

**AA, General Studies- Pre-Med/Pre-Dental/Pre-Pharmacy to  
Bachelor in Science in Mathematics  
Pre-Medical and Pre-Dental Concentration<sup>T</sup>  
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 US History II or HIST 2301 Texas History
EDUC/PSYC 1300 Learning Frameworks	MUSI 1306 or other Creative Arts core
MATH 2413 Calculus*	ANTH 2346 General Anthropology or other Social Science core
BIOL 1406 Biology for Science Majors I	BIOL 1407 Biology for Science Majors II

Total Semester Hours: 17

Total Semester Hours: 16

**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
PHYS 2425 Engineering Physics I*	MATH 1342 Elementary Statistics
SPCH 1321 Business & Professional	PHYS 2426 Engineering Physics II*
<sup>C</sup> PHIL 1301 – Introduction to Philosophy	CHEM 2425 Organic Chemistry II
CHEM 2423 Organic Chemistry I	

Total Semester Hours: 17

Total Semester Hours: 14

**Associates of Arts- General Studies-Pre-Med/Pre-Dental/Pre-Pharmacy Majors**

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**

MATH 2414 – Calculus II	<sup>C</sup> CHEM 1412 – College Chemistry II (CHEM 1312+1112)
<sup>C</sup> CHEM 1411 – College Chemistry I (CHEM 1311+1111)	

Total Semester Hours: 12

**Third Year – Tarleton State University**

FIRST SEMESTER	SECOND SEMESTER
COSC 1310 - Procedural Programming	MATH 2332 – Applied Matrix Algebra (Spring Only)
MATH 3311 - Probability and Statistics (Fall Only)	MATH 3306 Differential Equations
MATH 3433 - Calculus III	MATH 3320 – Foundations of Mathematics (Spring Only)
COSC 3344 – Computer Applications in Analysis (Fall Only)	BIOL 3407 - Microbiology
MATH 3332 – Linear Algebra (Fall Only)	

Total Semester Hours: 16

Total Semester Hours: 13

**Fourth Year – Tarleton State University**

FIRST SEMESTER	SECOND SEMESTER
MATH 3301 – Number Theory (Spring Only) <u>OR</u>	MATH 3301 – Number Theory (Spring Only) <u>OR</u>
MATH 3360 – Numerical Analysis (Fall Even Years) <u>OR</u>	MATH 3360 – Numerical Analysis (Fall Even Years) <u>OR</u>
MATH 4306 – Partial Differential Equations (Spring Even Years) <u>OR</u>	MATH 4306 – Partial Differential Equations (Spring Even Years) <u>OR</u>
MATH 4320 – Mathematical Modeling (Fall Odd Years) <u>OR</u>	MATH 4320 – Mathematical Modeling (Fall Odd Years) <u>OR</u>
MATH 4088 – Undergraduate Research Project <u>OR</u>	MATH 4088 – Undergraduate Research Project <u>OR</u>
MATH 4390 – Math Topics (Spring Odd Years)	MATH 4390 – Math Topics (Spring Odd Years)
MATH 4309 - Advanced Analysis (Fall Only)	MATH 3301 – Number Theory (Spring Only) <u>OR</u>
	MATH 3360 – Numerical Analysis (Fall Even Years) <u>OR</u>
	MATH 4306 – Partial Differential Equations (Spring Even Years) <u>OR</u>
	MATH 4320 – Mathematical Modeling (Fall Odd Years) <u>OR</u>
	MATH 4088 – Undergraduate Research Project <u>OR</u>
	MATH 4390 – Math Topics (Spring Odd Years)
BIOL 4374 –Biochemistry I	MATH 4311 - Probability and Statistics II (Spring Only)
PHIL 3301 –Ethics in the Professions	MATH 4332 – Abstract Algebra (Spring Only)

Total Semester Hours: 12

Total Semester Hours: 12

TOTAL: 129

**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.

\*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.

<sup>T</sup> 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 Math department at 254-968-9168.