

UTeach-Natural Sciences Secondary Teaching, Undergraduate Certificate

UTeach-Natural Sciences Secondary Teaching Option Certificate

The UTeach-Natural Sciences program offers a secondary teaching option certificate to students who intend to teach at the middle or high school level. UTeach-Natural Sciences prepares students in the College of Natural Sciences, the Jackson School of Geosciences, and Cockrell School of Engineering for middle school or secondary teacher certification in science, technology, engineering, and mathematics (STEM). However, any students in any major at the University may seek STEM teacher certification through UTeach-Natural Sciences.

This certificate is composed of two separate tracks: a track for undergraduates, and an accelerated track for seniors and degree holders within one year of earning an undergraduate degree.

State of Texas teacher certification requirements are governed by the Texas Education Agency and are subject to change. Students must adhere to current teacher certification requirements, even if they differ from those listed in the University catalogs.

Total Hours Required: 24 Requirements

Requirements are listed in the table below. Additional requirements may follow the table, so be sure to read the entire page. Some required courses listed below may also satisfy [General Education](#) requirements, including [Core Curriculum](#). Students should also review the [University's Undergraduate Minor and Certificate Requirements and Policies](#).

Code	Title	Hours
Hours chosen from:		3
BIO 337.2	Research Methods: UTeach (Topic 2: Research Methods: UTeach)	
CH 368.1	Research Methods: UTeach (Topic 1: Research Methods: UTeach)	
PHY 341.7	Research Methods: UTeach (Topic 7: Research Methods: UTeach)	
HIS 329U or PHL 329U	Perspectives on Science and Mathematics Perspectives on Science and Mathematics	3
Professional Development Coursework		
Hours chosen from:		18
EDC 651S.3	Secondary School Teaching Practicum: Math (Topic 3: Secondary School Teaching Practicum: Math or Topic 4: Secondary School Teaching Practicum: Science)	
EDC 365C or UTS 350	Knowing and Learning in Math and Science Knowing and Learning in Math and Science	
EDC 365D or UTS 355	Classroom Interactions Classroom Interactions	
EDC 365E	Project-Based Instruction	

or UTS 360 Project-Based Instruction

UTS X01 & UTS X10 & UTS X70	Secondary Teacher Education Preparation: Step 1 and Secondary Teacher Education Preparation: STEP 2 and Student Teaching Seminar
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Total Hours

24

Additional Requirements and Policy

In addition, students must meet the following requirements to graduate and be recommended for certification:

- University grade point average of at least 2.50, with grades of at least C-.
- Successful completion of secondary teacher certification and identified discipline specific content courses with a grade of at least C-. Lists of the required content courses and additional certification requirements are available in the UTeach-Natural Sciences office and online.
 - Science teacher certification: All courses must be majors level.
 - Biology: At least 24 hours in biology (some biochemistry and neuroscience courses may count), and six hours in each from chemistry, geology, and physics.
 - Chemistry: At least 24 hours in chemistry, and six hours in each from biology, geology, and physics.
 - Geology: At least 24 hours in geology, and six hours in each from biology, chemistry, and physics.
 - Physics: At least 24 hours in physics, and six hours in each from biology, chemistry, and geology.
 - Mathematics teacher certification: All courses, except M 315C, must count toward a math degree.
 - Mathematics: At least 24 hours in math, including M 315C, M 333L, and M 375D.
 - Life Sciences teacher certification: All courses must be majors level.
 - Life sciences: At least 24 hours in biology, including INB 370; CH 301.
 - Physics and Mathematics and Physical Science (Physics and Chemistry) teacher certification: All courses must be majors level and/or count towards a physics, chemistry and/or mathematics degree.
 - Physics and Mathematics: At least 24 hours in physics, and M 315C, M 333L and M 375D.
 - Physical Science (Physics and Chemistry): At least 24 hours in physics, and CH 301, CH 302, CH 204, CH 353 and CH 455.
 - Computer Science and Computer Science and Math teacher certification: All courses must count toward a computer science and/or math degree.
 - Computer Science: At least 24 hours of computer science.
 - Computer Science and Mathematics: At least 24 hours of computer science and M 315C, M 333L, and M 375D.

f. Mathematics, Physical Science, and Engineering certification: All courses must be majors level.

i. For Engineering majors: M 315C, M 333L, and M 375D, PHY 303K and PHY 105M, PHY 303L and PHY 105N, and CH 301.

ii. For Mathematics majors: PHY 301 and PHY 101L, PHY 316 and PHY 116L, PHY 315 and PHY 115L, CH 301, CH 302, and CH 204, E S 301, M E 377K.

iii. For Chemistry majors: M 315C, M 427J or M 427K, M 333L, and M 375D, PHY 301 and PHY 101L, PHY 316 and PHY 116L, PHY 315 and PHY 115L, E S 301, and M E 377K.

3. Successful passing of final teaching portfolio review, conducted by the UTeach Program in Natural Sciences

Special Requirements

Students who successfully complete this certificate may be eligible for recommendation for state teaching certification if they have met all professional development and discipline specific content courses. Students seeking middle grades certification must also complete the following courses with grades of at least C-:

1. EDP 350G Adolescent Development **or** PSY 301 Introduction to Psychology and PSY 304 Introduction to Child Psychology
2. EDC 339E Secondary School Literacy across the Disciplines

The courses required for all teacher certifications include a minimum of 30 field-based experience (FBE) hours prior to the clinical teaching experience. All students in the field experience courses (UTS 101, UTS 110, UTS 211, EDC 365C, EDC 365D, EDC 365E, EDC 665 and EDC 651S) are observed by and received feedback from highly-qualified Professors of Practice and select in-service educators throughout each semester. Students must pass the field experience in order to pass these courses. During clinical teaching (UTS 170, EDC 651S), supervision and feedback are provided by Professors of Practice, field supervisors, and the cooperating teacher.

Information about additional certification requirements is available from the UTeach-Natural Sciences academic advisor.

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