

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

Electrical Engineering 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.

ELECTRICAL ENGINEERING MINOR

The electrical engineering minor provides a solid foundation in the core areas of electronic circuits and signals and systems, as well as the prerequisite material in mathematics and physics. Concentration of upper-division electives in either of the major tracks constitutes substantial and focused work in the discipline of electrical engineering. This minor is particularly suitable for students with majors in applied physics or any School of Engineering major.

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

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

MATH 23A: Vector Calculus **OR**

AM 30: Multivariate Calculus for Engineers

One of the following options:

AM 10: Mathematical Methods for Engineers I **AND**

AM 20: Mathematical Methods for Engineers II

OR

MATH 21: Linear Algebra **AND**

MATH 24: Ordinary Differential Equations

One of the following physics sequences:

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

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

OR

PHYS 6A: Introductory Physics I **AND** PHYS 6L: Introductory Physics I Laboratory **AND**

PHYS 6C: Introductory Physics III **AND** PHYS 6N: Introductory Physics III 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)

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

MATH 23A - Vector Calculus (5.00)



MATH 1D - Calculus (5.00)

--- Or ---

MATH 1DH - Calculus - HONORS (5.00)

--- Or ---

AM 30 - Multivariate Calculus for Engineers (5.00)



MATH 1D - Calculus (5.00)

--- Or ---

MATH 1DH - Calculus - HONORS (5.00)

Select 1 Sequence(s) from the following

AM 10 - Mathematical Methods for Engineers I (5.00)



MATH 2B - Linear Algebra (5.00)

--- Or ---

MATH 2BH - Linear Algebra - HONORS (5.00)

--- And ---

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 21 - Linear Algebra (5.00)



MATH 2B - Linear Algebra (5.00)

--- Or ---

MATH 2BH - Linear Algebra - HONORS (5.00)

--- And ---

MATH 24 - Ordinary Differential Equations (5.00)



MATH 2A - Differential Equations (5.00)

--- Or ---

MATH 2AH - Differential Equations - HONORS (5.00)

Select 1 Sequence(s) from the following

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)

--- And ---

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)

--- Or ---

PHYS 6A - Introductory Physics I (5.00)



PHYS 4A - Physics for Scientists and Engineers: Mechanics (6.00)

--- Or ---

PHYS 2A - General Introductory Physics (5.00)

--- And ---

PHYS 6L - Introductory Physics I Laboratory (1.00)



PHYS 4A - Physics for Scientists and Engineers: Mechanics (6.00)

--- Or ---

PHYS 2A - General Introductory Physics (5.00)

--- And ---

PHYS 6C - Introductory Physics III (5.00)



PHYS 4B - Physics for Scientists and Engineers: Electricity and Magnetism (6.00)

--- Or ---

PHYS 2B - General Introductory Physics (5.00)

--- And ---

PHYS 6N - INTRODUCTORY PHYSICS III LABORATORY (1.00)



PHYS 4B - Physics for Scientists and Engineers: Electricity and Magnetism (6.00)

--- Or ---

PHYS 2B - General Introductory Physics (5.00)

END OF AGREEMENT