

Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

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

From: MiraCosta 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

ECS 020 - Discrete Mathematics For Computer Science (4.00)	←	CS 226 - Discrete Structures (4.00) --- Or --- MATH 226 - Discrete Mathematics (4.00)
ECS 036A - Programming & Problem Solving (4.00)	←	CS 111 - Introduction to Computer Science I: Java (3.00) --- Or --- CS 150 - C++ Programming (3.00) --- Or --- CS 138 - Programming with Python (3.00)
ECS 036B - Software Development & Object-Oriented Programming in C++ (4.00)	←	CS 112 - Introduction to Computer Science II: Java (3.00) --- Or --- CS 151 - Advanced C++ Programming (3.00)
ECS 036C - Data Structures, Algorithms, & Programming (4.00)	←	CS 113 - Basic Data Structures and Algorithms (3.00)
ECS 050 - Computer Organization & Machine-Dependent Programming (4.00)	←	CS 220 - Computer Architecture and Assembly Language (3.00)

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

MAT 021A - Calculus (4.00)	←	MATH 150 - Calculus and Analytic Geometry I (5.00) • Credit for articulated courses in one series only --- Or --- MATH 150H - Calculus and Analytic Geometry I (Honors) (5.00)
MAT 021B - Calculus (4.00)	←	MATH 155 - Calculus and Analytic Geometry II (4.00) • Credit for articulated courses in one series only
MAT 021C - Calculus (4.00)	←	MATH 260 - Calculus and Analytic Geometry III (4.00) • Credit for articulated courses in one series only --- Or --- MATH 260H - Calculus and Analytic Geometry III (Honors) (4.00)

Select 1 Course from the following

MAT 022A - Linear Algebra (3.00)	←	MATH 270 - Linear Algebra (4.00) --- Or --- MATH 270H - Linear Algebra (Honors) (4.00)
MAT 027A - Linear Algebra with Applications to Biology (4.00) Same-As: BIS 027A	←	No Course Articulated
MAT 067 - Modern Linear Algebra (4.00)	←	No Course Articulated

ADDITIONAL MAJOR REQUIREMENTS

Select 3 Course(s) from the following

BIS 002A - Introduction to Biology: Essentials of Life on Earth (5.00)	←	BIO 204 - Foundations of Biology: Biochemistry, Cell Biology, Genetics and Molecular Biology (4.00) --- Or --- BIO 204H - Foundations of Biology: Biochemistry, Cell Biology, Genetics, and Molecular Biology(Honors) (4.00)
BIS 002B - Introduction to Biology: Principles of Ecology & Evolution (5.00)	←	BIO 202 - Foundations of Biology: Evolution, Biodiversity and Organismal Biology (4.00)
BIS 002C - Introduction to Biology: Biodiversity & the Tree of Life (5.00)	←	BIO 202 - Foundations of Biology: Evolution, Biodiversity and Organismal Biology (4.00)

<div> BIS 002A - Introduction to Biology: Essentials of Life on Earth (5.00) </div> <div> --- And --- </div> <div> BIS 002B - Introduction to Biology: Principles of Ecology & Evolution (5.00) </div> <div> --- And --- </div> <div> BIS 002C - Introduction to Biology: Biodiversity & the Tree of Life (5.00) </div>	<div>← No Course Articulated</div>
CHE 002A - General Chemistry (5.00)	<div>← No Course Articulated</div>
CHE 002B - General Chemistry (5.00)	<div>← No Course Articulated</div>
CHE 002C - General Chemistry (5.00)	<div>← No Course Articulated</div>
<div> CHE 002A - General Chemistry (5.00) </div> <div> --- And --- </div> <div> CHE 002B - General Chemistry (5.00) </div> <div> --- And --- </div> <div> CHE 002C - General Chemistry (5.00) <ul style="list-style-type: none"> Articulates as a sequence only </div>	<div>←</div> <div> CHEM 150 - General Chemistry I: For Science Majors (5.00) </div> <div> --- And --- </div> <div> CHEM 151 - General Chemistry II: For Science Majors (5.00) <ul style="list-style-type: none"> Articulates as a sequence only Complete entire sequence at same institution prior to transfer </div> <div> --- Or --- </div> <div> CHEM 150 - General Chemistry I: For Science Majors (5.00) </div> <div> --- And --- </div> <div> CHEM 151H - General Chemistry II : For Science Majors (Honors) (5.00) <ul style="list-style-type: none"> Articulates as a sequence only Complete entire sequence at same institution prior to transfer </div> <div> --- Or --- </div> <div> CHEM 150H - General Chemistry I : For Science Majors (Honors) (5.00) </div> <div> --- And --- </div> <div> CHEM 151 - General Chemistry II: For Science Majors (5.00) <ul style="list-style-type: none"> Articulates as a sequence only Complete entire sequence at same institution prior to transfer </div> <div> --- Or --- </div> <div> CHEM 150H - General Chemistry I : For Science Majors (Honors) (5.00) </div> <div> --- And --- </div> <div> CHEM 151H - General Chemistry II : For Science Majors (Honors) (5.00) <ul style="list-style-type: none"> Articulates as a sequence only Complete entire sequence at same institution prior to transfer </div>
CHE 004A - General Chemistry for the Physical Sciences & Engineering (5.00)	<div>← No Course Articulated</div>
CHE 004B - General Chemistry for the Physical Sciences & Engineering (5.00)	<div>← No Course Articulated</div>
CHE 004C - General Chemistry for the Physical Sciences & Engineering (5.00)	<div>← No Course Articulated</div>
PHY 009A - Classical Physics (5.00)	<div>←</div> <div> PHYS 151 - Principles of Physics I (4.00) </div> <div> --- Or --- </div> <div> PHYS 151H - Principles of Physics I (Honors) (4.00) </div>

PHY 009B - Classical Physics (5.00)



PHYS 253 - Principles of Physics III (4.00)

--- Or ---

PHYS 151H - Principles of Physics I (Honors) (4.00)

--- And ---

PHYS 253H - Principles of Physics III (Honors) (4.00)

--- And ---

PHYS 152H - Principles of Physics II (Honors) (4.00)

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

PHY 009C - Classical Physics (5.00)



PHYS 152 - Principles of Physics II (4.00)

--- Or ---

PHYS 152H - Principles of Physics II (Honors) (4.00)



No Course Articulated

PHY 009A - Classical Physics (5.00)

--- And ---

PHY 009B - Classical Physics (5.00)

--- And ---

PHY 009C - Classical Physics (5.00)



No Course Articulated

PHY 009B - Classical Physics (5.00)

--- And ---

PHY 009C - Classical Physics (5.00)

END OF AGREEMENT