

**AS- General Studies - Chemistry to  
Bachelor of Science in Chemistry  
Physical Science Teacher Certification Concentration †  
Guided Pathway  
Effective for the 2019-2020 Catalog**

**First Year – North Central Texas College**

FIRST SEMESTER	SECOND SEMESTER
ENGL 1301 Composition I	ENGL 2311 Technical Writing
HIST 1301 US History I	HIST 1302 or 2301 US History II or Texas History
EDUC 1300 Learning Frameworks	MATH 2414 Calculus II*
CHEM 1411 General Chemistry I*	CHEM 1412 General Chemistry II*
MATH 2413 Calculus I*	MUSI 1306 or other Creative Arts Core

Total Semester Hours: 17

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**Second Year – North Central Texas College**

It's best to apply to Tarleton State University a full semester before you plan to transfer.

FIRST SEMESTER	SECOND SEMESTER
GOVT 2305 American National Government	GOVT 2306 Texas Government
SPCH 1311, 1315, or 1321	CHEM 2425 Organic Chemistry II*
PHYS 2425 University Physics I*	PHYS 2426 University Physics II*
ANTH 2346 General Anthropology or other Social Science core	HUMA 1301 Intro to Humanities or other Language/Philosophy/Culture Core
CHEM 2423 Organic Chemistry I	

Total Semester Hours: 17

Total Semester Hours: 14

**Associates of Science – General Studies- Chemistry Major**

You will need to apply for the associate's degree at your community college. Contact your advisor there for more information.

**These courses may be completed at NCTC or TSU**

GEOL 1407 – Intro to Environmental Science (GEOL 1305+1105 or GEOL 1405)	Elective
BCIS or COSC Elective	

Total Semester Hours: 10

**Third Year – Tarleton State University**

FIRST SEMESTER	SECOND SEMESTER
CHEM 3407 – Quantitative Analysis (Fall only)	CHEM 4408 – Instrumental Analysis (Spring only)
CHEM 4160 – Lab Safety & Ethics	ENGL 3309 – Technical Writing and Document Design
EDUC 3320 – Foundations of Teaching: Elementary (EC-6)	EDUC 3330 – Models of Instruction
READ 3351 – Content Area Literacy	PHYS 3334 – Modern Physics I

Total Semester Hours: 11

Total Semester Hours: 13

**Fourth Year – Tarleton State University**

FIRST SEMESTER	SECOND SEMESTER
CHEM 3423 – Physical Chemistry I (Fall only)	EDUC 4335 – Issues of Professionalism
EDUC 4330 – Application of Effective Teaching Practices	EDUC 4690 – Clinical Teaching
Advanced CHEM Elective	MATH 3306 – Differential Equations <u>OR</u> MATH 3433 – Calculus III

Total Semester Hours: 10

Total Semester Hours: 12-13

Total Degree Hours: 121-122

**This is not an official degree plan. Check with an advisor; degree plans may change in later catalogs.**

Part-time students may also follow this sequence. Developmental coursework may be required.

\* You may take a different course to meet this requirement. A specific list is available from your advisor.

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\*MATH 1314 is a prerequisite to CHEM 1411, and MATH 1314 along with either MATH 1316 or 2412 are prerequisites to MATH 2413 and PHYS 1401 or 2425. Until you have completed these prerequisites you will be under a General Studies major (AA or AS degree). Some Math prerequisites may be satisfied by earning required scores on CLEP, AP, IB, ACT, SAT, or an NCTC approved Math placement exam. Please see an advisor at NCTC for details.

() Course numbers shown in parentheses are equivalent to these courses at Tarleton State University.

† Degree availability varies by campus; consult [www.tarleton.edu](http://www.tarleton.edu) for more information.

For questions about the university portion of this pathway, contact the Chemistry, Geoscience and Physics department at 254-968-9143.