PHYSICS 7-12, B.S.

The program outline and graduation requirements are listed below. In addition, free electives are selected to reach 120 credits overall and a 2.7 cumulative GPA is required for graduation.

The department website provides an overview of the program, admission requirements (when applicable), faculty biographies, learning outcomes, and careers: https://www.southernct.edu/academics/physics/programs

This program is an education preparation program. Please consult the College of Education page for more information about the college admission requirements.

GENERAL EDUCATION REQUIREMENTS

All bachelor’s degree programs include liberal education (LEP) and writing (W) course requirements. Detailed information on these requirements is published in this section of the catalog: https://catalog.southernct.edu/undergraduate/general-information/lep.html.

Writing courses are not additional course requirements, course sections that meet this requirement are designated with a ‘W’ on the class schedule. Courses in the major and/or cognate may also be used to satisfy LEP requirements where noted below (*).

MAJOR REQUIREMENTS (57 Credits)

Physics Requirements (30 Credits)
PHY 230 — Physics for Scientists and Engineers I (‘C-’ or better)
PHY 231 — Physics for Scientists and Engineers II (‘C-’ or better)
PHY 309 — Modern Physics (‘C-’ or better)
PHY 370 — Modern Physics Laboratory (‘C-’ or better)
PHY 400 - Classical Mechanics I
PHY 406 - Electricity and Magnetism
PHY 461 — Methods in Physics Research
EGR 471 or PHY 471 - Capstone (T3)*
Select an additional 6 credits of PHY

Since all 100-level courses are introductory, a student may not receive credit for more than one of PHY 100, 101, 103, and 111.

Education Requirements (27 Credits)
EDU 316 - Child Development and Psychology for Educators (‘C’ or better)
EDU 413 – Secondary Education (‘C’ or better)
EDU 471 – Supporting English Learners for School Success (‘C’ or better)
RDG 470 – Literacy in the Content Areas (‘C’ or better)
SED 482 – Teaching Exceptional Students in the Secondary Education Classroom (‘C’ or better)
SCE 490 – Science (Secondary School) (‘C’ or better)
SCE 494 – Student Teaching (Science)
SCE 496 – Student Teaching Seminar (Science)

**Non-Course Requirements:**
Module 1: Behavioral Difficulties (Social and Emotional Development)
Module 2: Dyslexia Required

**COGNATE REQUIREMENTS (32 Credits)**

- CHE 120 – General Chemistry I (T2PR)*
- CHE 121 – General Chemistry II
- EDU 200 – Teachers, Schools, and Society ('C' or better) (T2CC)*
- HIS 110 or HIS 111 – United States History I or II (T2AE)*
- MAT 150 – Calculus I (T1QR)*
- MAT 151 – Calculus II
- MAT 252 – Calculus III
- MAT 245 – Differential Equations
- SHE 203 – School Health ('C' or better) (T2MB)*