Bachelor of Science in

INDUSTRIAL ENGINEERING

MAJOR MAP | 2019-2020

UTEP EDGE

	YOUR CLASS SCHEDULE	ACADEMIC ADVISING	ENRICHING EXPERIENCES	LIFELONG SUCCESS
FRESHMAN	• Register to take classes in this order: UNIV 1301, Foundations of Engineering; MATH 1411; PHYS 2420; then Industrial Engineering and core curriculum courses. • Take COMM 1302.	• Meet your PREE Advisor and attend the Intro Compliance session during orientation. • Declare your Industrial Engineering major once you register for MATH 1411 (CalculusI) or higher.	• Explore student organizations at Gold Rush. • Experience a new culture with a student exchange program. • Network with peers and organize a study group at the Tech Café. • Cultivate leadership and teamwork skills at TCM Day.	• Discover ACES tutoring resources. • Explore career opportunities at the Career Expo and the Engineering & Science Expo.
SOPHOMORE	• Take IE 2315, Statics for IE Majors; IE 2326, Engineering Economy for IE Majors; PHIL 2306, Ethics; and PHYS 2421, if not already completed. • Examine the critical path flow chart.	• Meet with your PREE Advisor before registration. • Discuss your degree plan with your PREE Advisor. • Ask your PREE advisor about the Rising Junior Exam.	• Join Institute of Industrial and System Engineers. • Explore professional engagement opportunities with SWE and MAES/SHPE. • Discover community involvement opportunities in your field with the Center for Civic Engagement. • Strive for high grades to be eligible for induction into Alpha Pi Mu, the Industrial Engineering Honor Society.	• Visit the Career Center Satellite to develop a resume and investigate employment opportunities. • Cultivate healthy lifestyle habits by visiting the Student Recreation Center.
JUNIOR	• Focus on your upper division Industrial Engineering classes. • Examine the critical path flow chart.	• Meet with your Industrial Engineering advisor before registration. • Discuss your degree plan with your advisor. • Ask about internship opportunities and about preparing for the Fundamentals of Engineering Exam (FE).	• Explore unique faculty-led travel opportunities with Engineering Global Programs. • Participate in a technical competition such as Steel Bridge, Concrete Canoe, or Mini Baja. • Cultivate global awareness at events sponsored by the Office of International Programs.	• Ask a Peer Career Advisor about internship opportunities. • Revisit the Career Expo and the Engineering & Science Expo. • Explore graduate programs in Engineering.
SENIOR	• Take IE 4466, Senior Design. • Complete your major requirements and any remaining electives.	• Meet with your Industrial Engineering advisor before registration. • Review your graduation audit with the Graduation Coordinator.	• Cultivate a leadership role with your student organization. • Expand your community engagement efforts by joining the Ninjaneer Service Learning Program. • Explore research opportunities with COURI.	• Take the Fundamentals of Engineering (FE) Exam. • Visit the Career Center Satellite for mock interviews and resume review. • Apply for graduate school or explore career opportunities.

UPDATED 06/29/2018

EDGE ADVANTAGES:

- Leadership
- Problem-solving
- Communication
- Entrepreneurship
- Social Responsibility
- Confidence
- Global Awareness
- Teamwork
- Critical Thinking

CAREER POSSIBILITIES:

- Computer and electronic product manufacturing
- Machinery manufacturing
- Aerospace product and parts manufacturing
- Motor vehicle parts manufacturing
- Engineering services

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MAJOR MAP CHECKLIST | 2019-2020

UTEP EDGE

Last Name _____ First Name _____ M.I. _____

Catalog: 2017-18
Expires: 08/01/2024

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*	General Chemistry Lab				
PHYS 2420*	Introductory Mechanics				
4 Language, Philosophy, and Culture (3)					
PHIL 2306*	Ethics				
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) Select and circle one:					
CE 2326*	Econ. For Engrs & Scientists				
9 Component Area Option (6)					
UNIV 1301*	Foundations of Engineering				
COMM 1302	Business/Prof. Communications				

B Foundational Math & Science (15 SCH)		Completed	Grade	SCH	Sub #
MATH 1312*	Calculus II				
MATH 2313*	Calculus III				
MATH 2326*	Differential Equations				
MATH 3323*	Matrix Algebra				
MATH 4329*	Numerical Analysis				

C Major: Required Lower Division Courses (13 SCH)		Semester Completed	Final Grade	SCH	Sub #
MECH 1305*	Graphic and Design Fundamentals				
MECH 2131*	Manufacturing Engineering Lab				
MME 2303*[a]	Materials & Manufacturing Processes				
CE 2315*[b]	Statics				
IE 2377*[c]	Electro-Mechanical Systems				

D Major: Required Upper Division Courses (38 SCH)		Semester Completed	Final Grade	SCH	Sub #
IE 3331	Systems Engineering				
IE 3332	Safety Engineering				
IE 3352	Design of Experiments				
IE 3373*	Engineering Probability & Statistical Models				
IE 3390	Operations Research I				
IE 3477	Methods and Industrial Ergonomics				
IE 4353	Industrial Systems Simulation				
IE 4384	Industrial Layout				
IE 4385	Statistical Quality Control and Reliability				
IE 4390	Probabilistic Operations Research				
IE 4391	Production and Inventory Control				
IE 4466	Senior Design				

E Technical Elective*** (9 SCH) Select and circle the three you chose:	Semester Completed	Final Grade	SCH	Sub #
ENGL 3359, IE 4312, 4333, 4371, 4395, 4396, 4397, or any other upper division course from the College of Engineering,				
College of Science, and College of Business Administration				

NOTES:

a -- MECH 2331 may be substituted.

b -- MECH 1321 may be substituted.

c -- MECH 2342 may be substituted.

* -- C or better required

** -- official substitution form available at http://engineering.utep.edu/plaza/AcademicForms/index.html

*** -- in addition to provided courses, any upper division course from the College of Engineering or College of Science may be substituted.

BSIE Total Hours	120

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				

APPROVALS:

ADVISOR _____ DATE _____

CHAIR _____ DATE _____

Rev. 06-26-2017