Bachelor of Science — Industrial and Systems Engineering
Degree Plan (checklist)

2023

Catalog: 2022-23
Expires: 08/01/2029

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)

Course	Title	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*	General Chemistry Lab				
PHYS 2320*	Introductory Mechanics				
PHYS 2120*	Introductory Mechanics Lab				
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) Select and circle one:					
CE 2326*	Econ. For Engrs & Scientists				
9 Component Area Option (6)					
COMM 1302*	Business/Prof. Communications				
COMM 1301*, CS 1310*, CS 1320*, EL 1301*, LEAD 1300*, SCI 1301*, UNIV 1301*					

B Foundational Math & Science (15 SCH)

Course	Title	Semester Completed	Final Grade	SCH	Sub #
MATH 1312*	Calculus II				
MATH 2313*	Calculus III				
MATH 2326*	Differential Equations				
MATH 3323*	Matrix Algebra				
MATH 4329	Numerical Analysis				

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				

C Major: Required Lower Division Courses (19 SCH)

Course	Title	Semester Completed	Final Grade	SCH	Sub #
IE 1333*	Computational Methods				
MECH 1305*	Graphic and Design Fundamentals				
MECH 2131*	Manufacturing Engineering Lab				
IE 2333*	Decision Support Systems				
MECH 2331* or MME 2303*	Materials & Manufacturing Processes or Introduction to Materials Science & Engr				
CE 2315* or MECH 1321*	Statics or Mechanics I-Statics				
IE 2377* or MECH 2342* or EE 2350*	Electro-Mechanical Systems or Electric Circuits I				

D Major: Required Upper Division Courses (32 SCH)

Course	Title	Semester Completed	Final Grade	SCH	Sub #
IE 3331	Systems Engineering				
IE 3352	Design of Experiments				
IE 3373*	Engineering Probability & Statistical Models				
IE 3334	Intro to Work Design				
IE 3390	Operations Research I: Deterministic Models				
IE 4334	Work Design: Productivity & Safety				
IE 4353	Industrial Systems Simulation				
IE 4385	Statistical Quality Control and Reliability				
IE 4390	Operations Research II: Stochastic Models				
IE 4391	Production Planning & Inventory Control Systems				
IE 4266	Senior Design				

E Technical Elective*** (9 SCH)
Select and circle the three you chose:

	Semester Completed	Final Grade	SCH	Sub #
IE 4371, 4395, 4396, RWS 3359 or any other upper division course from the College of Engineering, College of Science, and College of Business Administration				

* -- C or better required

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

*** -- In addition to provided courses, any upper division course from the College of Engineering, College of Science, or College of Business Administration

BSIE Total Hours	**120**

APPROVALS:

ADVISOR	DATE
CHAIR	DATE