# College of Science
## B.S. Physics—Option I and II
### 2018-2019 Texas Common Course Numbering System Transfer Guide

This four-year plan provides a model for on-time completion of this UNT program using as many TCCNS courses as possible. The four-year plan also shows the first point when no TCCNS options are available for this program. See the current Undergraduate Catalog for course prerequisites. Course availability at UNT is subject to change, and the plan shown below may change based on updates to UNT’s course offerings.

<table>
<thead>
<tr>
<th>Year</th>
<th>FALL SEMESTER</th>
<th>SPRING SEMESTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRESHMAN</td>
<td>UNT Requirement</td>
<td>TCCNS Option</td>
</tr>
<tr>
<td></td>
<td>ENGL 1310</td>
<td>ENGL 1301</td>
</tr>
<tr>
<td></td>
<td>CHEM 1410/1430</td>
<td>CHEM 1411 or 1311/1111</td>
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<tr>
<td></td>
<td>MATH 1710</td>
<td>MATH 2313 or 2413 or 2513</td>
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<tr>
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<td>UNT Core: Component Area Option</td>
<td>See list of approved courses</td>
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<tr>
<th>SOPHOMORE</th>
<th>UNT Requirement</th>
<th>TCCNS Option</th>
<th>UNT Requirement</th>
<th>TCCNS Option</th>
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<tbody>
<tr>
<td></td>
<td>MATH 2730</td>
<td>MATH 2315 or 2415</td>
<td>MATH 2700</td>
<td>MATH 2318 or 2418</td>
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<tr>
<td></td>
<td>PHYS 2220/2240</td>
<td>PHYS 2426 or 2326/2126</td>
<td>PHYS 3010/3030</td>
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<td>UNT Core: Language, Philosophy and Culture</td>
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<td>UNT Core: Creative Arts</td>
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<tr>
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<td>PSCI 2305</td>
<td>GOVT 2305</td>
<td>PSCI 2306</td>
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<td>*Elective</td>
<td>Consult UNT advisor</td>
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<tr>
<th>JUNIOR</th>
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<th>TCCNS Option</th>
<th>UNT Requirement</th>
<th>TCCNS Option</th>
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<tr>
<td></td>
<td>UNT Core: American History</td>
<td>See list of approved courses</td>
<td>CSCE 1020</td>
<td>COSC 1315 or 1415</td>
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<td>*Elective or Minor Course</td>
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<td></td>
<td>PHYS 3210</td>
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<td>PHYS 4110</td>
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<td></td>
<td>PHYS 3310</td>
<td>*PHYS 3420 or Minor Course</td>
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<td>MATH 3410</td>
<td>Advanced PHYS Elective</td>
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<th>SENIOR</th>
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<th>TCCNS Option</th>
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<td>*Elective or Minor Course</td>
<td>Consult UNT advisor</td>
<td>UNT Core: Social &amp; Behavioral Sciences</td>
<td>See list of approved courses</td>
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</tbody>
</table>

*See current UNT Undergraduate Catalog for details on Option I and Option II major requirements.

http://registrar.unt.edu/transfer-guides

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The UNT Core requirements are shown with Texas Common Course Numbering System values only when UNT offers equivalent courses. There may be other courses in transfer that apply toward the specific degree requirement, but those listed are known to apply.

**UNT Core: Communication**
ENGL 1301; and ENGL 1302 or 2311
A grade of ‘C’ or better is required on courses applied toward this requirement.

*ENGL 2311 is recommended.*

**UNT Core: Mathematics**
This requirement will be met by fulfilling the B.S. Physics mathematics requirement (see next column).

**UNT Core: Life & Physical Sciences**
This requirement will be met by fulfilling the B.S. Physics major requirements (see next column).

**UNT Core: American History**
Two courses chosen from: HIST 1301, 1302, 2301

**UNT Core: Government/Political Science**
GOVT 2305 and 2306

**UNT Core: Creative Arts**
One course chosen from: ARTS 1301 or 1304; DRAM 1310; MUSI 1306; SPCH 2341

**UNT Core: Language, Philosophy and Culture**
One course chosen from: ENGL 2332 or 2333; HIST 2321 or 2322; PHIL 1301, 1304, 2303, 2306, or 2316

**UNT Core: Social & Behavioral Sciences**
One course chosen from: ANTH 2346 or 2351; COMM 1307; CRJ 1301; ECON 2301 or 2302; GEOG 1303; MATH 1316, 1324, 1325 or 1425, 1332, 1342 or 1442 or 2342 or 2442, 1350, 2305 or 2405, 2312 or 2412, 2313 or 2413 or 2513; MUSI 1306 or 1307; PHIL 1301, 1304, 2303, 2306, or 2316; PHYS 1403, 1404, 1410, or 1415; PSYC 2301; SOCI 1301; SOCW 2361; SPCH 1315, 1318 or 2341; TECA 1354

**B.S. Physics—Option I and II**

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Students may not declare a major within the College of Science until they have completed MATH 1100 or have demonstrated proficiency through a math placement exam. Applicants who do not meet the math proficiency requirement will be provisionally admitted as Pre-College of Science (PCOS). PCOS students may visit the College of Science advising office for assistance.

The College of Science offers two options for a Bachelor’s of Science in Physics, Option I and Option II. Option II requires a minor in mathematics and science secondary teaching or a minor in general engineering technology. Students seeking secondary teacher certification should see requirements listed under “Teacher Certification”.

The College of Science encourages students to explore teaching at the secondary level as a career option. Students seeking secondary teacher certification should contact the Teach North Texas Program in the College of Science.

**Courses Recommended for Transfer**
The UNT Core requirements are shown with Texas Common Course Numbering System values only when UNT offers equivalent courses. There may be other courses in transfer that apply toward the specific degree requirement, but those listed are known to apply.

**UNT Core: Component Area Option**
Complete two courses from Component Area Option A OR one course from Component Area Option A AND one course from Component Area Option B.

**Option A:** ANTH 2346, 2351, or 2401; ARTS 1301 or 1304; ASTR 1403 or 1404; BIOL 1408 or 1413, or 2406; COMM 1307; CRJ 1301; DRAM 1310; ECON 2301 or 2302; ENGL 1301, 1302, 2311, 2332, or 2333; HECO 1322; GEOG 1303; GEOL 1401 or 1403; HIST 1301, 1302, 2321, or 2322; MATH 1316, 1324, 1325 or 1425, 1332, 1342 or 1442 or 2342 or 2442, 1350, 2305 or 2405, 2312 or 2412, 2313 or 2413 or 2513; MUSI 1306 or 1307; PHIL 1301, 1304, 2303, 2306, or 2316; PHYS 1403, 1404, 1410, or 1415; PSYC 2301; SOCI 1301; SOCW 2361; SPCH 1315, 1318 or 2341; TECA 1354

**Option B:** SPCH 1311; TECA 1303

**B.S. Physics: Major requirements**
Complete one of the following course groups:

1. PHYS 2425 or 2325/2125
2. PHYS 1401 (or 1301/1101) and PHYS 1402 (or 1302/1102)

Complete the following course: PHYS 2426 or 2326/2126

(Also fulfills Life & Physical Sciences)

Courses shown above are TCCNS options and do not include all courses required for UNT Physics major.

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# B.S. Physics—Option I and II

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## B.S. Physics: Other Course Requirements

Courses shown below are TCCNS options and do not include all courses required for UNT Physics major.

### Required courses in Mathematics:
- MATH 2313 or 2413 or 2513, (fulfills both university mathematics core and major requirements)
- MATH 2314 or 2414
- MATH 2315 or 2415
- MATH 2318 or 2418

### Required courses in chemistry:
- CHEM 1411 or 1311/1111
- CHEM 1412 or 1312/1112

### Required courses in computer science:
- COSC 1315 or 1415

### Additional requirements:
- Substitutions in the B.A. or B.S. degree programs may be made only with the written consent of the department chair.
- A minimum grade point average of 2.5 in all advanced-level science and mathematics courses is required for graduation with a degree in physics or engineering physics.

## B.S. Physics: Minor Requirements

Option II requires a minor in mathematics and science secondary teaching or a minor in general engineering technology. Students seeking secondary teacher certification should see requirements listed under the "Teacher Certification" section of the Physics Department in the UNT Undergraduate Catalog.

## Teacher Certification Option

The College of Science encourages students to explore teaching at the secondary level as a career option. A higher GPA may be required for the certification option. For more information contact your advisor.

## Special Notes

### Hours Required and General/College Requirements:
A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the General University Requirements section of the UNT catalog and the College of Science requirements.

### UNT Core Curriculum/Transfer of Core Curriculum:
UNT complies with the mandates of the 1997 Texas Legislature regarding requirements for state-assisted institutions. Students who successfully complete the common core curriculum (in whole or in part) at a Texas state-assisted institution of higher education are eligible to transfer as “core complete” for those categories in the UNT University Core Curriculum.

Individual academic programs may require courses contained in parts of the University Core Curriculum. Students who wish to take courses that will fulfill both core and major/program requirements simultaneously should check with academic advisors for assistance in selecting core courses.

### Choice of Catalog:
Any student transferring directly from a Texas public community college to UNT shall have the same choice of catalog designating degree requirements as the student would have had if the dates of attendance at the university had been the same as the dates of attendance at the community college.

The College of Science required curriculum and policies are located in the undergraduate catalog under the corresponding catalog year.

For additional program and contact information, visit the College of Science Student Advising website at www.cos.unt.edu/advising.

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