

PHYSICS

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:

- Use appropriate instruments to perform scientific experiments to analyze data to check agreements with theoretical predictions. 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, electromagnetism, and matter.

Associate in Science for Transfer Degree

Associate Degree Major Requirements	Units
REQUIRED CORE:	27
MATH 20A Calculus w/Analytic Geometry I (5)	
MATH 20B Calculus w/Analytic Geometry II (5)	
MATH 20C Calculus of Several Variables (5)	
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	27
Associate Degree Requirements (as described above)	27
<i>Complete CSU General Education or IGETC Pattern for a total of 60 transferable units (see pages 72-75 in the 2017-18 MPC Catalog).</i>	
TOTAL DEGREE UNITS	60