Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: University of California, Davis 2022-2023 General Catalog, Quarter	From: De Anza College 2022-2023 General Catalog, Quarter

Applied Physics B.S.

INFORMATION AND ADVISORIES

Special Advising Note:

Transfer students are strongy advised to complete as many preparatory courses as possible for their major before enrolling at UC Davis. In particular, it is highy recommended that students complete a Calculus-based Physics series, a Calculus series through Linear Algebra and Differential Equations, and a formal course in C Programming before transferring. Preparing well for the major helps students move efficiently toward graduation and significantly reduces time to degree. As a result, students who expect to graduate in two years will need the recommended courses upon entry.

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:

This 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.

Strive to achieve your highest possible GPA in order to be most competitive. Transfer students must earn an overall transfer GPA of 2.80 or higher to be competitive candidates for admission to this major (3.20 or higher for TAG applicants). Candidates must complete courses comparable to the following UC Davis courses with a cumulative GPA of 3.0 for the selective major course group. It is required that candidates have already achieved the minimum required GPA in course(s) from the group below that have been completed by the time of application and maintain that GPA 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 course equivalents:

- Mathematics 021A/B/C/D
- Mathematics 022 A/B
- Physics 009A/B/C/D or Physics 009HA/HB/HC/HD/HE

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Transfer Admission Guarantee (TAG) Note:

GPA and other requirements to obtain a UC Davis TAG may differ from those stated here for general transfer admission to the major.
Visit http://tag.ucdavis.edu for details regarding UC Davis TAG.

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

- **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

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 1A** - Calculus (5.00) • *Credit for articulated courses in one series only* **--- Or ---** **MATH 1AH** - Calculus - HONORS (5.00) • *Credit for articulated courses in one series only*
MAT 021B - Calculus (4.00)	←	**MATH 1B** - Calculus (5.00) • *Credit for articulated courses in one series only* **--- Or ---** **MATH 1BH** - Calculus - HONORS (5.00) • *Credit for articulated courses in one series only*
MAT 021C - Calculus (4.00)	←	**MATH 1C** - Calculus (5.00) • *Credit for articulated courses in one series only* **--- Or ---** **MATH 1CH** - Calculus - HONORS (5.00) • *Credit for articulated courses in one series only*
MAT 021D - Vector Analysis (4.00)	←	**MATH 1D** - Calculus (5.00) **--- Or ---** **MATH 1DH** - Calculus - HONORS (5.00)
MAT 022A - Linear Algebra (3.00)	←	**MATH 2B** - Linear Algebra (5.00) **--- Or ---** **MATH 2BH** - Linear Algebra - HONORS (5.00)
MAT 022B - Differential Equations (3.00)	←	**MATH 2A** - Differential Equations (5.00) **--- Or ---** **MATH 2AH** - Differential Equations - HONORS (5.00)

Select 1 Series from the following

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

PHY 009A - Classical Physics (5.00)	←	**PHYS 4A** - Physics for Scientists and Engineers: Mechanics (6.00)
PHY 009B - Classical Physics (5.00)	←	**PHYS 4C** - Physics for Scientists and Engineers: Fluids, Waves, Optics and Thermodynamics (6.00)
PHY 009C - Classical Physics (5.00)	←	**PHYS 4B** - Physics for Scientists and Engineers: Electricity and Magnetism (6.00)
PHY 009D - Modern Physics (4.00)	←	**PHYS 4D** - Physics for Scientists and Engineers: Modern Physics (6.00)

--- Or ---

PHY 009HA - Honors Physics (5.00)	←	No Course Articulated
PHY 009HB - Honors Physics (5.00)	←	No Course Articulated
PHY 009HC - Honors Physics (5.00)	←	No Course Articulated
PHY 009HD - Honors Physics (5.00)	←	No Course Articulated
PHY 009HE - Honors Physics (5.00)	←	No Course Articulated

ATMOSPHERIC PHYSICS CONCENTRATION

PHY 040 - Introduction to Physics Computation (4.00)	←	No Course Articulated

CHEMICAL PHYSICS CONCENTRATION

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

CHE 002A - General Chemistry (5.00)	←	**CHEM 1A** - General Chemistry (5.00) • *Effective next fall, this articulation will be revised* **--- Or ---** **CHEM 1AH** - General Chemistry - HONORS (5.00) • *Course is articulated in more than one agreement but credit can only apply to one* • *Effective next fall, this articulation will be revised*
CHE 002B - General Chemistry (5.00)	←	**CHEM 1B** - General Chemistry (5.00) • *Effective next fall, this articulation will be revised* **--- Or ---** **CHEM 1BH** - General Chemistry - HONORS (5.00) • *Course is articulated in more than one agreement but credit can only apply to one* • *Effective next fall, this articulation will be revised*
CHE 002C - General Chemistry (5.00)	←	**CHEM 1C** - General Chemistry and Qualitative Analysis (5.00) **--- Or ---** **CHEM 1CH** - General Chemistry and Qualitative Analysis - HONORS (5.00) • *Course is articulated in more than one agreement but credit can only apply to one*

--- And ---

PHY 040 - Introduction to Physics Computation (4.00)	←	No Course Articulated

COMPUTATIONAL PHYSICS CONCENTRATION

ECS 036A - Programming & Problem Solving (4.00)	←	**CIS 22A** - Beginning Programming Methodologies in C++ (4.50) **--- Or ---** **CIS 22B** - Intermediate Programming Methodologies in C++ (4.50) • *Course is articulated in more than one agreement but credit can only apply to one* **--- Or ---** **CIS 22BH** - Intermediate Programming Methodologies in C++ - HONORS (4.50) • *Course is articulated in more than one agreement but credit can only apply to one* **--- Or ---** **CIS 26A** - C as a Second Programming Language (4.50) **--- Or ---** **CIS 26B** - Advanced C Programming (4.50) **--- Or ---** **CIS 27** - Programming in C++ for C/Java Programmers (4.50) • *Course is articulated in more than one agreement but credit can only apply to one* **--- Or ---** **CIS 35A** - Java Programming (4.50) • *Course is articulated in more than one agreement but credit can only apply to one* **--- Or ---** **CIS 36A** - Introduction to Computer Programming Using Java (4.50)

ECS 036B - Software Development & Object-Oriented Programming in C++ (4.00)	←	**CIS 22B** - Intermediate Programming Methodologies in C++ (4.50) • *Course is articulated in more than one agreement but credit can only apply to one* **--- Or ---** **CIS 22BH** - Intermediate Programming Methodologies in C++ - HONORS (4.50) • *Course is articulated in more than one agreement but credit can only apply to one* **--- Or ---** **CIS 29** - Advanced C++ Programming (4.50) **--- Or ---** **CIS 35A** - Java Programming (4.50) • *Course is articulated in more than one agreement but credit can only apply to one* **--- Or ---** **CIS 36B** - Intermediate Problem Solving in Java (4.50)
ECS 036C - Data Structures, Algorithms, & Programming (4.00)	←	**CIS 22C** - Data Abstraction and Structures (4.50) • *Course is articulated in more than one agreement but credit can only apply to one* **--- Or ---** **CIS 22CH** - Data Abstraction and Structures - HONORS (4.50) • *Course is articulated in more than one agreement but credit can only apply to one*

PHYSICAL ELECTRONICS CONCENTRATION

ENG 017 - Circuits I (4.00)	←	**ENGR 37** - Introduction to Circuit Analysis (5.00)
PHY 040 - Introduction to Physics Computation (4.00)	←	No Course Articulated
PHY 080 - Experimental Techniques (4.00)	←	No Course Articulated

GEOPHYSICS CONCENTRATION

PHY 040 - Introduction to Physics Computation (4.00)	←	No Course Articulated

MATERIALS SCIENCE CONCENTRATION

PHY 040 - Introduction to Physics Computation (4.00)	←	No Course Articulated

PHYSICAL OCEANOGRAPHY CONCENTRATION

PHY 040 - Introduction to Physics Computation (4.00)	←	No Course Articulated

END OF AGREEMENT