Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

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

Assistive Technology Minor

GENERAL INFORMATION FOR ALL MINORS

UC Santa Cruz students have the option to complete one or more minors, provided they complete all of the required coursework for the minor(s). The sponsoring department establishes the course requirements for a minor. The minor involves substantial work in the discipline and requires no fewer than 25 upper-division or graduate credits. The minor appears on the student's official transcript but not on the diploma.

Students do not apply for admission into a minor when applying to UC Santa Cruz. If interested in completing a minor, transfer students must contact the department sponsoring the minor after enrolling at UCSC.

ASSISTIVE TECHNOLOGY MINOR

The Assistive Technology minor is designed for students who are interested in helping people with movement disabilities. The emphasis is on designing exoskeletons and robots built on two core cross-disciplinary areas: Mechatronics and Functional Anatomy.

Please visit the department's website to learn more about this minor: https://engineering.ucsc.edu/departments/electrical-and-computer-engineering

PREPARATION FOR THE MINOR

MATH 19A: Calculus for Science, Engineering, and Mathematics

MATH 19B: Calculus for Science, Engineering, and Mathematics

PHYS 5A: Introduction to Physics I **AND** PHYS 5L: Introduction to Physics I Laboratory

PHYS 5C: Introduction to Physics III **AND** PHYS 5N: Introduction to Physics Laboratory III

CHEM 1A: General Chemistry

BIOL 20A: Cell and Molecular Biology

BIOE 20B: Development and Physiology

CSE 12: Computer Systems and Assembly Language and Lab

ECE 13: Computer Systems and C Programming

AM 10: Mathematical Methods for Engineers I **OR** MATH 21: Linear Algebra

AM 20: Mathematical Methods for Engineers II **OR** MATH 24: Ordinary Differential Equations

ECE 101: Introduction to Electronic Circuits **AND** ECE 101L: Introduction to Electronic Circuits Laboratory

PREPARATION FOR THE MINOR

MATH 19A - Calculus for Science, Engineering, and Mathematics (5.00)	←	**MATH 1A** - Calculus (5.00) **--- Or ---** **MATH 1AH** - Calculus - HONORS (5.00)
MATH 19B - Calculus for Science, Engineering, and Mathematics (5.00)	←	**MATH 1B** - Calculus (5.00) **--- And ---** **MATH 1C** - Calculus (5.00) **--- Or ---** **MATH 1BH** - Calculus - HONORS (5.00) **--- And ---** **MATH 1CH** - Calculus - HONORS (5.00)

PHYS 5A - Introduction to Physics I (5.00)	←	**PHYS 4A** - Physics for Scientists and Engineers: Mechanics (6.00)
--- And ---		
PHYS 5L - INTRODUCTION TO PHYSICS I LABORATORY (1.00)	←	**PHYS 4A** - Physics for Scientists and Engineers: Mechanics (6.00)

PHYS 5C - Introduction to Physics III (5.00)	←	**PHYS 4B** - Physics for Scientists and Engineers: Electricity and Magnetism (6.00)
--- And ---		
PHYS 5N - INTRODUCTION TO PHYSICS III LABORATORY (1.00)	←	**PHYS 4B** - Physics for Scientists and Engineers: Electricity and Magnetism (6.00)

CHEM 1A - General Chemistry (5.00)	←	**CHEM 1A** - General Chemistry (5.00) **--- And ---** **CHEM 1B** - General Chemistry (5.00) **--- And ---** **CHEM 1C** - General Chemistry and Qualitative Analysis (5.00) **--- Or ---** **CHEM 1AH** - General Chemistry - HONORS (5.00) **--- And ---** **CHEM 1BH** - General Chemistry - HONORS (5.00) **--- And ---** **CHEM 1CH** - General Chemistry and Qualitative Analysis - HONORS (5.00)
BIOL 20A - Cell and Molecular Biology (5.00)	←	**BIOL 6B** - Cell and Molecular Biology (6.00)
BIOE 20B - Development and Physiology (5.00)	←	**BIOL 6A** - Form and Function in the Biological World (6.00) **--- Or ---** **BIOL 6AH** - Form and Function in the Biological World - HONORS (6.00)
CSE 12 - Computer Systems and Assembly Language and Lab (7.00)	←	**CIS 21JA** - Introduction to x86 Processor Assembly Language and Computer Architecture (4.50) **--- Or ---** **CIS 21JB** - Advanced x86 Processor Assembly Programming (4.50)
ECE 13 - Computer Systems and C Programming (7.00)	←	No Course Articulated

AM 10 - Mathematical Methods for Engineers I (5.00)	←	**MATH 2B** - Linear Algebra (5.00) **--- Or ---** **MATH 2BH** - Linear Algebra - HONORS (5.00)
--- Or ---		
MATH 21 - Linear Algebra (5.00)	←	**MATH 2B** - Linear Algebra (5.00) **--- Or ---** **MATH 2BH** - Linear Algebra - HONORS (5.00)

AM 20 - Mathematical Methods for Engineers II (5.00)	←	**MATH 2A** - Differential Equations (5.00) **--- Or ---** **MATH 2AH** - Differential Equations - HONORS (5.00)
--- Or ---		
MATH 24 - Ordinary Differential Equations (5.00)	←	**MATH 2A** - Differential Equations (5.00) **--- Or ---** **MATH 2AH** - Differential Equations - HONORS (5.00)

ECE 101 - Introduction to Electronic Circuits (5.00)	←	**ENGR 37** - Introduction to Circuit Analysis (5.00)
--- And ---		
ECE 101L - Introduction to Electronic Circuits Laboratory (2.00)	←	No Course Articulated

END OF AGREEMENT