

# Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: University of California, Merced  
2022-2023 General Catalog, Semester

From: De Anza College  
2022-2023 General Catalog, Quarter

## Electrical Engineering, B.S. (Available Fall 2025)

### ADMISSIONS MAJOR SELECTION CRITERIA

**Electrical Engineering, B.S. (Available for Transfer Students starting Fall 2025) (Please apply for Upper-Division transfer admissions between October 1st to Nov 30th, 2024)**

For admission to the **Electrical Engineering, B.S.** major, students must earn an overall transferrable GPA of 2.4 or better, and complete classes articulated with the following UC Merced courses by the end of spring term prior to fall enrollment or by the end of fall term prior to spring enrollment. All major preparation courses requires a "C" or better.

\* **REQUIRED** major preparation courses:

- CHEM 002
- MATH 021, MATH 022, MATH 023, MATH 024
- PHYS 008 & PHYS 008L, PHYS 009 & PHYS 009L

\* Please continue to check ASSIST every year as this information is valid for the academic year listed on the top of the agreement.

#### Additional Major Preparation Courses

Please visit the [catalog](#) for the latest curriculum information. We anticipate to publish the Lower Division Courses for the Major (Additional Major Preparation Courses) in next year's ASSIST 2023-2024 Agreement.

#### AP Exam Score Course Exceptions

- An AP Computer Science: Comp Science A score of 5 exempts CSE 022
- An AP Chemistry score of 5 exempts CHEM 002 and CHEM 010
- An AP Mathematics: Calculus AB score of 4 or 5 exempts Math 021
- An AP Mathematics: Calculus BC score of 3 exempts MATH 021
- An AP Mathematics: Calculus BC score of 4 or 5 exempts Math 021 and Math 022
- An AP Mathematics: Calculus BC Subscore AB score 3 or higher exempts Math 021
- An AP Physics: Physics C: Mechanics: score of 5 exempts PHYS 008 and PHYS 008L

**UC Merced Advance Placement (AP) and International Baccalaureate (IB)** credit policies are detailed in the link below:

[Advance Placement \(AP\) and International Baccalaureate \(IB\) Examinations](#)

### IMPORTANT TRANSFER INFORMATION

In addition to the Major Selection Criteria, all Upper-Division Transfer applicants must meet minimum [University of California admissions requirements](#). Visit <https://admissions.ucmerced.edu/transfer/requirements> for more specific UC Merced admissions information.

Prior to Transferring to UC Merced, please be advised of the following for Junior Transfers:

**1) WRI 001 and WRI 010 are admissions requirements:** In most situations, WRI 001 is fulfilled by IGETC 1A English Composition and WRI 010 is fulfilled by IGETC 1B Critical Thinking/English Composition. However best practice is to complete the articulated course for WRI 001 and WRI 010. Please scroll towards the bottom of the agreement to find the articulation for each course.

**2) Transfer Admissions Guarantee (TAG):** UC Merced is one of the six UC's that offers Transfer Admissions Guarantee. Please visit the TAG website for more information: <https://admissions.ucmerced.edu/transfer/tag>

**3) General Education (GE Requirements):** While general education is not required for admission, it can help speed up your time to graduation once you transfer to UC Merced. We highly recommend reviewing the [Transfer Students: Satisfying General Education](#) page in the catalog for a more extensive explanation of the requirements.

Please note the [School of Engineering](#) strongly discourages IGETC, but accepts it; students are encouraged to focus primarily on lower division major preparation and fulfilling UCM minimum admissions requirements. If you elect to complete IGETC, the courses may double count with the major courses listed below. Please visit your Community College Counselor to learn more.

**4. This agreement displays all lower-division (or Major Preparation) courses required in the major.** UC Merced courses on the left, approved (articulated) transfer courses to the right.

**5. Changes to this Agreements:** Major requirements are subject to change from one academic year to the next. Newly-articulated courses are added on a rolling basis, and articulated courses can be revised. Visit ASSIST every semester for the latest information and consult with an Academic Counselor at your institution on a regular basis.

For more questions about admissions, please email: [transfer@ucmerced.edu](mailto:transfer@ucmerced.edu).

## ABOUT THIS MAJOR

The field of [Electrical Engineering](#) has revolutionized the human lives and continues to do so at a faster pace, e.g., electrification, electric vehicles/trains, autonomous vehicles, electric devices and gadgets, cell phones, Internet, integrated chips, computers, TVs, and the list goes on. After waking up, the first thing we do is to turn on lights, the last thing is to turn them off and in between, use all kinds of electric gadgets.

UC Merced emphasizes sustainability across the [Electrical Engineering Curriculum](#), taking a highly interdisciplinary approach that combines strong theoretical foundation with field studies, laboratory experiments and computational simulations. Core courses within the major provide students with a firm foundation in the physical and life sciences and the ways that they apply to top-notch technology, green electronics, renewable energy and sustainable infrastructure. UC Merced also emphasizes opportunities for undergraduates to participate in research with opportunities ranging from electric vehicles to solar energy to remotely controlled drones.

## MAJOR PREPARATION COURSES REQUIRED FOR TRANSFER

Minimum grade required: C or better  
Required for admission  
\*\*REFER TO TOP OF AGREEMENT\*\*

**CHEM 002** - General Chemistry I (4.00)



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

--- And ---

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

--- Or ---

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

--- And ---

**CHEM 1BH** - General Chemistry - HONORS (5.00)

--- Or ---

**CHEM 1AH** - General Chemistry - HONORS (5.00)

--- And ---

**CHEM 1BH** - General Chemistry - HONORS (5.00)

--- Or ---

**CHEM 1AH** - General Chemistry - HONORS (5.00)

--- And ---

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

--- And ---

**MATH 021** - Calculus I for Physical Sciences & Engineering (4.00)



**MATH 1A** - Calculus (5.00)

--- And ---

**MATH 1B** - Calculus (5.00)

--- Or ---

**MATH 1AH** - Calculus - HONORS (5.00)

--- And ---

**MATH 1BH** - Calculus - HONORS (5.00)

**MATH 022** - Calculus II for Physical Sciences & Engineering (4.00)



**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)

**MATH 023** - Vector Calculus (4.00)



**MATH 1C** - Calculus (5.00)

--- And ---

**MATH 1D** - Calculus (5.00)

--- Or ---

**MATH 1CH** - Calculus - HONORS (5.00)

--- And ---

**MATH 1DH** - Calculus - HONORS (5.00)

**MATH 024** - Linear Algebra and Differential Equations (4.00)



**MATH 2A** - Differential Equations (5.00)

--- And ---

**MATH 2B** - Linear Algebra (5.00)

--- And ---

**PHYS 008** - Introductory Physics I for Physical Sciences (3.00)

--- And ---

**PHYS 008L** - Introductory Physics I for Physical Sciences Lab (1.00)



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

**PHYS 009** - Introductory Physics II for Physical Sciences (3.00)

--- And ---

**PHYS 009L** - Introductory Physics II for Physical Sciences Lab (1.00)



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

--- And ---

**PHYS 4C** - Physics for Scientists and Engineers: Fluids, Waves, Optics and Thermodynamics (6.00)

## ACADEMIC WRITING - CHOOSE ONE COURSE FROM:

**\*\*REFER TO TOP OF AGREEMENT\*\***

Minimum grade required: C or better

**WRI 001** - Academic Writing (4.00)



**ESL 5** - Advanced Composition and Reading (5.00)

--- Or ---

**EWRT 1A** - Composition and Reading (5.00)

--- Or ---

**EWRT 1AH** - Composition and Reading - HONORS (5.00)

--- Or ---

**EWRT 1AS** - Intensive Composition and Reading Stretch: First Quarter (5.00)

- UC credit limitation applies; refer to UC-transferability list

--- And ---

**EWRT 1AT** - Intensive Composition and Reading Stretch: Second Quarter (5.00)

- UC credit limitation applies; refer to UC-transferability list

## COLLEGE READING AND COMPOSITION - CHOOSE ONE COURSE FROM:

**\*\*REFER TO TOP OF AGREEMENT\*\***

Minimum grade required: C or better

**WRI 010** - College Reading and Composition (4.00)



**COMM 9** - Argumentation: Analysis of Oral and Written Communication (5.00)

--- Or ---

**COMM 9H** - Argumentation: Analysis of Oral and Written Communication - HONORS (5.00)

--- Or ---

**EWRT 1B** - Reading, Writing and Research (5.00)

--- Or ---

**EWRT 1C** - Literature and Composition (5.00)

--- Or ---

**EWRT 2** - Critical Reading, Writing and Thinking (5.00)

--- Or ---

**EWRT 2H** - Critical Reading, Writing and Thinking - HONORS (5.00)

--- Or ---

**PHIL 3** - Critical Thinking and Writing (5.00)

**END OF AGREEMENT**