

# University of Houston - Department of Mechanical Engineering - Undergraduate Program

## University of Houston – Mechanical Engineering Curriculum

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### Core

ENGL 1303	Freshman Composition I
ENGL 1304	Freshman Composition II or ITEC 3372 Communication in Science, Engineering and Technology
HIST 1377	The United States to 1877
HIST 1378	The United States since 1877
POLS 1336	U.S. and Texas Constitution and Politics
POLS 1337	U.S. Government: Congress, President and Courts
ENGI 2304	Technical Communications
Humanities, Social Sciences and Visual/Performing Arts- three courses--see core curriculum	

### Natural Science and Mathematics

CHEM 1117	Fundamentals of Chemistry for Engineers Laboratory
CHEM 1372	Fundamentals of Chemistry for Engineers
MATH 1431	Calculus I
MATH 1432	Calculus II
MATH 2433	Calculus III
MATH 3321	Engineering Mathematics
MATH 3363	Introduction to Partial Differential Equations
PHYS 1321	University Physics I
PHYS 1322	University Physics II

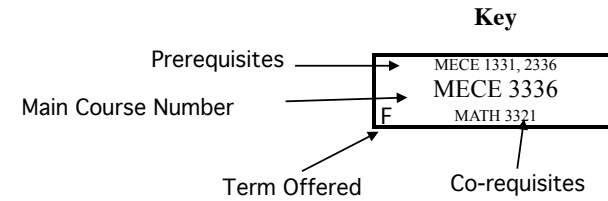
### Engineering

MECT 1330	Computer-aided drafting - required, but does not apply to the BSME degree
ECE 3336	Introduction to Circuits and Electronics
MECE 1100	Introduction to Mechanical Engineering (initially taught as ENGI 1197)
MECE 1331	Computing for Engineers
MECE 2334	Thermodynamics I
MECE 2336	Mechanics I (Statics)
MECE 2361	Mechanical Design I: Design Analysis and Synthesis
MECE 3245	Material Science Laboratory
MECE 3334	Thermodynamics II
MECE 3336	Mechanics II (Dynamics)
MECE 3338	Mechanical Design II: Dynamics and Control of Mechanical Systems
MECE 3345	Material Science
MECE 3360	Experimental Methods
MECE 3363	Introduction to Fluid Mechanics
MECE 3369	Solid Mechanics
MECE 3371	Numerical Methods for Engineers
MECE 4340	Mechanical Engineering Capstone I
MECE 4341	Mechanical Engineering Capstone II
MECE 4364	Heat Transfer
MECE 4371	Thermal /Fluids Laboratory
MECE 4372	Mechanics-Controls/Vibration Laboratory

### MECE Electives (must have senior status in ME)\*

CHEE 33XX, CIVE 33XX, ECE 33XX, ENGI 53XX, INDE 33XX, PETR 33XX	or higher
MATH 43XX	(no more than one course, which may be used to obtain a mathematics minor)
MECE 3399 & MECE 4399	Senior Honors Thesis
MECE 4398	Special Problems (no more than one course)
MECE 53XX or higher	(at least two courses) offered during the long semesters

\* Students completing the previous ME elective core requirements (the three MECE XXXX electives) need at least two MECE 53XX courses



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MATH 1330 MATH 1431	MATH 1310 CHEM 1372	CHEM 1117 CHEM 1372		ENGL 1303	POLS 1336
MATH 1431 MATH 1432	PHYS 1321 MATH 1432		MATH 1431 MECE 1331	MECE 1100	ENGL 1303 ENGL 1304
MATH 1432 MATH 2433	PHYS 1321 PHYS 1322 MATH 2433		PHYS 1321 MECE 2336 MATH 2433		MECE 1331, ENGL 1304 ENGI 2304  Humanities
MATH 1432 MATH 3321		PHYS 1322, MATH 2433 CHEM 1372, 1117 MECE 2334	MECE 1331, 2336 MECE 3336 MATH 3321	ENGI 2304, MECT 1330 MECE 2361	POLS 1337
MATH 2433, 3321 MATH 3363	MECE 1331, PHYS 1322, MATH 3321 ECE 3336	MECE 2334, 3336 MECE 3334 F	CHEM 1372, 1117 MECE 2334, 3336 MECE 3345	MECE 3336 MECE 3369 MATH 3363 F	HIST 1377 (or 1376)
MATH 3363, MECE 1331, 3336, 3369 S MECE 3371 MECE 3363	MECE 1331, 2334, 3336 ECE 3336, ENGI 2304 MECE 3360	MECE 2334, 3336 MECE 3363 S MATH 3363	MECE 3345, ENGI 2304 MECE 3245	MECE 2361, 3336 MECE 3338 S	HIST 1378 (or 1379)
senior standing in ME MECE elective	MECE 3338, 3360 MECE 4372	MECE 3334, 3363 MECE 4364 MECE 3371	MECE 3338, 3345, 3360, 3369, 3371 F MECE 4340 MECE 4364		SOC SCI
senior standing in ME MECE elective	MECE 3334, 3360, 4364 MECE 4371	senior standing in ME MECE elective	MECE 4340, 4364 S MECE 4341		Visual/Perf Arts

- \* The first digit in a course number indicates level, while the second digit is the number of credit hours. For example, MATH 2433 is a 4 credit hour sophomore-level course in mathematics.
- \* Prerequisites appear above the main course number, while corequisites are shown below. Consult the instructor if you don't meet these requirements. Course titles are on the other side of this page.
- \* Admissions evaluates all transcripts. Courses transferred as "electives" can be assigned by petition. Students must request a review from the Dean's office one year before graduation.
- \* Students must satisfy a drafting requirement by completing MECT 1330 or by petitioning high school drafting or relevant industrial experience.
- \* You are required to take CHEM 1372 and CHEM 1117 in place of CHEM 1331, CHEM 1332, CHEM 1111 and CHEM 1112.
- \* Guidelines for selecting MECE electives are listed on the other side of this page. You must petition any exceptions to these guidelines.
- \* Consult the Class Schedule for a description of the current and previous non technical core requirements.
- \* Curriculum effective Fall 2011.
- \* All ME students must attain a 2.25 GPA in MECE 1331, 2334, 2336, 2361 and 3336 before taking the 3000-level courses. This 2.25 GPA must be attained by the time each of these courses has been attempted at least once.