

PHYSICS, ASSOCIATE IN SCIENCE FOR TRANSFER

The Associate in Science in Physics for Transfer degree (AS-T in Physics) program provides students with sufficient understanding of the physical world with concepts, laws of physics and qualitative and quantitative reasoning skills to think critically and to analyze real-world situations. Successful completion of the transfer degree at Monterey Peninsula College guarantees students acceptance to a California State University (but does not guarantee acceptance to a particular campus or major) to pursue a baccalaureate degree in Physics or related major, in preparation to pursue a career in research, industry, and education. Students must complete the Associate Degree for Transfer requirements to earn the AS-T degree.

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 Transfer Degree Major Requirements

Code	Title	Units
Required Core		
MATH 20A	Calculus with Analytic Geometry I	4
MATH 20B	Calculus with Analytic Geometry II	4
MATH 20C	Calculus of Several Variables	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		24
Additional Requirements		36
Complete CSU General Education or IGETC pattern and electives, if needed, for a total of 60 transferable units.		
Total Units		60

Please refer to the graduation requirements section of the Catalog for information about degree and certificate requirements including Reading and Writing, Mathematics, Information Competency, and General Education requirements.