



AS General Studies
 Physics Emphasis to
 Bachelor of Science in Physics^T
Guided Pathway



Effective beginning with the 2019-2020 catalog

First Year - Collin College

(Developmental coursework may be required.)

FIRST SEMESTER	SECOND SEMESTER
Ⓒ ENGL 1301 Composition I	Ⓒ ENGL 1302 Composition II (or ENG 2311)
Ⓒ MATH 2413 – Calculus I	MATH 2414 – Calculus II
Ⓒ Speech (see list below) – 3 hours	Ⓒ Lang, Phil, & Culture (see list below) - 3 hours
Ⓒ History (see list below) – 3 hours	Ⓒ History (see list below) – 3 hours
Ⓒ PHYS 2425 University Physics I	Ⓒ PHYS 2426 University Physics II

Total Semester Hours: 16

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
Ⓒ GOVT 2305 Federal Government	Ⓒ GOVT 2306 Texas Government
Ⓒ Related Elective (see list below) - 4 hours	Ⓒ Creative Arts (see list below) – 3 hours
Ⓒ Social/Behavioral Science (see list below) -3 hours	Related Elective (see list below) - 4 hours
Related Elective (see list below) - 4 hours	Related Elective (see list below) - 4 hours

Total Semester Hours: 14

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AA in General Studies

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

These courses may be completed at CC or TSU	
COSC Elective	Support Field Elective ⁺
Ⓒ First Year Seminar Elective (Learning Frameworks)	Support Field Elective ⁺
Support Field Elective ⁺	Support Field Elective ⁺

Total Semester Hours: 16

Third Year – Tarleton State University

FIRST SEMESTER	SECOND SEMESTER
PHYS 3331 – Mechanics I (Fall Only)	PHYS 3334 – Modern Physics I
PHYS 3332 – Electromagnetic Field Theory (Fall Only)	PHYS 4330 – Mathematical Methods for Physics and Engineering (Spring Only)
MATH 3306 – Differential Equations	PHYS 4340 – Advanced Physics Lab (Spring Only)
MATH 3433 – Calculus III	Advanced Support Field Elective ⁺

Total Semester Hours: 13

Total Semester Hours: 12

Fourth Year – Tarleton State University

FIRST SEMESTER	SECOND SEMESTER
PHYS 4335 – Quantum Physics (Fall Only)	PHYS 4337 – Nuclear Physics (Spring Only)
PHYS 4161 – Physics Research Project (Fall Only)	PHYS 4162 – Physics Research Seminar (Spring Only)
PHYS 3333 – Thermodynamics (Fall Only)	Advanced Physics Elective
Advanced Physics Elective	Advanced Support Field Elective ⁺

Total Semester Hours: 10

Total Semester Hours: 10
 Total Degree Hours: 122

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.

Ⓒ 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 www.tarleton.edu for more information.

*For questions about the university portion of this pathway,
 contact the Department of Chemistry, Geosciences, and Physics at 254-968-9953.*

Mathematics – **AS degree** MUST choose TWO from: **MATH** 1314, 1414, 1316, 1342, 2305, 2318, 2320, 2412, 2413*, 2414*, 2415. (*recommended)

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

Social and Behavioral Sciences – choose one from: **ANTH** 2302, 2346, 2351, **ECON** 2301, 2302, **PSYC** 2301, **SOCI** 1301, 1306

Creative Arts - choose one from: **ARTS** 1301, 1303, 1304, 1313, **DANC** 2303, **DRAM** 1310, 2361, 2362, 2366, **MUSI** 1306, 1307, 1310

Related Electives - choose at least 12 hours from:

PHYS 1403 Stars and Galaxies

CHEM 1411 General Chemistry I

CHEM 1412 General Chemistry II

ENGL 2311 Technical and Business Writing

MATH 2318 Linear Algebra **or Higher**