**CORE CURRICULUM**

<table>
<thead>
<tr>
<th>Course</th>
<th>Minimum Hours Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year Signature Course</td>
<td>3</td>
</tr>
<tr>
<td>English Composition</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>American &amp; Texas Government</td>
<td>6</td>
</tr>
<tr>
<td>American History</td>
<td>6</td>
</tr>
<tr>
<td>Social &amp; Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics (Fulfilled by course in major)</td>
<td>0</td>
</tr>
<tr>
<td>Science &amp; Technology-I (Fulfilled by courses in major)</td>
<td>0</td>
</tr>
<tr>
<td>Science &amp; Technology-II (Fulfilled by courses in major)</td>
<td>0</td>
</tr>
<tr>
<td>Visual &amp; Performing Arts</td>
<td>3</td>
</tr>
</tbody>
</table>

**SKILLS & EXPERIENCE FLAGS**

Flags attached to courses are displayed in the online Course Schedule.

- **Two Writing Flags:** □ □
  - 1. Core Writing Flag (cannot also fulfill another core curriculum requirement)
  - 2. Additional Writing Flag
    - Note: One of the two writing flags must be upper-division.
- **One Quantitative Reasoning Flag** □
- **One Global Cultures Flag** □
- **One Cultural Diversity in the U.S. Flag** □
- **One Ethics and Leadership Flag** □
- **One Independent Inquiry Flag** □

**FOREIGN LANGUAGE**

1 of the following: 6–12

- a. Beginning level proficiency in a foreign language
- b. 1 course in a foreign language & 1 three-hour course in the culture of the same language area
- c. 2 three-hour courses from the same foreign culture area

Foreign culture courses selected from approved lists maintained by the college. Bit.ly/19Ao6pc

**INTRODUCTORY MATHEMATICS & SCIENCE**

<table>
<thead>
<tr>
<th>Course</th>
<th>Minimum Hours Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>M 408C &amp; 408D or 408N, 408S, &amp; 408M</td>
<td>8–12</td>
</tr>
<tr>
<td>PHY 301 &amp; 101L*, 316 &amp; 116L*, and 315 &amp; 115L</td>
<td>12</td>
</tr>
<tr>
<td>* PHY 303K &amp; 103M and 303L &amp; 103N, substitute for PHY 301 &amp; 101L and 316 &amp; 116L However, they are not preferred preparation for PHY 315 &amp; 115L.</td>
<td></td>
</tr>
<tr>
<td>CH 301, 301C, or 301H</td>
<td>3</td>
</tr>
<tr>
<td>CH 302, 302C, or 302H</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Introductory science is substantially different for Option 6

**OPTION 2: COMPUTATION**

Designed to provide the necessary foundation and hands-on skill in computation for the student who plans a career or further study in computational physics or computer science. Students who complete this option may simultaneously fulfill some of the requirements of the Scientific Computation and Data Sciences Certificate.

- **Additional Science:** 6
  - 6 hours in BIO, GEO, or AST
  - Note: courses that cannot count toward major requirements in department that offers it cannot be applied.
- **Upper-division mathematics and statistics and data sciences:** 14
  - M 427J or 427K
  - M 427L
  - 6 additional hours of upper-division Mathematics or SDS
  - SDS 329C and M 362K are recommended
- **Upper-division physics:** 24
  - PHY 355 Modern Physics & Thermodynamics
  - PHY 338K Electronic Techniques
  - PHY 353L Modern Physics Laboratory
  - PHY 356K Classical Dynamics
  - PHY 352K Classical Electrodynamics I
  - PHY 329 Introduction to Computational Physics
  - PHY 373 Quantum Physics I: Foundations
  - PHY 369 Thermodynamics & Statistical Mechanics (373 is prerequisite or co-requisite)

**1 scientific computation specialization, 12 hours total:**

- **A. 1st choice**
  - CS 303E, and CS 313E or SDS 322
  - 2 courses from 2 areas listed below:
    - Numerical methods: M 348; SDS 335; CS 323E, 323H, 367; CHE 348
    - Statistical Methods: M 358K, 378K; BME 335
    - Other computing topics: M 346, 362M, 368K, 372K, 376C; SDS 329D, 374C, 374D, 374E; CS 324E, 327E, 329E, 377; ME 367S

- **B. 2nd choice**
  - 12 hours from: EE 306, 312, 316, 319K, and 422C

**ELECTIVES**

Enough elective hours to reach 126 total (The number of elective hours needed may vary depending on course selections.)

**ADDITIONAL GRADUATION REQUIREMENTS**

- Minimum 21 upper-division hours in residence, including 12 in Physics
- Minimum 60 hours in residence overall
- Minimum 36 upper-division hours
- 126 hours total overall
- Minimum grade of C- & minimum 2.0 GPA in all Mathematics & Natural Sciences courses
- Minimum UT-Austin Grade Point Average of 2.0
- Must apply to graduate during final semester
- 2020–22 Catalog expires August 2028

Bachelor of Science in Physics (BS) 2020–22 Checklist

The University of Texas at Austin
College of Natural Sciences