

Bachelor of Science – Mechanical Engineering Degree Plan (checklist)

2021

Catalog: 2020-2021
Expires: 08/01/2027

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

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*, PHYS 4348*, MATH 3323*, MATH 3335*, MATH 4329*, MATH 4336*, STAT 3320*					

SUBSTITUTIONS**				
#	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 (23 SCH)		Semester Completed	Final Grade	SCH	Sub #
MECH 1305*	Graphic and Design Fundamentals				
MECH 1321*	Mechanics I-Statics				
MECH 2103*	Engineering Computations				
MECH 2131* or MECH 2132* or MECH 2133*	Manufacturing Laboratory Additive Manufacturing Laboratory Metal Casting Laboratory				
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				

F Major: Required Upper Division Courses (30 SCH)		Semester Completed	Final Grade	SCH	Sub #
MECH 3312	Thermodynamics				
MECH 4316 or MECH 4394	Thermal System Design Special Topics in Thermal Fluid Area				
MECH 3314	Fluid Mechanics				
MECH 4336 or MECH 4395	Principles of Engineering Design Special Topics in Solid Mechanics Area				
MECH 3334	Mechanical Design				
MECH 3345	System Dynamics				
MECH 3352	Engineering Analysis II				
MECH 4315	Heat Transfer				
MECH 4346 or MECH 4393	Mechatronics Special Topics in Electro-Mechanical Area				
MECH 4366	Senior Design				

G Lab Experience** (2 SCH) Can choose from MECH 3103, 3113, 3123		Semester Completed	Final Grade	SCH	Sub #

H Math Elective (3 SCH) Select and circle one:		Semester Completed	Final Grade	SCH	Sub #
MATH 3323*, MATH 3325*, MATH 4326*, STAT 3320*					

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

J Design Elective Any Area (6 SCH)		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>

BSME Total Hours	128
-------------------------	------------

APPROVALS:	
ADVISOR	DATE
CHAIR	DATE