

AS General Studies - Physics Field of Study to Bachelor of Science in Physics T



Guided Pathway

Effective for the 2021-2022 Catalog

First Year – Collin College

FIRST SEMESTER	SECOND SEMESTER
^c ENGL 1301 Composition I	^c ENGL 1302 Composition II (or ENG 2311)
^c Mathematics (see list below) (TSU requires MATH 2413 Calculus I)	^c Mathematics (see list below) (TSU requires MATH 2414 Calculus 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 PHYS 2425 University Physics I	^c 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
^c GOVT 2305 Federal Government	^c GOVT 2306 Texas Government
^c Related Elective (see list below) - 4 hours	^c Creative Arts (see list below) – 3 hours
^c 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	Total Semester Hours: 14

AS: General Studies – Physics Field of Study

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

These courses may be completed at CC (if offered) or TSU		
COSC Elective	*Support Field Elective	
*CAny Core Course (1 credit min)	*Support Field Elective	
*Support Field Elective	*Support Field Elective	
Total Semester Hours: 7	Total Semester Hours: 9	

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

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.

* You may take a different course to meet this requirement. A specific list is available from your advisor.

Collin Choices:

<u>Mathematics</u> – **AS degree** MUST choose TWO from: **MATH** 1314, 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, 2337, 2328, 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 1301, 2301, 2301, SOCI 1301, 1306

<u>Creative Arts</u> - 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 ENGL 2311 Technical and Business Writing CHEM 1411 General Chemistry I MATH 2318 Linear Algebra or Higher

CHEM 1412 General Chemistry II

^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.

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