# 2012-13 BS Mechanical Engineering Degree Plan <u>BS Physics Dual Degree</u>

Last	First	Middle	SMU Student ID

Dallas Address Phone Number Adviso

# See University Curriculum requirements in the Undergraduate Catalog.

#### **MAJOR**

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Courses	Hours	Semester & Year	Grade
ME 1202 – Introduction to Engineering	2		
ME 1102 – ME Laboratory: Introduction to Engineering	1		
ME 1305 – Information Technology & Society	3		
ME 2310 – Statics	3		
ME 2331 – Thermodynamics	3		
ME 2131 – ME Laboratory: Thermodynamics	1		
EE 2350 - Circuit Analysis I	3		
ME 2340 – Mechanics of Deformable Bodies	3		
ME 2140 – ME Laboratory: Solid Mechanics	1		
ME 2342 – Fluid Mechanics	3		
ME 2142 – ME Laboratory: Fluid Mechanics	1		
ME 3332 – Heat & Mass Transfer	3		
ME 3132 – ME Laboratory: Heat & Mass Transfer	1		
ME 3340 – Engineering Materials	3		
ME 3370 – Manufacturing Processes	3		
ME 4338 – Thermal Systems Design	3		
ME 4360 – Design & Control of Mechanical Systems	3		
ME 4160 – ME Laboratory: Automatic Control	1		
ME 4370 – Elements of Machine Design	3		
ME 4380 – Mechanical Engineering Design I	3		
ME 4381 – Mechanical Engineering Design II	3		
ME 5322 – Vibrations	3		
TOTAL	53		

## **MATHEMATICS/STATISTICS**

Courses	Hours	Semester & Year	Grade
MATH 1337 – Calculus with Analytic Geometry I	3		
MATH 1338 – Calculus with Analytic Geometry II	3		
MATH 2339 – Calculus with Analytic Geometry III	3		
MATH 2343 – Elementary Differential Equations	3		
MATH 3353 – Introduction to Linear Algebra	3		
STAT 4340 (CSE 4340, EMIS 4340) or STAT 5340 (EMIS 5370)	3		
TOTAL	18		

### **SCIENCE**

Courses		Semester & Year	Grade
CHEM 1303 – General Chemistry I	3		
PHYS 1303 – Introductory Mechanics	3		
PHYS 1105 – General Physics Laboratory	1		
PHYS 1106 – General Physics Laboratory	1		
PHYS 1304 – Introductory Electricity & Magnetism	3		
PHYS 3305 – Introduction to Modern Physics	3		
PHYS 3344 – Classical Mechanics	3		
PHYS 3374 – Thermodynamics & Statistical Mechanics	3		
PHYS 4211 – Laboratory Physics I	2		
PHYS 4321 – Methods of Theoretical Physics	3		
PHYS 4392 – Introduction to Electromagnetic Theory	3		
PHYS 5382 – Introduction to Quantum Mechanics	3		
PHYS 5383 – Advanced Quantum Mechanics	3		
Advanced Physics Elective <sup>2</sup>	3		
Advanced Physics Elective <sup>2</sup>	3		
TOTAL	40		

White Degree Plan (For advising ONLY!)

Blue Degree Plan (For graduating seniors ONLY: Due at the beginning of the graduating semester.)

### **GRADUATION CERTIFICATION:**

Advisor	Date
Dept. Chair or Associate Chair	Date
Assistant Dean	Date

<sup>&</sup>lt;sup>1</sup>Engineering majors are required to take 9 hours of Perspectives and 6 hours of Cultural Formations, or 12 hours of Perspectives and 3 hours of Cultural Formations for a total of 15 hours. One of the selections for Perspectives or Cultural Formations must satisfy the Human Diversity Co-Requirement.

<sup>2</sup>The advanced physics electives must be 3000 level or higher and be approved by the student's physics advisor.