

UTSA

MECHANICAL ENGINEERING RECOMMENDED PROGRAM OF STUDY 2008-2010 UNDERGRADUATE CATALOG

Revised 06/30/2008

SEMESTER I				SEMESTER II			
MAT	1214	Calculus I	4	MAT	1223	Calculus II	3
ME	1301	Intro to Engineering Design	1	ME	1402	Engineering Graphics	2
CHE	1103	General Chemistry I	3	PHY	1903	Engineering Physics I	3
WRC	1013	Freshman Composition I	3	PHY	1911	Engineering Physics I Lab	1
COR	1203	Freshman Seminar/Soc-Beh Science	3	WRC	1023	Freshman Composition II	3
CORE*		U.S. History & Diversity	3	CORE*		U.S. History & Diversity	3
Semester Total			17	Semester Total			15
SEMESTER III				SEMESTER IV			
MAT	2213	Calculus III	3	EGR	3323	Applied Engineering Analysis II	3
EGR	2103	Statics	3	EGR	2513	Dynamics	3
PHY	1923	Engineering Physics II	3	ME	3243	Materials Engineering	3
PHY	1931	Engineering Physics II Lab	1	ME	3241	Materials Engineering Laboratory	1
EGR	2323	Applied Engineering Analysis I	3	ME	3293	Thermodynamics I	3
CORE*		Visual & Performing Arts	3	Major Work		Approved Math/Science Elective	3
Semester Total			16	Semester Total			16
SEMESTER V				SEMESTER VI			
EE	2213	Electric Circuits/Electronics	3	ME	3663	Fluid Mechanics	3
ME	3113	Measurements & Instrumentation	3	ME	3823	Machine Element Design	3
ME	3263	Manufacturing Engineering	3	ME	4293	Thermodynamics II	3
ME	3513	Mechanism Design	3	ME	4523	Dynamic Systems & Control	3
ME	3173	Numerical Methods	3	ME	4702	Mech Systems & Control Lab	2
ME	3813	Mechanics of Solids	3	CORE*		Political Science 1013 (U.S.)	3
Semester Total			18	Semester Total			17
SEMESTER VII				SEMESTER VIII			
ME	4313	Heat Transfer	3	ME	4813	Senior Design II	3
ME	4802	Thermal & Fluid Laboratory	2	ME		Technical Elective	3
ME	4811	Senior Design I	1	ME		Technical Elective	3
ME		Technical Elective	3	CORE*		Economics (2003, 2013, or 2023)	3
CORE*		Political Science (Texas)	3	CORE*		World Society & Issues	3
CORE*		Literature	3				
Semester Total			15	Semester Total			15
Total Required Degree Hours							129

*PLEASE REFER TO UTSA 2008-10 UNDERGRADUATE CATALOG PAGES 5-9.

DEADLINE TO APPLY FOR GRADUATION:
FALL: Apr. 15; SPR: Nov.15; SMR: Feb. 15

ALL UNDERGRADUATE ENGINEERING STUDENTS SOPHOMORE LEVEL AND ABOVE MUST SEE A FACULTY ADVISOR EVERY FALL/SPRING PRIOR TO REGISTRATION

UTSA
College of Engineering
MECHANICAL ENGINEERING
Prerequisite List
2008-2010 Undergraduate Catalog
<http://www.utsa.edu>

NOTE: Prerequisites for CE, EE, ME, and EGR courses must be completed with a grade of “C” or better. A minimum grade of “C” is required for all science and mathematics courses required in the Engineering programs. Transfer students must request a transfer evaluation from the undergraduate advisors during their first semester. A grade of “D” may not be transferred into major work requirements. Students may not graduate with a grade of “D” in a course required for the major.

Course Number and Title (T/E = Technical Elective and concentration)	Prerequisites (credit or concurrent enrollment) ALWAYS CHECK CURRENT CATALOG
ME 1301 Intro to ME Design	ME Freshmen
ME 1402 Engineering Graphics	ME 1301
ME 3113 Measurements & Instrumentation	(EE 2213)
ME 3173 Numerical Methods	EGR 2323
ME 3241 Materials Engineering Lab	(ME 3243)
ME 3243 Materials Engineering	CHE 1103, EGR 2103, (ME 3241)
ME 3263 Manufacturing Engineering	(ME 3243)
ME 3293 Thermodynamics I	EGR 2103
ME 3323 Mechanical Vibration (T/E – Mechanical)	EGR 2513
ME 3513 Mechanism Design	EGR 2513
ME 3593 Alternative Energy Sources (T/E – Thermal)	ME 3293
ME 3663 Fluid Mechanics	EGR 2513, EGR 3323
ME 3813 Mechanics of Solids	EGR 2103
ME 3823 Machine Element Design	ME 1402, ME 3813
ME 4133 CAD/CAE (T/E – Mechanical)	ME 1402
ME 4183 Compressible Flow & Propulsion Syst (T/E – Thermal)	ME 3293, ME 3663
ME 4243 Intermediate Materials Engineering (T/E – Mechanics)	ME 3241, ME 3243, ME 3813
ME 4293 Thermodynamics II	MAT 2213, ME 3293
ME 4313 Heat Transfer & Rate Processes	ME 3173, ME 3293, ME 3663
ME 4323 Thermal Systems Design (T/E – Thermal)	ME 3663, (ME 4313)
ME 4343 Heating, A/C, & Refrig Design (T/E – Thermal)	ME 3293, ME 3663, (ME 4313)
ME 4523 Dynamic Systems & Control	EGR 2513, EGR 3323
ME 4553 Automotive Vehicle Dynamics (T/E – Mechanical)	ME 3513
ME 4563 Computer Integrated Manufacturing (T/E – Manufacturing)	ME 3263
ME 4573 Facilities Planning & Design (T/E – Manufacturing)	(ME 3263)
ME 4583 Enterprise Process & Engineering (T/E – Manufacturing)	(ME 3263)
ME 4603 Finite Element Analysis (T/E – Mechanics)	ME 3813
ME 4613 Power Plant System Design (T/E – Thermal)	ME 3663, ME 4293
ME 4623 Internal Combustion Engines (T/E – Thermal)	ME 3293, ME 3663
ME 4663 Fluid Systems Design (T/E – Thermal)	ME 3663, ME 3173
ME 4673 Mechanical Systems Design (TE – Mechanical)	ME 3513, ME 3823
ME 4702 Mechanical Systems & Control Lab	ME 3113, ME 3813, (ME 4523)
ME 4723 Reliability & Quality Control (T/E – Mechanical)	EGR 2323, ME 3113
ME 4773 Fundamentals of Robotics (T/E – Mechanical)	ME 3513
ME 4802 Thermal & Fluid Lab	ME 3113, ME 3663, (ME 4313)
ME 4811 Senior Design I	ME 3663, ME 3823, (ME 4313)
ME 4813 Senior Design II	ME 4811, ME 4313
ME 4953 Special Studies in ME (T/E)	Will depend on topic
ME 4963 Bioengineering (T/E – Mechanics)	ME 3813, EGR 2513
CHE 1103 General Chemistry I	(MAT 1073), CHE 1073 or passing score on Chemistry Placement Exam
EE 2213 Electric Circuits/Electronics	PHY 1923, (EGR 2323)
EGR 2103 Statics	MAT 1223, PHY 1903
EGR 2513 Dynamics	EGR 2103
EGR 2323 Applied Engineering Analysis I	MAT 1223
EGR 3323 Applied Engineering Analysis II	EGR 2323
MAT 1214 Calculus I	MAT 1093 or passing score on placement exam
MAT 1223 Calculus II	MAT 1214
MAT 2213 Calculus III	MAT 1223
PHY 1903 Engineering Physics I	MAT 1214, (MAT 1223)
PHY 1911 Engineering Physics I Lab	(PHY 1903)
PHY 1923 Engineering Physics II	PHY 1903, MAT 1223
PHY 1931 Engineering Physics II Lab	(PHY 1923)
MATH/SCIENCE ELECTIVE	
BIO 1404 Biosciences I	
CHE 1013 Elementary Organic & Biochemistry	CHE 1103
CHE 1113 General Chemistry II	CHE 1103
MAT 2323 Linear Algebra	MAT 1223 or EGR 2323
PHY 1983 Physics for Scientists III	PHY 1923
PHY 3103 Modern Physics	(MAT 2213), consent of instructor
STA 2303 Applied Probability/Statistics for Engineers	MAT 1223