

School of Interdisciplinary Studies

Education (BS) with 4-8 Science

UT Dallas offers rigorous university-based teacher certification curricula and enjoys an outstanding reputation for producing excellent teachers.

At UT Dallas, coursework and field experiences leading to teacher certification may be accomplished through either the Teacher Development Center (TDC) program in the School of Interdisciplinary Studies (972-883-2730) or through UTeach Dallas program in the School of Natural Sciences and Mathematics (NS&M) (972-883-2496).

UT Dallas School of Interdisciplinary Studies offers both a Bachelor of Arts in Education degree (BAED) and a Bachelor of Science in Education degree (BSED). Each degree emphasizes a broad understanding and wide perspective of the field of education. Becoming a teacher takes preparation and planning. To ensure the highest professional standards, the state of Texas and UT Dallas require students to pass a series of rigorous courses, complete extensive fieldwork and demonstrate their knowledge of content and educational expertise on state licensure exams to become fully certified as a highly qualified teacher in Texas. The TDC at UT Dallas offers all the preparation courses required for teacher certification, including practical classes in curriculum and instruction, educational technology, and classroom management. The TDC interfaces and engages with all academic schools at UT Dallas, as well as many area school districts, to assist students as they progress through the teacher certification program. The Teacher Development Center at UT Dallas is fully accredited by the Texas Education Agency.

All BAED and BSED students are required to select a certification focus before their junior year.

Bachelor of Science in Education with 4-8 Science

[Degree Requirements](#) (120 semester credit hours)

[View an Example of Degree Requirements by Semester](#)

Faculty

FACG> is-education-bs

Professors: Karen Prager, Lawrence J. Redlinger, Erin A. Smith

Professor of Instruction: Barbara Ashmore, Tonja Wissinger

Associate Professors of Instruction: Kathleen Byrnes, Patricia A. Leek, Syed Naqvi

Assistant Professors of Instruction: Kyle Hammonds, Marc Lusk, Michele McNeel, Azadeh Stark, Larissa Werhnyak

I. Core Curriculum Requirements: 42 semester credit hours¹

Communication: 6 semester credit hours

Select any 6 semester credit hours from [Communication Core](#) courses (see advisor)

Mathematics: 3 semester credit hours

[MATH 1325](#) Applied Calculus I

[MATH 2413](#) Differential Calculus²

or [MATH 2417](#) Calculus I²

Or select any 3 semester credit hours from [Mathematics Core](#) courses (see advisor)³

Life and Physical Sciences: 6 semester credit hours

[BIOL 2311](#) Introduction to Modern Biology I⁴

[BIOL 2312](#) Introduction to Modern Biology II⁴

Or select any 6 semester credit hours from [Life and Physical Sciences Core](#) courses (see advisor)³

Language, Philosophy and Culture: 3 semester credit hours

[AMS 2341](#) American Studies for the Twenty-First Century

or [AMS 2300](#) American Popular Culture

Or select any 3 semester credit hours from [Language, Philosophy and Culture Core](#) courses (see advisor)

Creative Arts: 3 semester credit hours

Select any 3 semester credit hours [Creative Arts Core](#) courses (see advisor)

American History: 6 semester credit hours

Select any 6 semester credit hours from [American History Core](#) courses (see advisor)

Government/Political Science: 6 semester credit hours

Select any 6 semester credit hours from [Government/Political Science Core](#) courses (see advisor)

Social and Behavioral Sciences: 3 semester credit hours

Select any 3 semester credit hours from [Social and Behavioral Sciences Core](#) courses. (see advisor)

Component Area Option: 6 semester credit hours

[MATH 1326](#) Applied Calculus II

or [MATH 2414](#) Integral Calculus₂

or [MATH 2419](#) Calculus II₂

[MATH 2415](#) Calculus of Several Variables₂

Or select any 6 semester credit hours from [Component Area Option Core](#) courses. (see advisor)₃

II. Major Requirements: 60 semester credit hours beyond Core Curriculum

Major Related Courses (18 semester credit hours)

[BIS 3320](#) The Nature of Intellectual Inquiry

[ED 4694](#) Student Teaching Secondary

or [ED 4394](#) Residency 1- Secondary

and [ED 4395](#) Residency 2- Secondary

[ISNS 3373](#) Our Nearest Neighbors in the Sky

Choose two from the following:

[ISNS 2367](#) The Oceans₅

or [ISNS 2359](#) Earthquakes and Volcanoes₅

[ISNS 2368](#) Weather and Climate₅

or [ISNS 2366](#) Global Climate Change

Foundation I: Natural Science and Mathematics (12 semester credit hours)

[NATS 1311](#) The Universe, and Everything Else₅

or [PHYS 1301](#) College Physics I ^{5, 4}

6 semester credit hours of upper-level [BIOL](#) courses

And choose one from the following:

[GEOS 1303](#) Physical Geology ^{5, 6}

[GEOS 1304](#) History of Earth and Life ^{5, 7}

[GEOS 2310](#) Environmental Geology ⁵

Foundation II: Education (12 semester credit hours)

[ED 3314](#) The American Public School

[ED 3339](#) Educational Psychology for Teachers

or [PSY 3339](#) Educational Psychology

[ED 4351](#) ESL for K-12 Teachers

[ED 4353](#) Reading in Secondary Content

Teaching Techniques (18 semester credit hours)

[BIOL 2281](#) Introductory Biology Laboratory

[CHEM 1311](#) General Chemistry I ⁵

[CHEM 1111](#) General Chemistry Laboratory I ⁵

[CHEM 1312](#) General Chemistry II ^{5, 8}

[ED 3371](#) Curriculum and Instruction in the Natural Sciences

[ED 4361](#) Classroom Management Secondary

[NSC 3361](#) Introduction to Neuroscience

III. Certification Requirements and Recommendations: 18 semester credit hours beyond Core Curriculum

[BIS 4306](#) Strategies for Diversity in Education

[CHEM 1112](#) General Chemistry Laboratory II

[ED 4372](#) Educational Technology

[ED 4301](#) Exceptional Populations

Guided Electives (8 semester credit hours)

3 semester credit hours of upper-level Mathematics or Science courses (see advisor)

[BIS 1100](#) Interdisciplinary Studies First Year Experience

Both lower- and upper-division courses may count as electives to fulfill remaining requirements.

The plan must include sufficient upper-division courses to total 45 upper-division semester credit hours.

Bachelor of Science in Education with 4-8 Science

(UTeach/School of Natural Sciences and Mathematics Option)

[Degree Requirements](#) (120 semester credit hours)

[View an Example of Degree Requirements by Semester](#)

Faculty

FACG> is-education-bs

Professors: Karen Prager, Lawrence J. Redlinger, Erin A. Smith

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Assistant Professors of Instruction: Kyle Hammonds, Marc Lusk, Michele McNeel, Azadeh Stark, Larissa Werhnyak

I. Core Curriculum Requirements: 42 semester credit hours¹

Communication: 6 semester credit hours

[COMM 1311](#) Survey of Oral and Technology-based Communication

[RHET 1302](#) Rhetoric

Or select any 6 semester credit hours from [Communication Core](#) courses (see advisor)

Mathematics: 3 semester credit hours

[MATH 1325](#) Applied Calculus I

[MATH 2413](#) Differential Calculus²

or [MATH 2417](#) Calculus I²

Or select any 3 semester credit hours from [Mathematics Core](#) courses (see advisor)³

Life and Physical Sciences: 6 semester credit hours

[BIOL 2311](#) Introduction to Modern Biology I⁴

[BIOL 2312](#) Introduction to Modern Biology II⁴

Or select any 6 semester credit hours from [Life and Physical Sciences Core](#) courses (see advisor)³

Language, Philosophy and Culture: 3 semester credit hours

[AMS 2341](#) American Studies for the Twenty-First Century

or [AMS 2300](#) American Popular Culture

or [HUMA 1301](#) Exploration of the Humanities

Or select any 3 semester credit hours from [Language, Philosophy and Culture Core](#) courses (see advisor)

Creative Arts: 3 semester credit hours

[ARTS 1301](#) Exploration of the Arts

Or select any 3 semester credit hours [Creative Arts Core](#) courses (see advisor)

American History: 6 semester credit hours

[HIST 1301](#) U.S. History Survey to Civil War

[HIST 1302](#) U.S. History Survey from Civil War

Or select any 6 semester credit hours from [American History Core](#) courses (see advisor)

Government/Political Science: 6 semester credit hours

[GOVT 2305](#) American National Government

[GOVT 2306](#) State and Local Government

Or select any 6 semester credit hours from [Government/Political Science Core](#) courses (see advisor)

Social and Behavioral Sciences: 3 semester credit hours

Select any 3 semester credit hours from [Social and Behavioral Sciences Core](#) courses. (see advisor)

Component Area Option: 6 semester credit hours

[MATH 1326](#) Applied Calculus II

or [MATH 2414](#) Integral Calculus₂

or [MATH 2419](#) Calculus II₂

[MATH 2415](#) Calculus of Several Variables₂

Or select any 6 semester credit hours from [Component Area Option Core](#) courses. (see advisor)₃

II. Major Requirements: 60 semester credit hours beyond Core Curriculum

Major Related Courses (18 semester credit hours)

[BIS 3320](#) The Nature of Intellectual Inquiry

[NATS 4696](#) UTeach Apprentice Teaching, 4-8 Science and Mathematics

[ISNS 3373](#) Our Nearest Neighbors in the Sky

Choose two from the following:

[ISNS 2367](#) The Oceans₅

or [ISNS 2359](#) Earthquakes and Volcanoes₅

[ISNS 2368](#) Weather and Climate₅

or [ISNS 2366](#) Global Climate Change

Foundation I: Natural Science and Mathematics (12 semester credit hours)

[NATS 1311](#) The Universe, and Everything Else₅

or [PHYS 1301](#) College Physics I_{5, 4}

6 semester credit hours of upper-level [BIOL](#) courses

And choose one from the following:

[GEOS 1303](#) Physical Geology^{5, 6}

[GEOS 1304](#) History of Earth and Life^{5, 7}

[GEOS 2310](#) Environmental Geology⁵

Foundation II: Education (12 semester credit hours)

[NATS 3341](#) Knowing and Learning in Mathematics and Science

[ED 3339](#) Educational Psychology for Teachers

or [PSY 3339](#) Educational Psychology

[NATS 3343](#) Classroom Interactions

[ED 4353](#) Reading in Secondary Content

Teaching Techniques (18 semester credit hours)

[BIOL 2281](#) Introductory Biology Laboratory

[CHEM 1311](#) General Chemistry I⁵

[CHEM 1111](#) General Chemistry Laboratory I⁵

[CHEM 1312](#) General Chemistry II^{5, 8}

[HIST 3328](#) History and Philosophy of Science and Medicine

or [ED 4351](#) ESL for K-12 Teachers

or [SMED 5301](#) Science, Mathematics, and Society (see [Fast-Track Baccalaureate/Master's Degrees](#) section)

or other course approved by the department

[NATS 4341](#) Project-Based Instruction

[NSC 3361](#) Introduction to Neuroscience

III. Certification Requirements and Recommendations: 18 semester credit hours beyond Core Curriculum

[CHEM 1112](#) General Chemistry Laboratory II

[NATS 1141](#) UTeach STEP 1

[NATS 1143](#) UTeach STEP 2

[NATS 4141](#) UTeach Apprentice Teaching Seminar

[NATS 4390](#) Research Methods

Guided Electives (11 semester credit hours)

3 semester credit hours of upper-level Mathematics or Science courses (see advisor)

[BIS 1100](#) Interdisciplinary Studies First Year Experience

Both lower- and upper-division courses may count as electives to fulfill remaining requirements.

The plan must include sufficient upper-division courses to total 45 upper-division semester credit hours.

1. Curriculum Requirements can be fulfilled by other approved courses from institutions of higher education. The courses listed are recommended as the most efficient way to satisfy both Core Curriculum and Major Requirements at UT Dallas.
2. Three semester credit hours of Calculus to be used to fulfill Core Requirement with the remaining one semester credit hour to be counted in Guided Electives.
3. Students are strongly encouraged to take core courses that are closely related to their foundations, concentrations, and career goals.
4. Requires enrollment in corequisite lab course. Lab semester credit hours to be counted in Guided Electives.
5. A required Major course that also fulfills a Core Curriculum requirement. Semester credit hours may be counted in Core Curriculum.
6. Requires enrollment in corequisite lab course GEOS 1103. Lab semester credit hours to be counted in Guided Electives.
7. Requires enrollment in corequisite lab course GEOS 1104. Lab semester credit hours to be counted in Guided Electives.
8. Indicates a prerequisite class that may be required before enrolling for upper-division classes.

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