Entering students interested in majoring in biochemistry will be classified as pre-majors and will be advised by the department. Admission to the university does not guarantee admission to the major.

To be admitted to the major (and be eligible to enroll in advanced biochemistry courses), a pre-major must meet all the requirements listed in "Admission to the Major" below.

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) and 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.

### Courses Recommended for Transfer

**UNT Core: English Composition & Rhetoric**
This requirement will be met by fulfilling the B.S. Biochemistry English Composition & Rhetoric requirement (see next page).

**UNT Core: Mathematics**
This requirement will be met by fulfilling the B.S. Biochemistry major mathematics requirement (see page two).

**UNT Core: Natural Science**
This requirement will be met by fulfilling the B.S. Biochemistry major requirements (see page two).

**UNT Core: U.S. History**
Two courses chosen from: HIST 1301, 1302, 2301

**UNT Core: Political Science**
Two courses chosen from one of the following combinations:
- GOVT 2301 and 2302
- GOVT 2301 and 2305
- GOVT 2301 and 2306
- GOVT 2302 and 2306
- GOVT 2305 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; CRJ 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; 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.

**College of Arts & Sciences Core: Foreign Language**
Students may complete either of two options to satisfy the College of Arts and Sciences foreign language requirement:

**Option I:** Any foreign language 2311 and 2312.
Courses must be taken in the same language.

**Option II for B.S. Majors:** Complete three courses from approved upper level options at UNT. A student who wishes to fulfill the foreign language requirement by this option must first be counseled by an undergraduate advisor of the Department of Biological Sciences at UNT and must obtain written approval of Option II for inclusion in the student's degree plan.

### Biochemistry: Admission to the Major

College Admissions Requirements: Entering transfer student interested in majoring in Biochemistry must first apply to be a pre-major.

All of the following pre-major requirements must be completed to apply for the Biochemistry major and take upper level courses.

- Complete 30 hours of college-level courses
- Biology Core Courses: BIOL 1406 or 1106/1306; BIOL 1407 or 1107/1307 or BIOL 2421 or BIOL 2321/2121 with a grade of C or higher.
- Chemistry Core Courses: CHEM 1411 or 1111/1311; CHEM 1412 or 1112/1312; CHEM 2423 or 2123/2323 (approved substitution) with a grade of C or higher.
- Mathematics Pre-requisite course: MATH 2312 or 2412 (pre-requisite to Calculus I) with a grade of C or higher.
- Have at least a 2.5 grade point average on the required biology and chemistry courses listed; and have a minimum 2.5 overall grade point average.
- A minimum UNT 2.5 grade point average and an overall 2.5 grade point average are required to enter the department as a pre-major or major (beginning freshmen are exempt).

http://essc.unt.edu/registrar/articulation/
# 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 and Sciences required curriculum and policies are located in the [Undergraduate Catalog 2012-2013](http://essc.unt.edu/registrar/articulation/).

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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## Biochemistry: English Composition and Rhetoric

**TCCNS Options:**

- ENGL 1301 and 2311

A grade of ‘C’ or better is required on courses applied toward this requirement.

*ENGL 2311 is required for Biochemistry majors however, students who have completed ENGL 1302 prior to attending UNT may substitute this course for ENGL 2311*

## Biochemistry: Major Requirements

**TCCNS Options:**

- CHEM 1411 or 1111/1311
- CHEM 1412 or 1112/1312
- CHEM 2423 or 2123/2323 (approved substitution)
- CHEM 2425 or 2125/2325 (approved substitution)

CHEM 1411 and 1412 fulfill both Natural Science core and major requirements.

*Courses listed above are TCCNS options and do not include all courses required for the UNT Biochemistry major.*

## Biochemistry: Advanced Coursework

No TCCNS options available.

## Biochemistry: Other Course Requirements

**TCCNS Options:**

- ENGL 2311
- MATH 2313 or 2413 or 2513
- MATH 2314 or 2414
- PHYS 2425 or PHYS 2125/2325 (approved substitution)
- PHYS 2426 or PHYS 2126/2326 (approved substitution)
- A minimum 2.5 grade point average must be maintained on all advanced courses in the division of sciences. A minimum 2.5 grade point average is required for graduation.
- A minimum UNT 2.5 grade point average and an overall 2.5 grade point average are required to enter the department as a pre-major or major (beginning freshmen are exempt).
- Students in the department whose UNT or overall grade point average drop below 2.5 for two consecutive semesters will be removed from the program.
- Only two attempts will be allowed for each biology and biochemistry course in this degree.

## Biochemistry: Minor in Biology (Required)

Minor of 20 hours in Biology is required.

**TCCNS Options:**

- BIOL 1406 or 1106/1306
- BIOL 1407 or 1107/1307 or BIOL 2421 or BIOL 2321/2121

## Special Notes

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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)
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.

UNT courses noted (#) do not have TCCNS equivalents, but have approved transferable substitutions.

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Semester</th>
<th>Spring Semester</th>
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<tbody>
<tr>
<td><strong>Freshman</strong></td>
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<tr>
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<td>UNT Requirement</td>
<td>TCCNS Option</td>
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<tr>
<td>BIOL 1710/BIOL 1730</td>
<td>BIOL 1406 or 1106/1306</td>
<td>BIOL 1720/BIOL 1740 or BIOL 1722/BIOL 1744, or BIOL 2041/BIOL 2042</td>
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<td>CHEM 1411 or 1111/1311</td>
<td>CHEM 1420/CHEM 1440</td>
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<td>ENGL 1310</td>
<td>ENGL 1301</td>
<td>TECM 2700</td>
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<td>MATH 1710</td>
<td>MATH 2313 or 2413 or 2513</td>
<td>MATH 1720</td>
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<td>PHYS 2125/2325 or PHYS 2425</td>
<td>PHYS 1520#/PHYS 1540# or PHYS 2220/2240</td>
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<td>UNT Core: Discovery</td>
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