

AS General Studies-Chemistry Emphasis to Bachelor of Science in Chemistry



Biochemistry Concentration^T **Guided Pathway**

Effective beginning with the 2020-2021 catalog

First Year - Collin College

(Developmental coursework may be required.)

FIRST SEMESTER	SECOND SEMESTER
^c ENGL 1301 Composition I	^c ENGL 1302 Composition II (or ENG 2311)
^c MATH 2413 Calculus I	^c CHEM 1412 General Chemistry II
^c Speech (see list below) – 3 hours	^c Lang, Phil, & Culture (see list below) - 3 hours
^c History (see list below) – 3 hours	^c History (see list below) – 3 hours
^c CHEM 1411 General Chemistry I	MATH 2414 Calculus II (090)

Total Semester Hours: 17

Total Semester Hours: 17

Second Year - Collin College

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

FIRST SEMESTER	SECOND SEMESTER
^c GOVT 2305 Federal Government	^c GOVT 2306 Texas Government
CHEM 2423 Organic Chemistry I	^c Creative Arts (see list below) – 3 hours
^c Social/Behavioral Science (see list below) -3 hours	CHEM 2425 Organic Chemistry II
MATH 2425 Calculus III	MATH 2320 Differential Equations
Total Semester Hours: 14	Total Semester Hours: 13

AS in General Studies – Chemistry Emphasis

Contact your advisor at Collin College for information about applying for your Associate's degree.

These courses may be completed at CC or TSU		
BIOL 1406 – General Biology (BIOL 1306+1106)	BIOL 1407 – General Biology II (BIOL 1307+1107)	
* ^c First Year Seminar Elective (Learning Frameworks)	BCIS or COSC Elective	
PHYS 1401 – College Physics I (PHYS 1301+1101)	PHYS 1402 – College Physics II (PHYS 1302+1102)	

Total Semester Hours: 22

Third Year – Tarleton State University

FIRST SEMESTER	SECOND SEMESTER
BIOL 3303 - Genetics	CHEM 4160 – Lab Safety & Ethics
BIOL 3103 – Genetic Techniques	CHEM 4408 – Instrumental Analysis
CHEM 3407 – Quantitative Analysis (Fall only)	BIOL 3407 - Microbiology
CHEM 4327 – Quantitative Organic Analysis (Spring only) OR CHEM	Advanced Elective
4345 – Medicinal Chemistry (Fall only)	
ENGL 3309 – Technical Writing and Document Design	
Total Semester Hours: 14	Total Semester Hours: 12

Total Semester Hours: 14

Fourth Year – Tarleton State University

FIRST SEMESTER	SECOND SEMESTER
BIOL 3413 - Molecular Biology (Fall only)	BIOL 4378 – Biochemistry Lab (Spring only)
CHEM 3423 – Physical Chemistry I (Fall only)	CHEM 4375 – Biochemistry II (Spring only)
CHEM 4374 – Biochemistry I (Fall only)	Advanced Elective
Total Semester Hours: 11	Total Semester Hours: 9

Total Degree Hours: 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.

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

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

^T Degree availability varies by campus; consult <u>www.tarleton.edu</u> for more information.

Speech – choose one from: SPCH 1311, 1315, or 1321

History - choose two from: HIST 1301, 1302, 2301

Language, Philosophy, & Culture - choose one from: ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343, HIST 2311, 2312, 2321, 2322, HUMA 1301, PHIL 1301, 1304, 2303, 2306, 2307, 2321

Creative Arts - choose one from: ARTS 1301, 1303, 1304, 1313, DANC 2303, DRAM 1310, 2361, 2362, 2366, MUSI 1306, 1307, 1310 Social and Behavioral Sciences - choose one from: ANTH 2302, 2346, 2351, ECON 2301, 2302, PSYC 2301, SOCI 1301, 1306