b>MATH 191</b> - Single Variable Calculus and Analytic Geometry II (5.00) </div> <div>--- And ---</div> <div> <b>MATH 220</b> - Multi-Variable Calculus (5.00) <ul style="list-style-type: none"> <li>Complete entire sequence at same institution prior to transfer</li> </ul> </div>

### Select 1 Course from the following

<b>MAT 022A</b> - Linear Algebra (3.00)	←	<b>MATH 270</b> - Differential Equations with Linear Algebra (5.00)
		--- Or ---
<b>MAT 027A</b> - Linear Algebra with Applications to Biology (4.00) Same-As: BIS 027A	←	No Course Articulated
		--- Or ---
<b>MAT 067</b> - Modern Linear Algebra (4.00)	←	No Course Articulated

## ADDITIONAL MAJOR REQUIREMENTS

### Select 3 Course(s) from the following

<b>BIS 002A</b> - Introduction to Biology: Essentials of Life on Earth (5.00)	←	<b>BIOL 110</b> - Cell and Molecular Biology (5.00)
		--- Or ---
		<b>BIOL 110H</b> - Honors Cell and Molecular Biology (5.00)
<b>BIS 002B</b> - Introduction to Biology: Principles of Ecology & Evolution (5.00)	←	<b>BIOL 120</b> - Ecology Evolution, Diversity, and Physiology (5.00)
		--- Or ---
		<b>BIOL 120H</b> - Honors Ecology, Evolution, Diversity, and Physiology (5.00)

**BIS 002C** - Introduction to Biology: Biodiversity & the Tree of Life (5.00)



**BIOL 120** - Ecology Evolution, Diversity, and Physiology (5.00)

--- And ---

**BIOL 110** - Cell and Molecular Biology (5.00)

- *Complete entire sequence at same institution prior to transfer*

--- Or ---

**BIOL 120H** - Honors Ecology, Evolution, Diversity, and Physiology (5.00)

--- And ---

**BIOL 110H** - Honors Cell and Molecular Biology (5.00)

- *Complete entire sequence at same institution prior to transfer*

**CHE 002A** - General Chemistry (5.00)



**CHEM 1A** - General Chemistry I (5.00)

**CHE 002B** - General Chemistry (5.00)



**CHEM 1A** - General Chemistry I (5.00)

--- And ---

**CHEM 1B** - General Chemistry II (5.00)

- *Complete entire sequence at same institution prior to transfer*
- *Effective next fall, this articulation will be revised*

**CHE 002C** - General Chemistry (5.00)



**CHEM 1B** - General Chemistry II (5.00)

- *Effective next fall, this articulation will be revised*

**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)



**PHYS 1A** - Mechanics of Solids (4.00)

**PHY 009B** - Classical Physics (5.00)



**PHYS 1B** - Fluids, Heat and Sound (3.00)

--- And ---

**PHYS 1D** - Optics and Modern Physics (4.00)

- *Complete entire sequence at same institution prior to transfer*

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



**PHYS 1C** - Electricity and Magnetism (4.00)

**END OF AGREEMENT**