# Bachelor of Science in Physics (BS) 2018–20 Checklist

## Core Curriculum
Core courses must be chosen from approved lists. [bit.ly/1d6oP6l](bit.ly/1d6oP6l)

<table>
<thead>
<tr>
<th>Course Area</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:**
  - Core Writing Flag (cannot also fulfill another core curriculum requirement)
  - 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:

- 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 language courses selected from approved lists maintained by the college. [Bit.ly/19Ao6pc](bit.ly/19Ao6pc)

## Introductory Mathematics & Science

<table>
<thead>
<tr>
<th>Course Code</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>CH 301 or 301H</td>
<td>3</td>
</tr>
<tr>
<td>CH 302 or 302H</td>
<td>3</td>
</tr>
</tbody>
</table>

* PHY 303K & 103M and 303L & 103N, substitute for PHY 301 & 101L and 316 & 116L. However, they are not preferred preparation for PHY 315 & 115L.

Note: Introductory science is substantially different for Option 6

## Option 7: Biophysics

### Biology, Chemistry, and Biochemistry:

- BIO 311C, 311D, and 325 or BIO 315H and 325H
- BIO 206L
- CH 320M or 328M
- BCH 369

### Upper-division mathematics:

- M 427J or 427K
- M 427L
- 6 additional hours of upper-division Mathematics: M 340L, 361, and 362K are recommended

### Upper-division physics:

- PHY 355 Modern Physics & Thermodynamics
- PHY 345 Biophysics
- PHY 353L Modern Physics Laboratory
- PHY 336K Classical Dynamics
- PHY 352K Classical Electrodynamics I
- PHY 373 Quantum Physics I: Foundations
- PHY 369 Thermodynamics & Statistical Mechanics

### 1 of the following areas:

- Cell Biology: BIO 320
- Microbiology: BIO 326R
- Developmental Biology: BIO 349
- Neurobiology: NEU 371M or 365R
- Virology: BIO 330
- Computation: SDS 335 & BIO 337J*
  - * Note: if computation is selected, both courses must be completed

A list of recommended biology laboratory courses that complement some lecture courses are available in the Mathematics, Physics, and Astronomy Advising Center.

### Electives

Enough elective hours to reach 126 total

VARY

(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
- 2018–20 Catalog expires August 2026