



ASU Bachelor of Science in Mechanical Engineering (BSME) with Associate of Science in Engineering Science (ASES) Transfer 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
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 2105 is not offered at ASU and is not required for the Mechanical Engineering degree at ASU. This course does transfer to ASU however, it will not count towards the ASU Mechanical 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
COMM 1315	Public Speaking	3
Creative Arts		3
MATH 3301 OR MATH 3324	Linear Algebra OR Applied Mathematics for Engineering	3
MENG 2311	Engineering Thermodynamics	3
HIST 1301	History of the United States to 1865	3
		15

ASU Spring Semester Year 1

Courses		sch
ENGR 3305	Probability and Risk in Engineering	3
ENGR 2318	Sustainable Development Principles	3
ENGR 2332	Mechanics of Materials	3
Social and Behavioral Sciences		3
HIST 1302	History of the United States, 1865 to Present	3
		15

ASU Fall Semester Year 2

Courses		sch
ENGR 3404	Introduction to Fluid Mechanics	4
MENG 3441	Mechanisms and Dynamics of Machines	4
ENGR 3331	Engineering Materials	3
Mathematics/ Science Elective		3
		14

ASU Spring Semester Year 2

Courses		sch
MENG 3411	Heat Transfer	4
MENG 4279	Mechanical Engineering Senior Design I	2
ENGR 4201	Professional Engineering Practice	2
MENG Technical Elective		3
MENG 3351	Measurement and Instrumentation	3
		14

ASU Fall Semester Year 3

Courses		sch
MENG Design Elective		3
MENG 4380		3
MENG Design Elective		3
Language, Philosophy & Culture		3
MENG Elective		3
		15

Total SWTX 60 + ASU 73= 133 sch

Complete Total sch 133

Mechanical 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 2301* - Engineering Mechanics – Statics
 - Engineering 2302* - Engineering Mechanics – Dynamics
 - Engineering 2305 – Electrical Circuits
 - 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.