

<b>CORE CURRICULUM</b> Core courses must be chosen from approved lists. <i>bit.ly/1d6oP6l</i>	Minimum Hours Required
<b>First Year Signature Course</b>	3
<b>English Composition</b>	3
<b>Humanities</b>	3
<b>American &amp; Texas Government</b>	6
<b>American History</b>	6
<b>Social &amp; Behavioral Science</b>	3
<b>Mathematics</b> (Fulfilled by course in major)	0
<b>Science &amp; Technology-I</b> (Fulfilled by courses in major)	0
<b>Science &amp; Technology-II</b> (Fulfilled by courses in major)	0
<b>Visual &amp; Performing Arts</b>	3
<b>SKILLS &amp; EXPERIENCE FLAGS</b> Flags attached to courses are displayed in the online Course Schedule.	
<b>Two Writing Flags:</b>	<input type="checkbox"/> <input type="checkbox"/>
1. Core Writing Flag (cannot also fulfill another core curriculum requirement)	
2. Additional Writing Flag <i>Note: One of the two writing flags must be upper-division.</i>	
<b>One Quantitative Reasoning Flag</b>	<input type="checkbox"/>
<b>One Global Cultures Flag</b>	<input type="checkbox"/>
<b>One Cultural Diversity in the U.S. Flag</b>	<input type="checkbox"/>
<b>One Ethics and Leadership Flag</b>	<input type="checkbox"/>
<b>One Independent Inquiry Flag</b>	<input type="checkbox"/>
<b>TEACHING INSTRUCTION COURSEWORK</b>	
<b>HIS 329U or PHL 329U</b>	3
<b>Research methods course:</b> PHY 341 (Topic 7: Research Methods: UTeach) <i>Note: if research methods is taken outside of PHY, must complete 3 hours of additional upper-division PHY</i>	3
<b>UTS 101, 110</b>	2
<b>EDC 365C or UTS 350</b>	3
<b>EDC 365D or UTS 355</b>	3
<b>EDC 365E or UTS 360</b>	3
<b>EDC 651S (Topic 4: Secondary School Teaching Practicum: Science) and UTS 170</b> <i>Grades of at least C- are required in all courses in this section</i>	7
<b>Middle Grade Certification (Optional)</b> EDP 350G or PSY 301 and 304 EDC 339E <i>Grades of at least C- are required in all courses in this section</i>	6–9
<b>ELECTIVES</b> Enough elective hours to reach 126 total <i>(The number of elective hours needed may vary depending on course selections.)</i>	VARY

<b>OPTION 5: TEACHING</b> Designed to fulfill the course requirements for certification as a middle grades or secondary school science teacher in Texas. Students choose 1 of 4 certification options: composite science certification, physical sciences certification, physics/mathematics certification, or mathematics, physical science, and engineering certification. Completion of the course requirements does not guarantee teaching certification. Contact the UTeach-Natural Sciences academic adviser for more information.	Minimum Hours Required
<b>INTRODUCTORY MATHEMATICS &amp; SCIENCE</b>	
<b>M 408C &amp; 408D or 408N, 408S, &amp; 408M</b>	8–12
<b>M 427J or 427K</b>	4
<b>M 427L</b>	4
<b>PHY 301 &amp; 101L*, 316 &amp; 116L*, and 315 &amp; 115L</b> <i>* 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.</i>  <i>Note: Introductory science is substantially different for Option 6</i>	12
<b>Upper-division physics common to all certifications:</b> PHY 355 Modern Physics & Thermodynamics PHY 353L Modern Physics Laboratory	6
<b>3 of the following (common to all certifications):</b> PHY 329 Introduction to Computational Physics PHY 333 Modern Optics PHY 336K Classical Dynamics PHY 338K Electronic Techniques PHY 352K Classical Electrodynamics I PHY 373 Quantum Physics I: Foundations SCI 365 Physics by Inquiry	9
<b>ADDITIONAL GRADUATION REQUIREMENTS</b>	
<input type="checkbox"/> Minimum 21 upper-division hours in residence, including 12 in Physics <input type="checkbox"/> Minimum 60 hours in residence overall <input type="checkbox"/> Minimum 36 upper-division hours <input type="checkbox"/> 126 hours total overall <input type="checkbox"/> Minimum grade of C- & minimum 2.0 GPA in all Mathematics & Natural Sciences courses <input type="checkbox"/> Minimum UT-Austin Grade Point Average of 2.5 <input type="checkbox"/> Must pass the final teaching portfolio review <input type="checkbox"/> Must apply to graduate during final semester <input type="checkbox"/> 2020–22 Catalog expires August 2028	

See page 2 for Option 5  
Teaching Certifications

**OPTION 5: TEACHING**

Complete all coursework in 1 of the following certifications:

**Composite Science Certification:**

BIO 311C and 311D

Minimum Hours Required

6

CH 301, 301C, or 301H

3

CH 302, 302C, or 302H

3

6 hours of coursework in GEO

*Note: courses intended for non-science majors may not be counted toward this requirement*

6

6 additional hours in BIO, CH, or GEO to complete 12 hours in a 2nd field

6

**Physical Sciences Certification**

3 additional hours of upper-division PHY

3

CH 301, 301C, or 301H

3

CH 302, 302C, or 302H

3

General CH lab:

CH 204 or 317

2-3

Physical chemistry:

CH 353 & 153K  
CH 354L & 154K

8

Analytical Chemistry:

CH 455 or 456

4

**For physics/mathematics certification:**

Secondary school math:

M 315C and 333L

6

Linear algebra:

M 341 or 340L

3

Discrete math:

M 325K

3

Probability:

M 362K

3

Applied statistics:

M 358K

3

Problem solving or discovery:

M 375D

3

**For mathematics, physical science, and engineering certification:**

Minimum Hours Required

CH 301, 301C, or 301H

3

CH 302, 302C, or 302H

3

General CH lab:

CH 204

2

Secondary school math:

M 315C and 333L

6

Discrete math:

M 325K

3

Probability:

M 362K

3

Applied statistics:

M 358K

3

Engineering coursework:

ES 301 Engineering Design and Problem Solving  
ME 377K Projects in Mechanical Engineering\*

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\*upon approval by the UTeach Program