Bachelor of Science in

MECHANICAL ENGINEERING

MAJOR MAP | 2019-2020

UTEP EDGE

	YOUR CLASS SCHEDULE	ACADEMIC ADVISING	ENRICHING EXPERIENCES	LIFE LONG SUCCESS
FRESHMAN	• Register to take classes in this order: UNIV 1301, Foundations of Engineering; MATH 1411; PHYS 2420; then Mechanical Engineering and core curriculum courses. • Take COMM 1302.	• Meet your PREE Advisor and attend the Intro Compliance session during orientation. • Declare your Mechanical Engineeering major once you register for MATH 1411 (Calculus I) 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 Machine Shop. • 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 MECH 2311, Introduction to Thermo-Fluid. Build extra time into your schedule for this challenging course. • Take CE 2326, Economics for Engineers and Scientists; 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 about the Rising Junior Exam and the Masters of Science in Biomedical Engineering.	• Join Society of Automotive 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 Pi Tau Sigma, the Mechanical 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 Mechanical Engineering classes. • Examine the critical path flow chart.	• Meet with your Mechanical 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 MECH 4366, Senior Design. • Complete your major requirements and any remaining electives.	• Meet with your Mechanical 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:

- Aerospace
- Automobile
- Biomedical
- Construction and Building
- Manufacturing
- Power
- Process
- Railway

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MAJOR MAP CHECKLIST | 2019-2020

UTEP EDGE

Last Name | First Name | M.I.

Catalog: 2017-2018
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*	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 (6 SCH)		Semester Completed	Final Grade	SCH	Sub #
MATH 1312*	Calculus II				
MATH 2313*	Calculus III				

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

D Major: Required Lower Division Courses (25 SCH)		Semester Completed	Final Grade	SCH	Sub #
MECH 1305*	Graphic and Design Fundamentals				
MECH 1321*	Mechanics I-Statics				
MECH 2131*	Manufacturing Engineering Lab				
MECH 2311*	Introduction to Thermo-Fluid				
MECH 2322*	Mechanics of Materials				
MECH 2331*	Mat'ls and Manufacturing Processes				
MECH 2340*	Mechanics II-Dynamics				
MECH 2342*	Electro Mechanical Systems				
MECH 2351*	Engineering Analysis 1				

E Major: Required Upper Division Courses (39 SCH)		Semester Completed	Final Grade	SCH	Sub #
MECH 3312	Thermodynamics				
MECH 3313	Thermo-Fluids Lab				
MECH 3314	Fluid Mechanics				
MECH 3323	Solid Mechanics Lab				
MECH 3334	Mechanical Design				
MECH 3345	System Dynamics				
MECH 3352	Engineering Analysis II				
MECH 4315	Heat Transfer				
MECH 4316	Thermal System Design				
MECH 4326	Finite Element Analysis				
MECH 4336	Principles of Engineering Design				
MECH 4346	Mechatronics				
MECH 4366	Senior Design				

F Math/Science Elective (3) **** Select and circle one:	Semester Completed	Final Grade	SCH	Sub #
BIOL 1306*, MATH 2325*, MATH 2326*, MATH 3323* MATH 3325*, PHYS 3325*, PHYS 3351*, PHYS 4348*				

G Technical Elective (6 SCH) Select and circle two:	Semester Completed	Final Grade	SCH	Sub #
MECH 3363, 4355,4356, 4368, 4371, 4395				
MECH 3363, 4355,4356, 4368, 4371, 4395				

* -- C or better required

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

**** Students must complete 2 courses in the same science (either PHYS, CHEM, or BIOL) to satisfiy the Science Sequence. A C or better is required.

BSME Total Hours 128

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				

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ADVISOR DATE

CHAIR DATE

Rev. 06-26-2017