

Bachelor of Science in Physics

2022 - 2023 Degree Requirements Checklist

College of Science Admission Requirement

Students must demonstrate proficiency in College Algebra by placing into Math Level 2 or higher through the UNT Math Placement Exam **OR** completing College Algebra or higher with a grade of C or higher.

Major Requirements

- One of the following:
 - **PHYS 1710 & 1730:** Mechanics & Lab (4hrs) (*C or higher*)
 - **PHYS 1510 & 1530:** General Physics I with Calculus & Lab (4hrs) (*C or higher*)
 - **PHYS 1410 & 1430 and 1420 & 1440:** General Physics I and II & Labs (8hrs)
- One of the following:
 - **PHYS 2220 & 2240:** Electricity & Magnetism & Lab (4hrs)
 - **PHYS 1520 & 1540:** General Physics II with Calculus & Lab (4hrs)
- **PHYS 3010 & 3030:** Modern Physics & Lab (4hrs)
- **PHYS 3210:** Mechanics (3hrs)
- **PHYS 3310:** Mathematical Methods in the Physical Sciences (3hrs)
- **PHYS 3420:** Electronics (4hrs)
- **PHYS 3510:** Physics, Computation, and Software Applications (3hrs)
- **PHYS 4110:** Statistical and Thermal Physics (3hrs)
- **PHYS 4210:** Electricity and Magnetism (3hrs)
- **PHYS 4310:** Quantum Mechanics (3hrs)
- **PHYS 4950:** Physics Senior Thesis (3hrs)
- **PHYS 4955:** Physics Senior Thesis Capstone (3hrs)
- **Nine** additional hours of advanced physics courses

Concentrations available for BS Physics

See Physics Faculty Advisor for more information on concentrations

- Concentration in Engineering Physics
- Concentration in Astrophysics
- Concentration in Computation

Other Required Courses for Degree

- **MATH 1710:** Calculus I (4hrs) (*C or higher*)
- **MATH 1720:** Calculus II (3hrs) (*C or higher*)
- **MATH 2700:** Linear Algebra and Vector Geometry (3hrs)
- **MATH 2730:** Multivariable Calculus (3hrs)
- **MATH 3410:** Differential Equations I (3hrs)
- **CHEM 1410 & 1430:** General Chemistry I & Lab (4hrs) (*C or higher*)
- **CHEM 1420 & 1440:** General Chemistry II & Lab (4hrs)

University Core Requirements

Communication – English Composition and Rhetoric (6hrs total)
C or higher required for English core

- **ENGL 1310:** First-Year Writing I (3hrs)
- **ENGL 1320:** First-Year Writing II (3hrs) or **TECM 2700:** Technical Writing (3hrs)

Mathematics (at least 3hrs total)

- Double-dips with major requirement

Laboratory Sciences (at least 6hrs total)

- Double-dips with major requirement

Creative Arts (3hrs total)

- See catalog or online degree audit for acceptable options

Language, Philosophy, & Culture (3hrs total)

- See catalog or online degree audit for acceptable options

American History (6hrs total)

- **HIST 2610:** US History to 1865 (3hrs)
- **HIST 2620:** US History since 1865 (3hrs)

Government/Political Science (6hrs total)

- **PSCI 2305:** (3hrs)
- **PSCI 2306:** (3hrs)

Social & Behavioral Sciences (3hrs total)

- See catalog or online degree audit for acceptable options

Component Area Option (6hrs total)

- Double-dips with major requirement

Additional University Requirements

- Minimum of 120 total hours
- Minimum of 36 advanced hours
- Minimum 2.5 GPA on all advanced science, math, and engineering courses
- Minimum 2.000 UNT GPA
- Minimum 2.000 Overall GPA

College of Science Advising Center

Hickory Hall 283; (940) 369-8606; COSAdvising@unt.edu

This is an unofficial simplified checklist effective Fall 2022. Degree requirements and pre-requisites are subject to change, please check with an advisor for any updates. Online catalog - <http://catalog.unt.edu/>