

# PHYSICS, ASSOCIATE IN SCIENCE FOR UC TRANSFER

This Associate in Science degree in Physics for UC Transfer degree is intended to enhance student transfer and increase academic preparation for CCC students as they prepare to transfer into a Physics program at a UC campus. Along with the Transfer Agreement Guarantee (TAG) students completing this degree are guaranteed admission to the UC system, but not necessarily to a particular UC campus or major of their choice. Students should consult with a counselor for more information on university admission and transfer requirements, as this degree in Physics may not be the best option for students intending to transfer to a particular UC campus or to a college or university that is not part of the UC system..

To obtain an Associate in Science in Physics for UC Transfer degree, students must:

- Complete all courses required for the Physics major, as prescribed on the UCTP Template.
- Complete IGETC\* courses in the following areas, as prescribed on the UCTP Template.
  - Area 1A Freshman Composition (3 units)
  - Area 1B Critical Thinking (3 units)
  - Area 3 Arts and Humanities (3 units)
  - Area 4 Social and Behavioral Science (3 units)
  - Area 5B Biological Science (4 units)
  - Area 6 Language other than English (0-4 units)
- Meet the specified requirements as stated in the Transfer Agreement Guarantee (TAG) for the available school.
- Obtain a cumulative minimum grade point average of 3.5 in the major. Students who earn less than 3.5 GPA (UC transferable) still meet the associate degree graduation requirement but will not receive guaranteed admission into a UC.
- Obtain a grade of "C" better, or "P", in all courses required for the major. Although a "P" grade is allowed (Title 5 section 55062), it is highly recommended that students take the course for a letter grade (A, B, or C) due to unit limitations on "P/NP" courses by the UC system and Moorpark College.
- Complete requirements in residency. For students in the Ventura County Community College District, a minimum of 12 units must be completed in residence within the college district.

\* **NOTE:** The degree allows for the postponement of two courses in Area 3 (Arts and Humanities) and two courses in Area 4 (Social Science) of the IGETC. These are to be completed at the UC, once transferred.

Course ID	Title	Units/ Hours
<b>REQUIRED CORE COURSES</b>		
CHEM M01A or CHEM M01AH	General Chemistry I Honors: General Chemistry I	5
CHEM M01B	General Chemistry II	5
MATH M25A or MATH M25AH	Calculus with Analytic Geometry I Honors: Calculus with Analytic Geometry I	5

MATH M25B or MATH M25BH	Calculus with Analytic Geometry II Honors: Calculus with Analytic Geometry II	5
MATH M25C	Calculus with Analytic Geometry III	5
MATH M31	Introduction to Linear Algebra	3
MATH M35	Applied Differential Equations	3
PHYS M20A	Mechanics of Solids and Fluids	4
PHYS M20AL	Mechanics of Solids and Fluids Laboratory	1
PHYS M20B	Thermodynamics, Electricity, and Magnetism	4
PHYS M20BL	Thermodynamics, Electricity, and Magnetism Laboratory	1
PHYS M20C	Wave Motion, Optics, and Modern Physics	4
PHYS M20CL	Wave Motion, Optics, and Modern Physics Laboratory	1
<b>Total Units for the Major</b>		<b>46</b>

### IGETC General Education Requirements: Refer to the IGETC for the list of courses available for each Area

- AREA 1A Freshman Composition: One course
- AREA 1B Critical Thinking: One course
- AREA 3 Arts and Humanities: One course
- AREA 4 Social and Behavior Science: One course
- Area 6 Language other than English (0-4 units)

**Total Units Required for the Degree 71**

Upon successful completion of this program, students will be able to:

- discern between relevant and irrelevant evidence, formulate appropriate hypotheses, and distinguish between experiments to determine which one(s) leads to an appropriate conclusion.
- analyze mechanical systems.
- analyze systems involving thermodynamics and electricity and magnetism.
- analyze problems from Mechanics, Electricity Magnetism, Modern Physics, Optics, and Thermodynamics and will be able to recognize and apply equations to solve the problems.