

Bachelor of Science – Engineering Innovation and Leadership Degree Plan - Mechanical Engineering Concentration (checklist)

2024

Catalog: 2023-2024

Expires: 08/01/2030

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)					
PHYS 2320*	Introductory Mechanics				
PHYS 2120*	Laboratory for PHYS 2320				
PHYS 2321*	Introductory Electromagnetism				
PHYS 2121*	Laboratory for PHYS 2321				
4 Language, Philosophy, and Culture (3)					
PHIL 2306*	Ethics				
5 Creative Arts (3) Select and circle one:					
ART 1300*, ARTH 1305*, 1306*, CHIC 1311*, DANC 1304*, FILM 1390*, MUSL 1324*, 1327*, 2321*, 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)					
EL 1301*	Eng. Innovation & Leadership				
CS 1320* ^a	Computer Programming Sci. / Engr.				

B Foundational Math & Science (12 SCH)		Semester Completed	Final Grade	SCH	Sub #
CHEM 1305*	General Chemistry				
MATH 1312*	Calculus II				
MATH 2313*	Calculus III				
MATH 2326*	Differential Equations				

H Upper Division Math/Science Elective (3 SCH)		Semester Completed	Final Grade	SCH	Sub #
MATH 3323*	Matrix Algebra				

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
ex	EL 1402	Other		ENGR 14TR
1				
2				
3				
4				

C Engineering Leadership Coursework (25 SCH)		Semester Completed	Final Grade	SCH	Sub #
EL 1402*	Fund of Leadership, Design and Graphics				
EL 2301*	Modeling and Simulation				
EL 3302*	Engineering Measurements				
EL 3003*	Professional Practice I				
EL 3005*	Professional Practice II				
EL 3331*	Engineering Design: People to Products				
EL 3332*	Engineering Entrepreneurship: Products to People				
EL 3373* or IE 3373 or EE 3384	Engineering Probability & Stat. Models Engr Probability & Stat Models				
EL 4395*	Capstone Design I: Definition & Exploration				
EL 4396*	Capstone Design II: Development & Evaluation				

D Mechanical Concentration Required Courses (13 SCH)		Semester Completed	Final Grade	SCH	Sub #
MECH 1321	Mechanics I - Statics				
MECH 2103	Engineering Computations				
MECH 2311	Intro to Thermal-Fluid Science				
MECH 2322	Mechanics of Materials				
MECH 2340	Mechanics II - Dynamics				

E Emphasis Courses (15 SCH) for Mechanical Concentration		Semester Completed	Final Grade	SCH	Sub #

F Mechanical Technical Electives (12 SCH) see advisor for approved courses		Semester Completed	Final Grade	SCH	Sub #
MECH 3312	Thermodynamics				
MECH 3354	Fluid Mechanics				
MECH 4315	Heat Transfer				
MECH ELECTIVE					

BSEL Total Hours 125

* -- C or better required
 ** -- requires submission of official substitution form available at
<https://www.utep.edu/engineering/student-resources/student-resources-forms.html>

APPROVALS:	
ADVISOR	DATE
CHAIR	DATE