



McLennan Community College &  
Angelo State University  
Bachelor of Science in  
Mechanical Engineering Crosswalk



McLennan Community College & Angelo State University Transfer Plan for  
Mechanical Engineering, Associate of Science (A.S.)  
Bachelor of Science in Mechanical Engineering (B.S.M.E.)

Core Curriculum taken at MCC (34 hours)	MCC Course	ASU Course Equivalent
Communication 010 (6 hours)	ENGL 1301 ENGL 2311	ENGL 1301 ENGL 2311
Mathematics 020 (4 hours)	MATH 2413	MATH 2413
Life and Physical Science 030 (8 hours)	PHYS 2425 PHYS 2426	PHYS 2325/2125 PHYS 2326/2126
Creative Arts 050 (3 hours)	Creative Arts Core	Creative Arts Core
History 060 (6 hours)	HIST 1301 HIST 1302	HIST 1301 HIST 1302
Component Area A 091 (3 hours)	SPCH 1315	COMM 1315
Component Area B 090 (4 hours)	CHEM 1409	CHEM 1311/1111

Remaining Mechanical Engineering, A.S. Requirements (38 hours)	MCC Course	ASU Course Equivalent
2 hours	ENGR 1201	ENGR 1201
3 hours	ENGR 1304	ENGR 1304
3 hours	ENGR 2304	ENGR 2304
3 hours	ENGR 2332	ENGR 2332
3 hours	ENGR 2334	MENG 2311
4 hours	MATH 2414	MATH 2414
3 hours	ENGR 2301	ENGR 2301
4 hours	MATH 2415 <sup>1</sup>	MATH NENA
3 hours	MATH 2318 <sup>2</sup>	MATH NENA
3 hours	ENGR 2302	ENGR 2302
3 hours	ENGR 2305	ENGR 2305
1 hour	ENGR 2105 <sup>3</sup>	ENGR NENA
3 hours	MATH 2320 <sup>2</sup>	MATH NENA

Total MCC hours: 72

Notes for MCC Coursework
<sup>1</sup> MATH 2415 will transfer as MATH NENA. MATH 2415 is approved to substitute MATH 3415 for the purpose of this agreement with the DLH Department of Engineering. If a student changes their major, the substitution will not apply to their new degree plan.

<sup>2</sup>MATH 2318 will transfer as MATH NENA and MATH 2320 will transfer as MATH NENA. Taking both MATH 2318 and MATH 2320 are approved to substitute ASU's MATH 3324. This is approved for the purpose of this agreement with the DLH Department of Engineering. If a student changes their major, the substitution will not apply to their new degree plan.

<sup>3</sup>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.

**Upon transferring to ASU, you will meet with an academic advisor to review a personalized degree plan.**

<b>Remaining Core Curriculum taken at ASU (12 hours)</b>	<b>ASU Course</b>
Language, Philosophy and Culture 040 (3 hours)	Language, Philosophy and Culture Core Course
Government/Political Science 070 (6 hours)	POLS 2305 POLS 2306
Social and Behavioral Sciences 080 (3 hours)	Social and Behavioral Sciences Core Course

<b>Remaining B.S.M.E. in Mechanical Engineering Requirements (46 hours)</b>	<b>ASU Course</b>
4 hours	ENGR 3404
4 hours	MENG 3441
3 hours	ENGR 3305
3 hours	ENGR 2318
3 hours	MENG 3351
3 hours	ENGR 3331
3 hours	Mathematics/Science Elective
3 hours	MENG Elective- Introductory Elective (3352 or 3353)
2 hours	ENGR 4201
3 hours	MENG Technical Elective
2 hours	MENG 4279
4 hours	MENG 3411
3 hours	MENG 4380
3 hours	MENG Design Elective
3 hours	MENG Design Elective

Total ASU hours: 58

Total B.S.M.E. in Mechanical Engineering hours: 130

### Notes for ASU Coursework

#### 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.

**Please note:** this crosswalk is for students to utilize as a reference of what courses they can take at each institution. It’s possible for there to be changes to course offerings and degree plans, therefore it is encouraged for students to meet with their academic advisor at both institutions to discuss current course options and sequence of courses.

---

If students do not take MATH 2318: Linear Algebra at MCC, students will then need to take either MATH 3301 or MATH 3324 at ASU. Students are encouraged to reach out to the Academic Advisor at ASU to determine the best course option to meet the MATH 3324 requirement.

---

**Note for ASU’s GS 1181 (Freshman Seminar) Course that is required for all ASU degree plans:** Students that transfer to ASU may be required to take a Freshman Seminar (GS 1181) course their first semester at ASU unless they are exempt per applicable ASU guidelines at that time. If the student qualifies for an exemption from GS 1181, the student’s advisor and/or department chair will assist with submitting an appropriate substitution request.