CORE CURRICULUM
Core courses must be chosen from approved lists. bit.ly/1d6oP6l

First Year Signature Course 3
English Composition 3
Humanities 3
American & Texas Government 6
American History 6
Social & Behavioral Science 3
Mathematics (Fulfilled by course in major) 0
Science & Technology-I (Fulfilled by courses in major) 0
Science & Technology-II (Fulfilled by courses in major) 0
Visual & Performing Arts 3

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
M 408C & 408D or 408N, 408S, & 408M 8–12
PHY 301 & 101L*, 316 & 116L*, and 315 & 115L 12
* PHY 303K & 103M and 303L & 103N, substitute for PHY 301 & 101L and 316 & 116L. However, they are not preferred preparation for PHY 315 & 115L.
CH 301 or 301H 3
CH 302 or 302H 3

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 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: 12
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 349
   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
□ 2018–20 Catalog expires August 2026