

# SMU ENGINEERING

## 2007-08 BS Civil Engineering Degree Plan BS Math Dual Degree

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Last First Middle SMU Student ID

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Dallas Address Phone Number Advisor

### General Education Curriculum (GEC): From fall 2006 through summer 2007

| 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 & Civil Engineering          | 3         |                 |       |
| ENCE 2304 – Introduction to Environmental Engineering & Science        | 3         |                 |       |
| ENCE 2310 – Statics  | 3         |                 |       |
| ENCE 2340 – Mechanics of Deformable Bodies                             | 3         |                 |       |
| ENCE 2140 – ENCE Laboratory: Mechanics of Materials                    | 1         |                 |       |
| ENCE 3323 – Water Resources Engineering                                | 3         |                 |       |
| ENCE 3350 – Structural Engineering I: Analysis and Design in Steel     | 3         |                 |       |
| ENCE 4350 – Structural Engineering II: Analysis and Design in Concrete | 3         |                 |       |
| ENCE 4380 – Environmental & Civil Engineering Design I                 | 3         |                 |       |
| ENCE 4381 – Environmental & Civil Engineering Design II                | 3         |                 |       |
| ENCE 4385 – Soil Mechanics & Foundations                               | 3         |                 |       |
| ENCE 5354 – Environmental Engineering Principles & Processes           | 3         |                 |       |
| ENCE 5372 – Introduction to CAD  | 3         |                 |       |
| ENCE 5378 – Transportation Engineering & Traffic Planning              | 3         |                 |       |
| ENCE X3XX – Technical Elective <sup>2</sup>                            | 3         |                 |       |
| ENCE X3XX – Technical Elective <sup>2</sup>                            | 3         |                 |       |
| <b>TOTAL</b>   | <b>46</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 2320 – Dynamics                         | 3         |                 |       |
| ENCE 2331 – Thermodynamics                   | 3         |                 |       |
| ENCE 2342 – Fluid Mechanics                  | 3         |                 |       |
| ENCE 2142 – ENCE Laboratory: Fluid Mechanics | 1         |                 |       |
| <b>TOTAL</b>                                 | <b>13</b> |                 |       |

**SCIENCE**

| Courses  | Hours     | Semester & Year | Grade |
|--|-----------|-----------------|-------|
| 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 1304 – Introductory Electricity & Magnetism | 3         |                 |       |
| PHYS 1105 – General Physics Laboratory I         | 1         |                 |       |
| PHYS 1106 – General Physics Laboratory II        | 1         |                 |       |
| GEOL 1301 – Earth Systems                        | 3         |                 |       |
| <b>TOTAL</b>                                     | <b>19</b> |                 |       |

**FOR DUAL MATH 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 128)

**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 advanced electives; ENCE 5361, ENCE 5364 or ME 5322.

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