

Bachelor of Science in Education with Major in Science

Required 132 credits (36 of which must be numbered 300 or above and 30 which must be from UND) including:

I. Essential Studies Graduation Requirements (see University ES listing).

II. EHD General Graduation Requirements (see EHD listing).

III. The following Science Curriculum:

A. Minimum of 24 semester hours in ONE of the four science areas (biology, chemistry, physics or earth science) through completion of a minor (24)

B. Minimum of 12 semester hours in your choice of each of two other areas as follows, plus a minimum of four semester hours in the fourth area (28)

Code	Title	Credits
Physics		
PHYS 211	College Physics I	4
PHYS 212	College Physics II	
PHYS 213	College Physics III	
OR		
PHYS 251	University Physics I (Students taking the University Physics I must take Calculus I)	4
PHYS 252	University Physics II (Requires departmental /instructor approval to waive Calculus II)	
PHYS 253	University Physics III (Requires departmental / instructor approval to waive Calculus III)	
Chemistry		
CHEM 121 & 121L	General Chemistry I and General Chemistry I Laboratory	4
CHEM 122 & 122L	General Chemistry II and General Chemistry II Laboratory	
OR		
CHEM 115 & 115L	Introductory Chemistry and Introductory Chemistry Laboratory	4
CHEM 116 & 116L	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Laboratory	
CHEM 333 & 333L	Analytical Chemistry and Analytical Chemistry Laboratory (CHEM 122 Prerequisite)	4
Earth Science		
PHYS 110 & 110L	Introductory Astronomy and Introductory Astronomy Lab	4
GEOL 101 & 101L	Introduction to Geology and Introduction to Geology Laboratory	4
or GEOL 102 & 102L	The Earth Through Time and The Earth Through Time Laboratory	
GEOG 121 & 121L	Global Physical Environment and Global Physical Environment Laboratory	4
or GEOG 134 & 134L	Introduction to Global Climate and Introduction to Global Climate Laboratory	
Biology		
BIOL 150 & 150L	General Biology I and General Biology I Laboratory	4
BIOL 151 & 151L	General Biology II and General Biology II Laboratory	4
BIOL 312	Evolution	3

BIOL 332 & 332L	General Ecology and Gen Ecology Lab	3
or BIOL 336	Systematic Botany	
or BIOL 315	Genetics	

Math (Minimum 8 credits)

Select one of the following Math courses: 3-4

MATH 103	College Algebra (For students electing the life science physics option (College Physics 211, 212, 213))	
MATH 165	Calculus I (For students taking the physical science physics option (University Physics 251, 252, 253))	

Select one of the following Statistics courses: 3-4

PSYC 241	Statistics for the Behavioral Sciences	
ECON 210	Introduction to Business and Economic Statistics	

IV. Pre-Admission Courses:

Code	Title	Credits
T&L 250	Introduction to Education	3
T&L 251	Understanding Individuals with Different Abilities	3
T&L 339	Educational Technology	3
T&L 345	Curriculum, Instruction, and Assessment	3

Total Credits 12

V. Post-Admission Courses:

To be admitted to the Teacher Education Program, students must meet the following requirements:

- Cumulative GPA of 2.75 and strength of academic record
- Cumulative GPA of 3.0 for communication courses (ENGL 110, ENGL 130, COMM 110)
- Completed 15 credits that apply toward graduation
- Completion of prerequisite courses (including T&L 250 completed or in process)
- Satisfactory dispositions (30 hour field experience) report from T&L 250 course

Code	Title	Credits
T&L 350	Development and Education of the Adolescent	3
T&L 432	Learning Environments	3
T&L 433	Multicultural Education	3
T&L 400	Methods and Materials (Science)	3
T&L 401	School Safety Science (T&L 400 co-req)	1
T&L 486	Field Experience (T&L 400 co-req)	2

Total Credits 15

VI. Student Teaching & Related Courses:

Prior to being eligible to student teach, students must complete the following prerequisites:

- Minimum cumulative GPA of 2.75 in content major
- Grade of C or better and 3.0 GPA in all T&L courses
- Submit full background check
- PRAXIS II completed
- Satisfactory completion of a field experience

Code	Title	Credits
T&L 487	Student Teaching	13
T&L 489	Senior Capstone: Responsive Teaching	3

Total Credits 16

For state licensure, students must take the following exams:

- Minimum scores on a test of basic skills in reading, writing, and math is required for teacher licensure in North Dakota. There are two options

accepted: 1) PRAXIS Core Academic Skills Exam; or 2) ACT score to meet the test of basic skills requirement: Composite score of 22, Mathematics score of 21, and English Language Arts score of 21.

- PRAXIS II General Science: Content Knowledge
- Principles of Learning and Teaching (PLT): Grades 7-12