

Associate of Science to

Bachelor of Science in Mathematics
Biomathematics Concentration

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Guided Pathway Effective for the 2019-2020 catalog¹





First Year – Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake, and Richland College²

FIRST SEMESTER	SECOND SEMESTER
^c ENGL 1301 – Composition I (010)	^c ENGL 1302 – Composition II (010)
^c HIST 1301 – United States History I (060)	CHIST 1302 – United States History II* (060)
CMATH 2413 – Calculus I [*] (020)	^c PHED 1164 – Introduction to Physical Fitness and Wellness (090)
EDUC 1300 – Learning Framework®	MATH 2414 – Calculus II
CSPCH 1311 – Introduction to Speech Communication* (090) OR CSPCH 1315 – Public Speaking* (090)	^c BIOL 1406 – Biology for Science Majors 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
<u>Choose One:</u> ^c ENGL 2326 – American Literature* (040)	CHEM 1411 – College Chemistry I (CHEM 1311+1111)
^c ENGL 2331 – World Literature* (040)	
^c PHIL 1301 – Introduction to Philosophy* (040)	
^c GOVT 2305 – Federal Government (070)	CPHYS 2425 - University Physics I (PHYS 2325+2125)
MATH 2415 – Calculus III	^c GOVT 2306 – Texas Government (070)
<u>Choose One:</u> CECON 2301 – Principles of Macroeconomics* (080)	Choose One: CARTS 1301 – Art Appreciation* (050)
^c PSYC 2301 – General Psychology* (080)	CDRAM 1310 – Introduction to Theater* (050)
^c SOCI 1301 – Introduction to Sociology* (080)	CMUSI 1306 – Music Appreciation* (050)
^c BIOL 1407 – Biology for Science Majors II+ (030)	MATH 2320 or 2420 – Differential Equations+ OR
	MATH 2305 – Discrete Mathematics+

Total Semester Hours: 17 Total Semester Hours: 17

Associate of Science (65 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
COSC 1310 – Procedural Programming	MATH 3433 – Calculus III
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
BIOL 3413 – Molecular Biology (Fall Only) <u>OR</u>	ENGL 3309 – Technical Writing and Document Design
BIOL 3485 – Immunology <u>OR</u>	
BIOL 4401 – Ecology (Fall Only) <u>OR</u>	
BIOL 4445 – Parasitology	
MATH 3360 – Numerical Analysis (Fall Even)	BIOL 3407 – Microbiology
Total Semester Hours: 16	Total Semester Hours: 17

Fourth Year – Tarleton State University

FIRST SEMESTER SECOND SEMESTER MATH 4320 - Mathematical Modeling (Fall Odd) BIOL 3303 & BIOL 3103 - Genetics and Genetic Techniques MATH 3332 – Linear Algebra **BIOL 3353** – Ecology and Evolution MATH 4309 - Advanced Analysis (Fall Only) MATH 4332 - Abstract Algebra (Spring Only) BIOL 3413 - Molecular Biology (Fall Only) OR MATH 3301 - Number Theory (Spring Only) OR BIOL 3485 - Immunology OR MATH 4306 - Partial Differential Equations (Spring Even) OR BIOL 4401 - Ecology (Fall Only) OR MATH 4088 – Undergraduate Research Project OR **BIOL 4445** – Parasitology MATH 4390 - Math Topics (Spring Odd) MATH 3306 - Differential Equations MATH 2332 – Applied Matrix Algebra

Total Semester Hours: 16 Total Semester Hours: 15

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.

 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.

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

Degree availability varies by campus; consult www.tarleton.edu for more information.

Approved: 2019-2020 Guided Pathway

