# Unofficial Degree Planning Worksheet Catalog Year: 2023 – 2024

# Major: BS in Physics

This worksheet is designed to help you plan and track your progress toward your degree. It lists all graduation requirements. Course descriptions are available in the current catalog. More detailed descriptions of the program can be found in the [2023 – 2024 catalog](https://ut.smartcatalogiq.com/current/catalog/).

## University Graduation Requirements

Students must earn 124 hours to be eligible for graduation.

Students must maintain an overall minimum GPA of 3.5 to be eligible for graduation with Honors Distinction.

Students must earn 100 [Academics, Community Service, and Engagement](https://ut.smartcatalogiq.com/en/current/catalog/the-ut-academic-experience/honors-program/continuation-in-the-honors-program/) points per year.

Students must maintain a major minimum GPA of 2.0 to be eligible for graduation.

Students must complete 31 credit hours in residency at UT to be eligible for graduation.

Students must complete 15 credit hours in residency at UT in their major coursework.

## Honors Requirements

### Fundamentum

| **Fundamentum Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| HON 100 (2cr) – Via ad Honores  – must be taken in residency |  |  |
| AWR 101 (4cr) - Reading Locally & Globally  **or** AWR 110 (5cr) – Academic Writing for Multilingual Students |  |  |
| AWR 201 (4cr) – Writing and Research: The Local and the Global  *Pre-requisite (one of the following): AWR 101, AWR 110, or equivalent* |  |  |
| Math (4cr) Requirement (choose one):  MAT 155, MAT 160, or Higher | MAT 260 |  |

### Honors Core

| **Dialectic Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| HON 220 (4cr) – Where have we been?  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |
| HON 230 (4cr) – Where are we now?  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |
| HON 240 (4cr) – Where are we going?  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |

| **Idea Labs Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| HON 253 (4cr) – Idea Lab: Health Science or Natural Science  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |
| HON 255 (4cr) – Idea Lab: Humanities/Fine Arts  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |
| HON 257 (4cr) – Idea Lab: Social Science  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |

### Honors Thesis

| **Honors Thesis Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| HON 490 (6-10cr) – Thesis  *Pre-requisite: Students must be in good standing in the Honors Program and must have completed 60 credit hours of course work.* |  |  |

## Physics Requirements (69-72 Credits)

### Physics Requirements

| **Physics Requirements (57-60 Credits)** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| PHY 205 (4cr) – General Physics with Calculus I (1)  *Pre-requisite: MAT 170 or equivalent*  *Co-requisite: MAT 260 and PHY 205L* |  |  |
| PHY 205L (0cr) – General Physics with Calculus I (1) Laboratory  *Co-requisite: PHY 205* |  |  |
| PHY 206 (4cr) – General Physics with Calculus II (2)  *Pre-requisite: MAT 260 and PHY 205 (with a grade of “C” or better)*  *Co-requisite: PHY 206L* |  |  |
| PHY 206L (0cr) – General Physics with Calculus II (2) Laboratory  *Co-requisite: PHY 206* |  |  |
| PHY 280 (4cr) – Mathematical Methods for Physics  *Pre-requisite: PHY 205 and PHY 206 (with a grade "C" or better)* |  |  |
| PHY 307 (4cr) – Modern Physics  *Pre-requisite: MAT 260, PHY 201 or PHY 206 (with a grade "C" or better)* |  |  |
| PHY 320 (4cr) – Classical Mechanics  *Pre-requisite: PHY 307 (with a grade of “C” or better)* |  |  |
| PHY 340 (4cr) – Electricity and Magnetism  *Pre-requisite: PHY 307 (with a grade of “C” or better)* |  |  |
| PHY 350 (4cr) – Advanced Physics Lab  *Pre-requisite: PHY 307 (with a grade of “C” or better)* |  |  |
| PHY 360 (4cr) – Quantum Mechanics  *Pre-requisite: PHY 307 (with a grade of “C” or better)* |  |  |
| PHY 430 (4cr) – Thermodynamics and Statistical Mechanics  *Pre-requisite: PHY 307 (with a grade of “C” or better) and PHY 360 (with a grade of “C” or better)* |  |  |
| PHY 451 (1-4cr) – Physics Capstone Research  *Pre-requisite: PHY 307 (with a grade of “C” or better)* |  |  |
| AST 300 (4cr) – Astrophysics  *Pre-requisite: PHY 307* |  |  |
| MAT 260 (4cr) – Calculus I (1) (Can fulfill Honors Mathematics Requirement)  *Pre-requisite: MAT 170 with a grade of “C” or higher, or equivalent* |  |  |
| MAT 261 (4cr) – Calculus II (2)  *Pre-requisite: MAT 260 with a grade of “C” or higher* |  |  |
| MAT 262 (4cr) – Calculus III (3)  *Pre-requisite: MAT 261 with a grade of “C” or higher* |  |  |
| MAT 300 (4cr) – Differential Equations  *Pre-requisite: MAT 262 with a grade of “C” or higher* |  |  |

### Physics Elective Requirement

| **Physics Elective Requirement (8 Credits)**  Three (3) additional PHY or AST courses above the 300-Level | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| Physics Elective (4cr) |  |  |
| Physics Elective (4cr) |  |  |
| Physics Elective (4cr) |  |  |

### Additional Note

| **Additional Note** |
| --- |
| To meet the requirements of the physics major, all required and elective courses must be completed with a grade of “C” or better. |