

# PHYSICS (AS-T)

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A branch of the physical sciences, physics is the study of energy, space, matter, the interactions between matter and the laws which govern these interactions. Physicists consider themselves the most fundamental of scientists, for they are the ones who examine the basic laws of nature. They seek to study and understand what happens when atoms and subatomic particles break down and assemble, how they react to collisions with each other and to electromagnetic radiation. Physicists use mathematics to understand, explain and predict their theories and equations. They often apply their predictions and theories to other fields -chemistry, biology, geophysics, engineering, communication, transportation, electronics and health. The Associate in Science Degree in Physics for Transfer will meet the needs of students transferring to a California State University who intend to study in a physics-related major.

**Important:** To obtain the Associate in Science Degree in Physics for Transfer, students must complete the following requirements with a minimum grade point average (GPA) of 2.0:

- The Physics major requirements below.
- The California State University General Education – Breadth (CSUGE) **or** the Intersegmental General Education Transfer Curriculum (IGETC) requirements. *\*\*Please note: Area 6-Languages Other Than English on the IGETC is **NOT** required for the AS-T.*
- Any needed transferable electives to reach a total of 60 CSU transferable units.
- All major courses and any courses noted on the CSUGE or IGETC check sheets must be completed with a C or better.

## Requirements for the Major

*Core-Complete the following:* ----- 27 units

- MATH 1400- Calculus and Analytical Geometry I (5)
- MATH 1500- Calculus and Analytical Geometry II (5)
- MATH 2400- Calculus and Analytical Geometry III (5)
- PHYS 2105- Mechanical Physics, Oscillations and Waves (4)
- PHYS 2110- Electrical Physics, Light (4)
- PHYS 2115- Heat, Modern, and Quantum Physics (4)

**Total Units** ----- 27