



ASU Bachelor of Science in Civil Engineering (BSCE) with Associate of Science in Engineering Science (ASES) from SWTX



SWTX Fall Semester Year 1

Courses		sch
EDUC 1300	Learning Framework ¹	3
ENGL 1301	Composition I	3
MATH 2413	Calculus I	4
CHEM 1311	General Chemistry I	3
CHEM 1111	General Chemistry I Lab	1
ENGR 1201	Introduction to Engineering	2
		16

SWTX Spring Semester Year 1

Courses		sch
ENGR 1304	Engineering Graphics	3
ENGL 1302	Composition II	3
MATH 2414	Calculus II	4
PHYS 2325	University Physics I	3
PHYS 2125	University Physics I Lab	1
GOVT 2305	Federal Government	3
		17

SWTX Fall Semester Year 2

Courses		sch
ENGR 2304	Programming for Engineers	3
ENGR 2301	Engineering Mechanics - Statics	3
MATH 2415	Calculus III ²	4
PHYS 2326	University Physics II	3
PHYS 2126	University Physics II Lab	1
		14

SWTX Spring Semester Year 2

Courses		sch
ENGR 2305	Circuit Analysis I ³	3
ENGR 2105	Circuits Analysis I Lab ³	1
MATH 2320	Differential Equations ⁴	3
ENGR 2302	Engineering Mechanics - Dynamics	3
GOVT 2306	Texas Government	3
		13

Core Courses: SWTX 25 sch + ASU 18 sch = 43 sch

ASES SWTX Total 60 sch

¹ EDUC 1300 required of all first time in college students. EDUC 1300 will transfer as ASU's USTD NENA and is approved to substitute ASU's GS 1181 (Freshman Seminar (ASU course requirement)) for the purpose of this agreement with the David L. Hirschfeld Department of Engineering.

² MATH 2415 will transfer in as MATH NENA. MATH 2415 is approved to substitute MATH 3415 for the David L. Hirschfeld Department of Engineering programs. This substitution is only applicable to this program and this agreement.

³ ENGR 2305 and ENGR 2105 are not required for the Civil Engineering degree at ASU and ENGR 2105 is not offered at ASU. These courses do transfer to ASU however, they will not count towards the ASU Civil Engineering degree.

⁴ MATH 2320 will transfer as MATH NENA. Students will then have the option to a) take MATH 3301 at ASU or b) take MATH 3324 at ASU. Please note, taking both, MATH 2320 and MATH 3301 are approved to substitute ASU's MATH 3324 for the David L. Hirschfeld Department of Engineering programs. This substitution is only applicable to this program and this agreement.

ASU Fall Semester Year 1

Courses		sch
ENGR 1307	Plane Surveying	3
MATH 3301 OR MATH 3324	Linear Algebra OR Applied Mathematics for Engineering	3
ENGR 3404	Introduction to Fluid Mechanics	4
HIST 1301	History of the United States to 1865	3
BIOL 1306/1106, 1307/1107, 1308/1108, 1309/1109 OR GEOL 1303/1103**	Principles of Bio I/Lab, Principles of Bio II/Lab, Human Bio/Lab, Man and the Environment/Lab, OR Physical Geology/Lab	4
		17

ASU Spring Semester Year 1

Courses		sch
ENGR 2332	Mechanics of Materials	3
ENGR 2318	Sustainable Development Principles	3
ENGR 3305	Probability and Risk in Engineering	3
Social and Behavioral Sciences		3
Creative Arts		3
		15

ASU Fall Semester Year 2

Courses		sch
CENG/MATH/ Science Elective (adv)		3
ENGR 3331	Engineering Materials	3
CENG 3311	Introduction to Transportation Engineering	3
CENG 3351	Introduction to Environmental Engineering	3
CENG 3361	Structural Analysis I	3
		15

ASU Spring Semester Year 2

Courses		sch
Technical Elective (advanced)		3
CENG 3341	Geotechnical Engineering	3
CENG 3352	Hydrology and Hydraulics	3
COMM 1315	Public Speaking	3
ENGR 4201	Professional Engineering Practice	2
		14

ASU Fall Semester Year 3

Courses		sch
Design Elective (advanced)		3
Design Elective (advanced)		3
CENG 4380	Civil Engineering Senior Design	3
Language, Philosophy, & Culture		3
HIST 1302	History of the United States, 1865 to Present	3
		15

Total SWTX 60 + ASU 76**BS Complete Total 136 sch**

**Or other core Science course outside of chemistry and physics with department approval.

Civil Engineering Fundamentals

- I. Overall GPA of at least 2.50.
- II. Completion of the sequence below with a GPA of at least 2.50:
 - Engineering 1201 – Introduction to Engineering
 - Engineering 1304 – Engineering Graphics
 - Engineering 1307 – Plane Surveying or Engineering 1308 - Introduction to Geomatics
 - Engineering 2301* - Engineering Mechanics – Statics
 - Engineering 2302* - Engineering Mechanics – Dynamics
 - Mathematics 2413* - Calculus I
 - Mathematics 2414*- Calculus II
 - Physics 2325/2125* - Fundamentals of Physics I
 - Physics 2326/2126* - Fundamentals of Physics II
- III. Successful completion of the advancement exam.

*A grade of "C" or better is required for these courses.

Additional Notes

Please Note: This guide is for students to utilize as a reference of what courses they can take at each institution. It's possible for students to take these courses in a different sequence if they are coming in with prior credit or if there are changes to course offerings and degree plans. Therefore, it is encouraged for students to reach out to their academic advisor at each institution to discuss current course options and sequences.

This transfer guide is active under the 2024-2025 and 2025-2026 Catalogs at ASU, students utilizing this transfer guide shall have full acceptance of academic credits earned at SWTX.