

---

# PHYSICS

---

## PHYSICS

**PHYS 100      Introductory Physics****3 Credits**

A concise treatment of the basic principles of physics. Includes mechanics, matter, electricity, magnetism, heat, sound, light, relativity, and nuclear physics. Prerequisite: Must have completed with a C or better or be currently enrolled in: MATH 116 or MATH 116E or MATH 120 or MATH 120E or MATH 124 or MATH 126 or MATH 126E or higher.

**PHYS 107      Technical Physics I****3 Credits**

Investigates traditional topics of physics. Topics include mechanics, electricity, basic solid state components, optics, gases, hydraulics, fluids, and thermodynamics. This course provides a basic understanding of how physical systems are related and their technical applications. Hands-on labs, demonstrations, and calculations are an integral part of the course. Prerequisite: Must have completed with a C or better or be currently enrolled in: MATH 116 or MATH 116E or MATH 120 or MATH 120E or MATH 124 or MATH 126 or MATH 126E or higher.

**PHYS 151      Gen Physics I****4 Credits**

Primarily for students in arts and science. Topics include kinematics, energy and momentum conservation, rotational dynamics, thermodynamics, fluids, harmonic motion, and sound. Laboratory experiments illustrate many of these fundamental principles. Prerequisite: Must have completed MATH 127 or higher.

**PHYS 152      Gen Physics II****4 Credits**

A continuation of PHYS 151. Topics include electrostatics, circuits, magnetism, induction, AC circuits, electronics, light optics, special relativity, and an introduction in quantum theory. Lab included. Prerequisite: Must have completed PHYS 151.

**PHYS 180      Physics Scientist/Engr I****4 Credits**

A comprehensive, calculus-based physics course designed for advanced science and engineering students. Consists of intensive word problem solving covering topics of kinematics, vectors, forces, energy, momentum, rotation, angular momentum, equilibrium, elasticity, gravity, fluids, and oscillations. Lab included. Prerequisite: Must have completed MATH 181 with a grade of 'C' or higher.

**PHYS 181      Physics Scientist/Engr II****4 Credits**

A calculus-based investigation of thermodynamic laws, kinetic theory, electric charge, field, potential, current, dielectrics, circuit elements, magnetic fields and materials, electromagnetic oscillations. Lab included. Prerequisite: Must have completed MATH 181 and PHYS 180.