

# College of Arts & Sciences

## B.S. Physics—Option I and II

### 2013-2014 Texas Common Course Numbering System Transfer Guide



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

### Courses Recommended for Transfer

The UNT Core requirements, with the exception of U.S. History and Political Science, and the College & Major 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: 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.S. Physics mathematics requirement (see next column).

#### UNT Core: Natural Science

This requirement will be met by fulfilling the B.S. Physics major requirements (see next column).

#### UNT Core: U.S. History

Two courses chosen from: HIST 1301, 1302, 2301

#### UNT Core: Political Science

As of Fall 2013, only the following courses are offered at the two-year level:

- GOVT 2305 and 2306

Other acceptable combinations are:

- GOVT 2301 and 2302
- GOVT 2301 and 2305
- GOVT 2301 and 2306
- GOVT 2302 and 2306

#### UNT Core: Visual & Performing Arts

One course chosen from: ARTS 1301, 1303, or 1304; DRAM 1310; MUSI 1306 or 1307; SPCH 2341

#### UNT Core: Humanities

One course chosen from: ENGL 2322, 2323, 2327, 2328, 2332, or 2333; PHIL 1304 or 2316

#### UNT Core: Social & Behavioral Sciences

One course chosen from: ANTH 2346 or 2351; COMM 1307; CRIJ 1301; ECON 2301 or 2302; HUMA 2323; PSYC 2301; SOCI 1301; SPCH 1318; TECA 1354

#### UNT Core: Discovery

One course chosen from: ARTS 1301; BIOL/HECO 1322; GEOG 1303; HIST 2321 or 2322; MATH 2305 or 2405; PHIL 1301, 2303, or 2306; SPCH 1311 or 1315; TECA 1303

#### UNT Core: Capstone

The Capstone Core requirement is unique to UNT and will be fulfilled by an advanced course at UNT.

#### 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

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

#### 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,
- 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 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.

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#### **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 2012-2013 Undergraduate Catalog.

#### **Teacher Certification Option**

The College of Arts and Sciences 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 the College of Arts and Sciences Office of Student Advising at 940-565-2051.

#### **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 Arts and Sciences 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 Arts & Sciences required curriculum and policies are located in the [Undergraduate Catalog 2013-2014](#).

For additional program and contact information see the College of Arts and Sciences Student Advising website:  
[www.cas.unt.edu/advising](http://www.cas.unt.edu/advising)

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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.

YEAR	FALL SEMESTER		SPRING SEMESTER	
	UNT Requirement	TCCNS Option	UNT Requirement	TCCNS Option
FRESHMAN	ENGL 1310 or 1313	ENGL 1301	TECM 2700 (recommended) or ENGL 1320 or 1323	ENGL 2311 (recommended) or ENGL 1302
	CHEM 1410/1430	CHEM 1411 or 1311/1111	CHEM 1420/1440	CHEM 1412 or 1312/1112
	MATH 1710	MATH 2313 or 2413 or 2513	MATH 1720	MATH 2314 or 2414
	UNT Core: Discovery	See list of approved courses	PHYS 1710/1730	PHYS 2425 or 2325/2125

YEAR	FALL SEMESTER		SPRING SEMESTER	
	UNT Requirement	TCCNS Option	UNT Requirement	TCCNS Option
SOPHOMORE	MATH 2730	MATH 2315 or 2415	MATH 2700	MATH 2318 or 2418
	PHYS 2220/2240	PHYS 2426 or 2326/2126	PHYS 3010/3030	None
	UNT Core: Humanities	See list of approved courses	UNT Core: Visual & Performing Arts	See list of approved courses
	UNT Core: Political Science	See list of approved courses	UNT Core: Political Science	See list of approved courses
			*Elective or Minor Course	Consult UNT advisor

YEAR	FALL SEMESTER		SPRING SEMESTER	
	UNT Requirement	TCCNS Option	UNT Requirement	TCCNS Option
JUNIOR	UNT Core: U.S. History	See list of approved courses	CSCE 1020	COSC 1315 or 1415
	*Elective or Minor Course	Consult UNT advisor	UNT Core: U.S. History	See list of approved courses
	PHYS 3210	None	PHYS 4110	None
	PHYS 3310		*PHYS 3420 or Minor Course	
	MATH 3410		PHYS Elective (advanced)	

YEAR	FALL SEMESTER		SPRING SEMESTER	
	UNT Requirement	TCCNS Option	UNT Requirement	TCCNS Option
SENIOR	PHYS 4210	None	PHYS 4310	None
	*PHYS Elective (advanced) or Minor Course		PHYS 4950	
	*PHYS Elective (advanced) or Minor Course		*Elective (advanced) or Minor Course	
	*Elective or Minor Course	Consult UNT advisor	*Elective or Minor Course	Consult UNT advisor
	UNT Core: Social & Behavioral Sciences	See list of approved courses	UNT Core: Capstone	None

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