



STEM

**Associate of Science to  
Bachelor of Science in Mathematics  
Pre-Actuarial Concentration<sup>T</sup>  
Guided Pathway  
Effective for the 2019-2020 catalog<sup>1</sup>**



BHC CVC EFC ECC MVC NLC RLC

**First Year – Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake, and Richland College<sup>2</sup>**

FIRST SEMESTER	SECOND SEMESTER
<sup>C</sup> ENGL 1301 – Composition I (010)	<sup>C</sup> ENGL 1302 – Composition II (010)
<sup>C</sup> HIST 1301 – United States History I (060)	<sup>C</sup> HIST 1302 – United States History II* (060)
<sup>C</sup> MATH 2413 – Calculus I <sup>A*</sup> (020)	<sup>C</sup> PHED 1164 – Introduction to Physical Fitness and Wellness (090)
EDUC 1300 – Learning Framework <sup>@</sup>	MATH 2414 – Calculus II
SPCH 1321 – Business & Professional Communication	<sup>C</sup> PHYS 2425 – University Physics I+ (030)

Total Semester Hours: 16

Total Semester Hours: 15

**Second Year – Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake, and Richland College**

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

FIRST SEMESTER	SECOND SEMESTER
<b>Choose One:</b> <sup>C</sup> ENGL 2326 – American Literature* (040) <sup>C</sup> ENGL 2331 – World Literature* (040) <sup>C</sup> PHIL 1301 – Introduction to Philosophy* (040)	ACCT 2301 – Principles of Accounting I
<sup>C</sup> GOVT 2305 – Federal Government (070)	ECON 2302 – Principles of Microeconomics
MATH 2415 – Calculus III	<sup>C</sup> GOVT 2306 – Texas Government (070)
<b>Choose One:</b> <sup>C</sup> ECON 2301 – Principles of Macroeconomics* (080) <sup>C</sup> PSYC 2301 – General Psychology* (080) <sup>C</sup> SOCI 1301 – Introduction to Sociology* (080)	<b>Choose One:</b> <sup>C</sup> ARTS 1301 – Art Appreciation* (050) <sup>C</sup> DRAM 1310 – Introduction to Theater* (050) <sup>C</sup> MUSI 1306 – Music Appreciation* (050)
<b>Choose One:</b> <sup>C</sup> PHYS 2426 – University Physics II+ (030) <sup>C</sup> CHEM 1412 – General Chemistry II+ (030) <sup>C</sup> BIOL 1407 – Biology for Science Majors II+ (030)	ACCT 2302 – Principles of Accounting II – Managerial

Total Semester Hours: 17

Total Semester Hours: 15

**Associate of Science (63 hours)**

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

**Third Year – Tarleton State University**

FIRST SEMESTER	SECOND SEMESTER
MATH 3311 – Probability and Statistics (Fall Only)	MATH 3320 – Foundations of Mathematics (Spring Only)
COSC 3344 – Computer Applications in Analysis (Fall Only)	MATH 4311 – Probability and Statistics II (Spring Only)
MATH 3332 – Linear Algebra (Fall Only)	MATH 2332 – Applied Matrix Algebra (Spring Only)
MATH 3301 – Number Theory (Spring Only)	MATH 3301 – Number Theory (Spring Only)
MATH 3360 – Numerical Analysis (Fall Even Years)	MATH 3360 – Numerical Analysis (Fall Even Years)
MATH 4306 – Partial Differential Equations (Spring Even Years)	MATH 4306 – Partial Differential Equations (Spring Even Years)
MATH 4320 – Mathematical Modeling (Fall Odd Years)	MATH 4320 – Mathematical Modeling (Fall Odd Years)
MATH 4088 – Undergraduate Research Project	MATH 4088 – Undergraduate Research Project
MATH 4390 – Math Topics (Spring Odd Years)	MATH 4390 – Math Topics (Spring Odd Years)

Total Semester Hours: 12

Total Semester Hours: 12

**SUMMER**

MATH 3433 – Calculus III	MATH 3306 – Differential Equations
COSC 1310 – Procedural Programming	FINC 3301 – Principles of Financial Management

Total Semester Hours: 13

**Fourth Year – Tarleton State University**

FIRST SEMESTER	SECOND SEMESTER
FINC 4304 – Principles of Investments I (Fall Only)	ECON 4311 – Econometrics and Forecasting (Spring Only)
ECON 3301 – Intermediate Macroeconomics (Fall Only)	FINC 4308 – Principles of Insurance and Risk Management (Spring Only)
MATH 4309 – Advanced Analysis (Fall Only)	MATH 4332 – Abstract Algebra (Spring Only)
MATH 3301 – Number Theory (Spring Only)	ECON 3302 – Intermediate Microeconomics (Spring Only)
MATH 3360 – Numerical Analysis (Fall Even Years)	
MATH 4306 – Partial Differential Equations (Spring Even Years)	
MATH 4320 – Mathematical Modeling (Fall Odd Years)	
MATH 4088 – Undergraduate Research Project	
MATH 4390 – Math Topics (Spring Odd Years)	
ENGL 3309 – Technical Writing and Design	

Total Semester Hours: 15

Total Semester Hours: 12

**TOTAL: 127**

**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.

1 You may use this pathway if you entered one of the seven colleges on or before this date.

2 Students must earn at least 25% of the credit hours (15 hours) required for graduation through instruction by one of the seven colleges of the DCCCD awarding the degree.

@ All college students with fewer than 12 semester credit hours of successful college credit (grade of "C" or above) should take a student success course in the first semester.

A To register for MATH 2413, students must have completed the prerequisite math courses as follows: MATH 1314, MATH 1316, MATH 2412

\* Choose the appropriate Science, Math, and Computer Science course based on the university to which you will transfer. See your academic advisor for details.

C This course counts for the Core Curriculum at any public college or university in Texas.

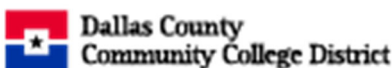
\* There are several options to fulfill this requirement. See your academic advisor for a specific list.

You must earn a grade of "C" or better in English 1301 and the selected college-level mathematics course and receive a GPA of at least 2.00 on all college-level course work.

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

<sup>1</sup> Degree availability varies by campus; consult [www.tarleton.edu](http://www.tarleton.edu) for more information.

Approved: 2019-2020 Guided Pathway



For questions about the University portion of this guided pathway,  
contact the Math department at 254-968-9168.