



**AS General Studies-Chemistry Emphasis to  
Bachelor of Science in Chemistry  
Pre-Pharmacy Concentration<sup>T</sup>  
Guided Pathway**  
Effective beginning with the 2019-2020 catalog



### First Year - Collin College

(Developmental coursework may be required.)

FIRST SEMESTER	SECOND SEMESTER
<sup>c</sup> ENGL 1301 Composition I	<sup>c</sup> ENGL 1302 Composition II (or ENG 2311)
<sup>c</sup> MATH 2413 Calculus I	<sup>c</sup> CHEM 1412 General Chemistry II
<sup>c</sup> Speech (see list below) – 3 hours	<sup>c</sup> Lang, Phil, & Culture (see list below) - 3 hours
<sup>c</sup> History (see list below) – 3 hours	<sup>c</sup> History (see list below) – 3 hours
<sup>c</sup> CHEM1411 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
<sup>c</sup> GOVT 2305 Federal Government	<sup>c</sup> GOVT 2306 Texas Government
CHEM 2423 Organic Chemistry I	<sup>c</sup> Creative Arts (see list below) – 3 hours
<sup>c</sup> 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.

Total Semester Hours: 22

#### These courses may be completed at CC or TSU

<b>BIOL 1406</b> – General Biology (BIOL 1306+1106)	<b>BIOL 1407</b> – General Biology II (BIOL 1307+1107)
<b>PHYS 1401</b> – College Physics I (PHYS 1301+1101)	<b>PHYS 1402</b> – College Physics II (PHYS 1302+1102)
<sup>c</sup> First Year Seminar Elective (Learning Frameworks)	<b>ECON 2301</b> – Principles of Microeconomics <u>OR</u>
	<b>PSYC 2301</b> – General Psychology <u>OR</u>
	<b>PSYC 2314</b> – Lifespan Growth and Development

### Third Year – Tarleton State University

FIRST SEMESTER	SECOND SEMESTER
<b>BIOL 3303</b> – Genetics	<b>CHEM 4408</b> – Instrumental Analysis (Spring only)
<b>BIOL 3103</b> – Genetic Techniques	<b>BIOL 3407</b> – Microbiology
<b>CHEM 3407</b> – Quantitative Analysis (Fall only)	<b>MATH 3450</b> – Principles of Biostatistics
<b>CHEM 4345</b> – Medicinal Chemistry (Fall only)	
<b>ENGL 3309</b> – Technical Writing and Document Design	

Total Semester Hours: 14

Total Semester Hours: 12

### Fourth Year – Tarleton State University

FIRST SEMESTER	SECOND SEMESTER
<b>BIOL 3413</b> – Molecular Physiology (Fall only)	<b>Advanced CHEM Elective</b>
<b>CHEM 3423</b> – Physical Chemistry I (Fall only)	<b>Advanced CHEM Elective</b>
<b>CHEM 4374</b> – Biochemistry I (Fall only)	<b>BIOL 4375</b> – Biochemistry II (Spring only) <u>OR</u>
	<b>BIOL 4378</b> – Biochemistry Lab (Spring only)
<b>CHEM 4160</b> – Lab Safety & Ethics	

Total Semester Hours: 12

Total Semester Hours: 8

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.

<sup>c</sup> 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.

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

**Collin Options:**

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**

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