

PHYSICS, ASSOCIATE IN SCIENCE FOR UC TRANSFER

The Associate in Science in Physics for UC Transfer degree prepares students to pursue a Bachelor's degree in Physics at a University of California institution. This major provides students with a full two years of physics education as well as a strong foundation in math and chemistry. In addition, completion of the AS in Physics for UC Transfer degree allows students to defer for completion after transfer one course in Cal-GETC Area 3 (Arts and Humanities) and one course in Cal-GETC Area 4 (Social and Behavioral Sciences). Admission to the University of California is competitive; successful completion of this program does not guarantee acceptance to a UC campus.

Learning Outcomes

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

- Reason qualitatively and logically about physical phenomena using scientific models.
- Apply Newton's laws, thermodynamics, the laws of electricity and magnetism, quantum theory, and the principles of energy conservation to problems involving motion, heat, light, electro-magnetism, and matter.
- Use appropriate instruments to perform scientific experiments to analyze data to check agreements with theoretical predictions.

Associate in Science for UC Transfer Degree Major Requirements

| Code | Title | Units |
|---|-------------------------------------|-----------|
| Required Core | | |
| CHEM 1A | General Chemistry I | 5 |
| CHEM 1B | General Chemistry II | 5 |
| MATH 20A | Calculus with Analytic Geometry I | 4 |
| MATH 20B | Calculus with Analytic Geometry II | 4 |
| MATH 20C | Calculus of Several Variables | 4 |
| MATH 31 | Linear Algebra | 4 |
| MATH 32 | Differential Equations | 4 |
| PHYS 3A | Science and Engineering Physics I | 4 |
| PHYS 3B | Science and Engineering Physics II | 4 |
| PHYS 3C | Science and Engineering Physics III | 4 |
| TOTAL MAJOR UNITS | | 42 |
| Additional Requirements ¹ | | 21 |
| Complete Information Competency and Cal-GETC pattern, deferring for completion after transfer to UC one course each in Area 3 (Arts and Humanities) and Area 4 (Social and Behavioral Sciences). All courses taken must be UC-transferable. | | |
| Total Units | | 63 |

¹ Consult with a counselor for campus-specific admission requirements.

Please refer to the program requirements section of the Catalog for information about associate degree requirements and certificate requirements including Information Competency, and General Education requirements.