The BA with a major in physics is designed for students planning to teach physics in public school, taking a double major or desiring a liberal arts education with a science concentration.

The College of Arts and Sciences expects students to have completed the Texas State recommended high school program and be ready to enroll in Language 2040 (TCCNS: Language 2311) or a mathematics course above college algebra. If you are not prepared for this level, the necessary prerequisites will either replace electives or increase the hours required for this degree.

### Courses Recommended for Transfer

#### UNT Core: English Composition & Rhetoric

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.A. Physics mathematics requirement (see page two).

#### UNT Core: Natural Science

Two courses chosen from:
- HIST 1301, 1302, 2301, 2327, 2328, 2381

#### UNT Core: Political Science

Two courses chosen from one of the following combinations:
- GOVT 2301 and 2302
- GOVT 2305 and 2306
- GOVT 2301 and 2305
- GOVT 2301 and 2306
- GOVT 2302 and 2306

#### UNT Core: Visual & Performing Arts

One course chosen from:
- ARCH 1301, 1302; ARTS 1301 or 1304; COMM 2366; DRAM 1310, 2361, 2362, 2363, 2366, 2367; DANC 2303, 2304; HUMA 1315; MUSI 1306, 1307, 1308, 1309

#### UNT Core: Humanities

One course chosen from:
- ENGL 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333, 2341, 2342, 2343, 2351; HUMA 1301, 1302; PHIL 1301, 2303, 2306, 2316, or 2317

#### UNT Core: Social & Behavioral Sciences

One course chosen from:
- ANTH 2346, 2351; CRIJ 1301; ECON 1301, 2301, 2302; GEOG 1302; HUMA 2323; PSYC 2301; SOCI 1301, 1306; TECA 1354

#### UNT Core: Understanding the Human Community

This requirement will be met by fulfilling College of Arts and Sciences foreign language requirement (see below).

#### College of Arts & Sciences: Foreign Language

Any foreign language 2311 and 2312.

This also satisfies the university core Understanding the Human Community Requirement.

Latin courses (2311 and 2312) can be used to satisfy this requirement, but will not satisfy the university core Understanding the Human Community requirement. Courses must be taken in the same language.

**NOTE:** Prerequisites for foreign language 2311 and 2312 courses are 1311 and 1312 or 1411 and 1412 or 1511 and 1512. Placement exams may be available; see your community college academic advisor for details.

#### B.A. Physics: Major Requirements

- PHYS 2425 or 2325/2125
- PHYS 2426 or 2326/2126

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

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B.A. Physics: Other Course Requirements

TCCNS options:

Required courses in mathematics:

- MATH 2313 or 2413 or 2513
- MATH 2314 or 2414
- MATH 2315 or 2415

Required courses in laboratory science:

- CHEM 1411 or 1311/1111
- CHEM 1412 or 1312/1112

Complete one of the following Natural/Life Sciences:

- ANTH 2401
- BIOL 1406 or 1106/1306
- BIOL 1407 or 1107/1307
- BIOL 1408 or 1108/1308
- BIOL 1409 or 1109/1309
- BIOL 1411 or 1111/1311
- BIOL 1413 or 1113/1313
- BIOL 1424 or 1124/1324
- BIOL 2401 or 2101/2301
- BIOL 2402 or 2102/2302
- BIOL 2406 or 2106/2306
- BIOL 2420 or 2120/2320
- BIOL 2414 or 2114/2314
- BIOL 2415 or 2115/2315
- GEOL 1401 or 1101/1301
- GEOL 1402 or 1102/1302
- GEOL 1403 or 1103/1303
- GEOL 1404 or 1104/1304
- GEOL 1405 or 1105/1305
- GEOL 1445 or 1145/1345

Substitutions in the BA or BS 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.

Teach North Texas Program: Minor requirements

Students must complete the required 21 hours for the minor in mathematics and science secondary teaching and meet all GPA requirements to apply for state certification. Students should contact the Teach North Texas program for more information on enrolling in the certification courses. No TCCNS options available for Teach North Texas requirements.

A 2.5 GPA is required on all courses counting toward the Teach North Texas Minor; see current UNT Undergraduate Catalog for all minor requirements.

Teacher Certification Information

To be certified to teach in the State of Texas, the student must successfully pass the following exams:

- Exam #1 TExES: Pedagogy & Professional Responsibilities (Grades 8-12)
- Exam #2 TExES: Math and Physics

Additional requirements for Teacher Certification in Math and Physics include a 2.5 overall GPA (including all transferred courses), a 2.5 UNT GPA, and a 2.5 major GPA.

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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.

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<th>Year</th>
<th>Fall Semester</th>
<th>Spring Semester</th>
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<tbody>
<tr>
<td></td>
<td>UNT Requirement</td>
<td>TCCNS Option</td>
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<td>FRESHMAN</td>
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<td></td>
<td>CHEM 1410/1430</td>
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*Students must be admitted to the Teach North Texas Program prior to enrolling in certain Education courses.*

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|        | MATH 4060 | E
|        | PHIL 2600 | None | PHYS Elective (advanced) | Consult UNT advisor |
|        | PHYS Elective (advanced) | None | PHYS Elective (advanced) | None |

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