

# SMU ENGINEERING

## 2008-09 BS Environmental Engineering Degree Plan

### BS Math Dual Degree

Last First Middle SMU Student ID

Dallas Address Phone Number Advisor

#### General Education Curriculum (GEC): From fall 2008 through summer 2009

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		
<b>TOTAL</b>	<b>23</b>		

#### MAJOR

Courses	Hours	Semester & Year	Grade
ENCE 1302 – Introduction to Environmental and Civil Engineering	3		
ENCE 1331 – Meteorology	3		
ENCE 2304 – Introduction to Environmental Engineering & Science	3		
ENCE 2421 – Aquatic Chemistry	4		
ENCE 3323 – Water Resources Engineering	3		
ENCE 3431 – Fundamentals of Air Quality I	4		
ENCE 3341 – Introduction to Solid & Hazardous Waste Management	3		
ENCE 3451 – Principles of Industrial Hygiene and Occupational Health	4		
ENCE 4380 – Environmental & Civil Engineering Design I	3		
ENCE 4381 – Environmental & Civil Engineering Design II	3		
ENCE 5317 – Environmental Organic Chemistry	3		
ENCE 5354 – Environmental Engineering Principles & Processes	3		
Environmental Technical Elective <sup>2</sup>	3		
Environmental Technical Elective <sup>2</sup>	3		
<b>TOTAL</b>	<b>45</b>		

#### 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		
STAT 4340 or STAT 5340 – Statistical Methods for Engineers & Applied Scientists	3		
<b>TOTAL</b>	<b>15</b>		

**BASIC ENGINEERING**

Courses	Hours	Semester & Year	Grade
CSE 1340 or 1341 – Computer Science	3		
ENCE 2310 – Statics	3		
ENCE 2331 – Thermodynamics	3		
ENCE 2342 – Fluid Mechanics	3		
<b>TOTAL</b>	<b>12</b>		

**SCIENCE**

Courses	Hours	Semester & Year	Grade
BIOL 1401 – Introductory Biology I	4		
CHEM 1303 – General Chemistry I	3		
CHEM 1113 – General Chemistry Laboratory I	1		
CHEM 1304 – General Chemistry II	3		
CHEM 1114 – General Chemistry Laboratory II	1		
PHYS 1303 – Introductory Mechanics	3		
PHYS 1105 – General Physics Laboratory I	1		
PHYS 1304 – Introductory Electricity & Magnetism	3		
PHYS 1106 – General Physics Laboratory	1		
<b>TOTAL</b>	<b>20</b>		

**FOR MATH DUAL DEGREE**

Courses	Hours	Semester & Year	Grade
MATH 3315 – (CSE 3365) Introduction to Scientific Computing	3		
MATH 3337 – Advanced Mathematics for Science and Engineering	3		
Advanced Math Elective <sup>3</sup>	3		
Advanced Math Elective <sup>3</sup>	3		
<b>TOTAL</b>	<b>12</b>		

**ADDITIONAL COURSES**

Courses	Hours	Semester & Year	Grade
<b>TOTAL</b>			

Total TCH: \_\_\_\_\_ (Minimum 127)

**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>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>Advisor's approval required when enrolling in dual ENCE/MATH electives; ENCE 5331, ENCE 5332, ENCE 5334 or MATH 6336 (ME 5336).

<sup>3</sup>Advanced math electives must be approved by the student's math advisor.