

# Bachelor of Science – Mechanical Engineering Degree Plan (checklist)

2022

Catalog: 2021-2022  
Expires: 08/01/2028

Last Name \_\_\_\_\_

First Name \_\_\_\_\_

M.I. \_\_\_\_\_

UTEP ID \_\_\_\_\_

**NOTE: Overall GPA ≥ 2.0 AND In-Major GPA ≥ 2.0 REQUIRED for graduation**

A Core Curriculum (45 SCH) (minimum of "C" grade required)		Semester Completed	Final Grade	SCH	Sub #
<b>1 Communication (6 credit hours required)</b>					
RWS 1301*	Rhetoric and Composition I				
RWS 1302*	Rhetoric and Composition II				
<b>2 Mathematics (4)</b>					
MATH 1411*	Calculus I				
<b>3 Life and Physical Sciences (8)</b>					
CHEM 1305*	General Chemistry				
CHEM 1105*	Laboratory for CHEM 1305				
PHYS 2420*	Introductory Mechanics				
<b>4 Language, Philosophy, and Culture (3) Select and circle one:</b>					
ENGL 2311*, 2312*, 2313*, 2314*, 2318*, FREN 2322*, HIST 2301*, 2302*, PHIL 1301*, 2306*, RS 1301*, SPAN 2340*, WS 2300*, 2350*					
<b>5 Creative Arts (3) Select and circle one:</b>					
ART 1300*, ARTH 1305*, 1306*, DANC 1304*, FILM 1390*, MUSL 1321*, 1324*, 1327*, THEA 1313*					
<b>6 American History (6)</b>					
HIST 1301*	History of the U.S. to 1865				
HIST 1302*	History of the U.S. since 1865				
<b>7 Government/Political Science (6) – all 6 SCH must be completed at the same institution</b>					
POLS 2310*	Introduction to Politics				
POLS 2311*	American Govt. & Politics				
<b>8 Social and Behavioral Sciences (3)</b>					
CE 2326*	Econ. For Engrs & Scientists				
<b>9 Component Area Option (6)</b>					
UNIV 1301* or CS 1310*	Foundations of Engineering or Intro-Computational Thinking				
COMM 1302*	Business/Prof. Communications				

B Foundational Math & Science (9 SCH)		Semester Completed	Final Grade	SCH	Sub #
MATH 1312*	Calculus II				
MATH 2313*	Calculus III				
MATH 2326*	Differential Equations				

C Science Elective (4 SCH) Select and circle one:		Semester Completed	Final Grade	SCH	Sub #
CHEM 1306*+1106*, BIOL 1305*+1107*, PHYS 2421*					

D Math/Science Elective (3 SCH) Select and circle one:		Semester Completed	Final Grade	SCH	Sub #
BIOL 1306*, PHYS 2325*, PHYS 3351*, MATH 3323*, MATH 3335*, MATH 4329*, MATH 4336*, STAT 3320*					

SUBSTITUTIONS**				
Sub #	Course on degree plan to substitute	Institution where course was taken	Name of Course as it appears on UTEP Transcript	Course as it appears on UTEP Transcript
1				
2				
3				
4				

E Major: Required Lower Division Courses (22 SCH)		Semester Completed	Final Grade	SCH	Sub #
MECH 1305*	Graphic and Design Fundamentals				
MECH 1321*	Mechanics I-Statics or Statics				
MECH 2103*	Engineering Computations				
MECH 2311*	Introduction to Thermo-Fluid Science				
MECH 2322*	Mechanics of Materials				
MECH 2331*	Mat'ls and Manufacturing Processes				
MECH 2340*	Mechanics II-Dynamics				
MECH 2342*	Electro Mechanical Systems				
<b>F Design Studio (1 SCH) Select and circle one:</b>		Semester Completed	Final Grade	SCH	Sub #
MECH 2131*, MECH 2132*, MECH 2133*, MECH 2134*					

G Major: Required Upper Division Courses (21 SCH)		Semester Completed	Final Grade	SCH	Sub #
MECH 3312	Thermodynamics				
MECH 3314	Fluid Mechanics				
MECH 3334	Mechanical Design				
MECH 3345	System Dynamics				
MECH 3352	Engineering Analysis II				
MECH 4315	Heat Transfer				
MECH 4366	Senior Design				

H Lab Experience** (2 SCH) Select two of the following:		Semester Completed	Final Grade	SCH	Sub #
MECH 3103, 3113 or 3123					

I Math Elective (3 SCH) Select and circle one:		Semester Completed	Final Grade	SCH	Sub #
MATH 3323*, MATH 3335*, MATH 4329*, STAT 3320*					

J Electro-Mechanical Design Elective (3 SCH) Select and circle one:		Semester Completed	Final Grade	SCH	Sub #
MECH 4332, MECH 4334, MECH 4345, MECH 4346, MECH 4393					

K Solid Mechanics Design Elective (3 SCH) Select and circle one:		Semester Completed	Final Grade	SCH	Sub #
MECH 4336, MECH 4395, MECH 4370					

L Thermal Fluid Design Elective (3 SCH) Select and circle one:		Semester Completed	Final Grade	SCH	Sub #
MECH 4316, MECH 4394					

M Computational Elective (3 SCH) Select and circle one:		Semester Completed	Final Grade	SCH	Sub #
MECH 4326, MECH 4328, MECH 4330, MECH 4392					

N Design Elective Any Area (6 SCH) Select two from Electro-Mechanical, Solid Mechanics or Thermal Fluid Area		Semester Completed	Final Grade	SCH	Sub #

\* -- C or better required

\*\* -- From the department approved list of Design and Project Experience I and II courses

\*\*\* Official substitution form available <https://www.utep.edu/engineering/student-resources/student-resources-forms.html>

<b>BSME Total Hours</b>	<b>128</b>
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APPROVALS:	
ADVISOR	DATE
CHAIR	DATE