# 2011-12 BS Mechanical Engineering Degree Plan <u>BS Physics Dual Degree</u>

Last	First	Middle	SMU Student ID

Dallas Address Phone Number Advisor

## General Education Curriculum (GEC): From fall 2011 through summer 2012

Courses	Hours	Semester & Year	Grade
ENGL 1301 – Written English I	3		
ENGL 1302 – Written English II	3		
Perspectives <sup>1</sup> – Arts			
Perspectives <sup>1</sup> – Literature			
Perspectives <sup>1</sup> – Religious & Philosophical Thought			
Perspectives <sup>1</sup> – History			
Perspectives <sup>1</sup> – Politics & Economics			
Perspectives <sup>1</sup> – Behavioral Sciences			
Cultural Formations <sup>1</sup>			
Cultural Formations <sup>1</sup>			
Human Diversity requirement fulfilled by:	*****		
Wellness I	1		
Wellness II	1		
TOTAL	23		

#### **MAJOR**

MAJOR			
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	Hours	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 4321 – Methods of Theoretical Physics	3		
PHYS 3374 – Thermodynamics & Statistical Mechanics	3		
PHYS 4211 – Laboratory Physics I	2		
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		

Total TCH: (Minimul	n 134)	
White Degree Plan (For advising galue Degree Plan (For graduating		inning of the graduating semester.)
GRADUATION CERTIFICATION:		
Advisor	Date	
Dept. Chair or Associate Chair	Date	
Assistant Doop	Data	

<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.