

**COLLEGE OF ENGINEERING AND COMPUTER SCIENCE****Bachelor of Science in Mechanical Engineering**

Mechanical Engineering is one of the broadest of the engineering disciplines, and mechanical engineers find themselves engaged in a wide variety of industrial and business operations. Computer-aided design and analysis, thermal and fluid systems, manufacturing processes and control, bioengineering, aerospace systems, and instrumentation are several of the many areas that require mechanical engineering skills. Graduates with bachelor's degrees in mechanical engineering work in all types of organizations, from large corporations to government offices to small consulting firms. Entry-level positions include engineering design, testing, manufacturing, maintenance, and sales. With experience, mechanical engineers may become managers of large engineering projects, plant managers, owners of their own firms, or executives in large corporations. The bachelor's degree also provides a solid foundation for graduate study. *(The Mechanical Engineering program is accredited by the ABET Engineering Accreditation Commission.)*

**Recommended 4-Year Curriculum****FRESHMAN YEAR**

First Semester			Credit Hours	Second Semester			Credit Hours
ENGR	1200	Engineering Methods	2	PHYS	2325	University Physics I	3
ENGL	1301	English Composition I	3	PHYS	2125	University Physics I Lab	1
CHEM	1311	General Chemistry I	3	ENGL	1302	English Composition II	3
CHEM	1111	General Chemistry I Lab	1			*Fine and Perf. Arts Elective	3
MATH	2413	Calculus I	4	MATH	2414	Calculus II	4
UNIV	1300	Freshman Seminar	3	MENG	1201	Mechanical Engineering I	2
<b>Total Semester Hours</b>			<b>16</b>	<b>Total Semester Hours</b>			<b>16</b>

**SOPHOMORE YEAR**

First Semester			Credit Hours	Second Semester			Credit Hours
MATH	3404	Multivariate Calculus	4	MATH	1342	Statistics	3
ENGR	2301	Engr. Mechanics-Statics	3	MATH	3305	Differential Equations	3
MENG	2201	Mechanical Engineering II	2	ECON	2302	Microeconomics	3
MENG	2202	Materials Science	2	ENGR	2302	Dynamics	3
PHYS	2326	University Physics II	3	EENG	3304	Linear Circuits	3
PHYS	2126	University Physics II Lab	1	MENG	3219	Manufacturing	2
<b>Total Semester Hours</b>			<b>15</b>	<b>Total Semester Hours</b>			<b>17</b>

**JUNIOR YEAR**

First Semester			Credit Hours	Second Semester			Credit Hours
MATH	3203	Matrix Methods	2	MENG	3304	Thermodynamics II	3
MENG	3301	Thermodynamics I	3	MENG	3316	Heat Transfer	3
MENG	3306	Mechanics of Materials	3	MENG	3309	Mechanical Systems Design	3
MENG	3310	Fluid Mechanics	3	MENG	3111	Mech. Engr. Lab II	1
MENG	3303	Dynamics Of Machinery	3	ENGR	3314	Design Methodology	3
MENG	3210	Mech. Engr. Lab I	2			*Humanities Elective	3
<b>Total Semester Hours</b>			<b>16</b>	<b>Total Semester Hours</b>			<b>16</b>

**SENIOR YEAR**

First Semester			Credit Hours	Second Semester			Credit Hours
MENG	4115	Senior Design I	1	MENG	4315	Senior Design II	3
MENG	4311	Electro-Mech. Design	3	ENGR	4109	Senior Seminar	1
MENG	4313	Thermal/Fluid Design	3	POLS	2306	Texas Politics	3
POLS	2305	American Government	3			+Technical Elective	3
HIST	1301	United States History I	3	HIST	1302	United States History II	3
		+Technical Elective	3	ENGL		*World/European Literature	3
<b>Total Semester Hours</b>			<b>16</b>	<b>Total Semester Hours</b>			<b>16</b>

**Total hours must equal at least 128 hours**

**NOTES:**

\*See UT Tyler Core Curriculum for approved course(s).

+ Consult with your advisor for specific degree requirements and schedule planning.