

**Bachelor of Science in Physics  
with Computation Concentration (BS PHYS CMPT)  
2024 - 2025 Advising Handout**

**Important Information About Your Degree**

- **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 (Not the same as TSI) OR completing College Algebra or higher with a grade of C or higher.
- **UNT Double-Dip Course Policy (Best Selection):** Courses shown in *italics* satisfy multiple degree program requirements. Students who do not take the Best Selection courses, will have to take additional courses to meet program requirements. Whether or not the course is taken to fulfill a specific university core category, all courses are required by the program to complete the degree. Electives may be required due to double-dipping.
- Hour and GPA Requirements for graduation/degree completion:
  - BS in Physics with a Computational Concentration requires at least 120 hours, 42 advanced, 2.00 UNT GPA, 2.00 overall GPA, a minimum 2.50 GPA in all advanced science and mathematics courses
- Courses marked with an asterisk (\*) require are grade of **C or Higher**.
- Courses in **bold** require prerequisites. **Prerequisites** are listed in the university catalog with the course description.
- An official degree audit is required for graduation; Students **must** meet with an academic advisor to request that their audit be made official. Students can review degree requirements by running their audit at <http://degreereadit.unt.edu>
- For major-specific career information, contact the Department of Department in the Physics Building 110 or at [physics@unt.edu](mailto:physics@unt.edu).
- For teaching certification courses and requirements, contact [tn@unt.edu](mailto:tn@unt.edu).
- For assistance with TSI status or mandatory courses, contact [TSI@unt.edu](mailto:TSI@unt.edu).
- For additional program information visit <https://cos.unt.edu/advising> or contact the COS Advising Center at [cosadvising@unt.edu](mailto:cosadvising@unt.edu).

**Advising Notation Key**

<b>X</b> = Requirement Completed Credit is posted within the degree audit.	<b>IP</b> = In Progress/Pending Credit Advisor has seen proof from an unofficial transcript or an official score	<b>?</b> = Needs further evaluation Student may need to provide additional information. (ex. a course syllabus)
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Major Requirements	
Complete one of the following:	
Option 1:	
<b>PHYS 1510* &amp; 1530* – General Physics I with Calculus &amp; Lab</b>	4
<b>PHYS 1520* &amp; 1540* – General Physics II with Calculus &amp; Lab</b>	4
Option 2:	
<b>PHYS 1710* &amp; 1730* – Mechanics &amp; Lab</b>	4
<b>PHYS 2220* &amp; 2240* – Electricity &amp; Magnetism &amp; Lab</b>	4
Option 3:	
PHYS 1410* & 1430* – General Physics I & Lab	4
<b>PHYS 1420* &amp; 1440* – General Physics I &amp; Lab</b>	4
<b>PHYS 2220* &amp; 2240* – Electricity &amp; Magnetism &amp; Lab</b>	4
All courses listed below are required for the degree	
<b>PHYS 3010* &amp; 3030* – Modern Physics &amp; Lab</b>	4
<b>PHYS 3210* – Mechanics</b>	3
<b>PHYS 3310* – Mathematical Methods in Phys. Sciences</b>	3
<b>PHYS 3420* - Electronics</b>	3
<b>PHYS 3510* – Physics, Computation &amp; Software Applications</b>	3
<b>PHYS 4110* – Statistical and Thermal Physics</b>	3
<b>PHYS 4210* – Electricity and Magnetism</b>	3
<b>PHYS 4310* – Quantum Mechanics</b>	3
<b>PHYS 4950* – Physics Senior Thesis</b>	3
<b>PHYS 4955* – Senior Thesis Capstone</b>	3
<b>Concentration in Computation</b>	
Complete 3 courses (9 hours) from the following with a C or higher	
<b>CHEM 4660* – Intro. to Computational Chemistry</b>	3
<b>MATH 3350* – Intro. to Numerical Analysis</b>	3
<b>PHYS 3910* – Interim Computational Modeling of Phys. Sys.</b>	3
<b>PHYS 4600* – Computer Based Physics</b>	3
<b>Other Required Courses for Degree</b>	
<b>MATH 1710* – Calculus I</b>	4
<b>MATH 1720* – Calculus II</b>	3
<b>MATH 2700* – Linear Algebra and Vector Geometry</b>	3
<b>MATH 2730* – Multivariable Calculus</b>	3
<b>MATH 3410* – Differential Equations</b>	3
<b>CHEM 1410* &amp; 1430* – General Chemistry 1 &amp; Lab</b>	4
<b>CHEM 1420 &amp; 1440 – General Chemistry 2 &amp; Lab</b>	4

University Core Requirements	
42 hours – Students may elect to take any course approved for the University Core Curriculum to fulfill these requirements; however, there are courses recommended in the core categories for students pursuing a Physics major	
Composition I*:	3
<b>Composition II*:</b>	3
<i>Math:</i>	3
<i>Life &amp; Physical Science:</i>	3
<i>Life &amp; Physical Science:</i>	3
Creative Arts:	3
Language, Philosophy & Culture:	3
US History to 1865:	3
US History from 1865:	3
Federal Government:	3
Texas Government:	3
Social & Behavioral Sciences:	3
<i>Component Area Option I:</i>	3
<i>Component Area Option II:</i>	3
<b>Additional University Requirements</b>	
A minimum of 17 hours of advanced electives are needed to meet university requirement of 36 advanced hours.	

\*This information is for **ADVISING ONLY** and is not official. Requirements can and do change without notification.