PHYSICS—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Physics program offers course work for a diverse range of students from the community starting with those merely wishing to learn more of the world around them and finishing with the student pursuing a four-year degree in science or engineering.

Physics courses are available at three different levels, all of which satisfy the needs of students wishing to transfer to four-year colleges and universities. The level of the physics course that students initially enroll in is largely dependent on their individual math skills. The emphasis at all levels is on developing an understanding and appreciation for the basic laws of our physical universe. This is done largely through the development of problem solving skills and laboratory investigations. The Physics program at Hartnell College is fortunate to possess an excellent inventory of laboratory apparatus for demonstrations and student use in the laboratories, and special projects.

Some positions for which four-year graduates in physics are qualified are in research, teaching, engineering, medicine, and industry.

PROGRAM OUTCOMES

Upon successful completion of the Physics program, a student should be able to:

- comprehend and articulate basic physics terminology.
- demonstrate proficiency in problem solving, especially with regard to basic physics problems involving major concepts, theories, and principles including, but not limited to:
  - conservation of momentum and energy.
  - Newtonian mechanics.
  - Maxwell’s laws.
  - fluid dynamics.
- collect and analyze data effectively using basic laboratory equipment and present results in formally structured laboratory reports.