

CIVIL AND ENVIRONMENTAL ENGINEERING CURRICULUM SHEET | FALL 2012

FRESHMAN (35)

| FALL | | | SPRING | | |
|----------|---------------------------------|----|------------|-------------------------------|----|
| ECIV 111 | Intro to Engineering Graphics | 3 | ECIV 200 | Statics | 3 |
| CHEM 111 | General Chemistry | 4 | CHEM 112 | General Chemistry II | 4 |
| MATH 141 | Calculus I | 4 | ENGL 102 | Rhetoric & Composition | 3 |
| ENGL 101 | Critical Reading & Comp. | 3 | MATH 142 | Calculus II | 4 |
| ELECTIVE | AIU Aest. & Intr. Understanding | 3 | PHYS 211&L | Essentials of Physics I & Lab | 4 |
| | | 17 | | | 18 |

SOPHOMORE (31)

| FALL | | | SPRING | | |
|------------|--------------------------------|----|----------|------------------------------|----|
| ECIV 201 | Prog. & Graphics for ECIV | 3 | ECIV 220 | Mechanics of Solids | 3 |
| ECI 210 | Dynamics | 3 | ECIV 360 | Fluid Mechanics | 3 |
| MATH 241 | Vector Calculus | 3 | MATH 242 | Elem. Differential Equations | 3 |
| PHYS 212&L | Essentials of Physics II & Lab | 4 | STAT 509 | Statics for Engineers | 3 |
| ELECTIVE | GHS Historical Thinking | 3 | ELECTIVE | Professional Development | 3 |
| | | 16 | | | 15 |

JUNIOR (32)

| FALL | | | SPRING | | |
|----------|-----------------------------|----|---------------|----------------------------|----|
| ECIV 303 | Civil Engr. Materials | 3 | ECIV 330 | Intro. Geotechnical Engr. | 3 |
| ECIV 320 | Structural Analysis I | 3 | ECIV 362 | Intro. Water Resource Mgt. | 3 |
| ECIV 340 | Intro. Transportation Engr. | 3 | ECIV DISTR | ECIV Distribution | 3 |
| ECIV 350 | Intro. Environmental Engr. | 3 | ECIV Elective | ECIV Elective | 3 |
| ECIV Lab | ECIV Lab | 1 | ECIV Lab | ECIV Lab | 1 |
| ELECTIVE | GSS Social Science | 3 | ESM Elective | ESM Elective | 3 |
| | | 16 | | | 16 |

SENIOR (31)

| FALL | | | SPRING | | |
|---------------|--------------------------|----|---------------|-------------------|----|
| ECIV 405 | Systems App. In ECIV | 3 | ECIV DISTR | ECIV Distribution | 3 |
| ECIV 470 | Civil Engineering Design | 4 | ECIV Elective | ECIV Elective | 3 |
| ECIV DISTR | ECIV Distribution | 3 | ECIV Elective | ECIV Elective | 3 |
| ECIV DISTR | ECIV Distribution | 3 | ESM Elective | ESM Elective | 3 |
| ECIV Elective | ECIV Elective | 3 | ESM Elective | ESM Elective | 3 |
| | | 16 | | | 15 |

Carolina Core (34 hours)

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| AIU: Aesthetic & Interpretive Understanding any approved Carolina Core course for AIU |
| ARP: Analytical Reasoning & Prob. Solving MATH 141, MATH 142 |
| CMW: Communication - Writing ENGL 101, ENGL 102 |
| SCI: Scientific Literacy CHEM 111, CHEM 112 |
| GFL: Global Citizenship - Foreign Language Score of "2" or better on FLPT, any approved course(s) Carolina Core for foreign language |

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| GHS: Global Citizenship Historical Thinking any approved Carolina Core course for GHS |
| GSS: Global Citizenship Social Science any approved Carolina Core course for GSS |
| Overlay Courses |
| CMS: Communication - Spoken Component any approved Carolina Core course for CMS |
| INF: Information Literacy any approved Carolina Core course for INF |
| VSR: Values, Ethics, Social Responsibility any approved Carolina Core course for VSR |

ESM Electives | ECIV Distribution | ECIV Electives| ECIV Labs

ESM Electives (9 hours):

One ESM elective must come from this Science Group -- BIOL 101, 102, 110, 250, 270, and 300 or above; ENVR 221, 551; GEOL 201, 202, and 300 or above; MSCI courses 300 and above.

Two additional ESM electives from the following: additional **ECIV** courses from the Distribution and Elective categories; **ENCP** 290 or above (not 310 or 360); any **ECHE** course above 320; any **ELCT** above 201; any **EMCH** 290 or above (not 310 or 360); any **CSCE** 211 and above; any **PHYS** above 212; any **GEOL** 300 and above; **BIOL** 101, 102, 250, and 300 and above; **MSCI** 300 and above; any **CHEM** above 112; **MATH** 521, 544, 550; **STAT** 511, **NAVY** 201 or 301; one Project Lead the Way course; **ENVR** 501; **ECIV** 101 if taken in the freshman year.

ECIV Distribution (12 hours): One course from 4 of the following 5 areas

Environmental: ECIV 551, 555, 556, 557, 558

Geotechnical: ECIV 530

Structures: ECIV 325 or 327

Water Resources: ECIV 560 or 562 or 563

Transportation: ECIV 540, 541, 542, or 580

ECIV Electives (12 hours):

ECIV 300, 325, 327, 426, 490, 503, 520, 521, 524, 526, 530, 533, 535, 540, 541, 542, 551, 555, 556, 557, 558, 560, 562, 563, 570, 580, 588

ECIV Laboratory courses (2 hours):

ECIV 303L, 330L, 350L, 362L.

Aesthetic and Interpretive Understanding (AIU)

approved course from Carolina Core list

Effective, Engaged, and Persuasive Communications (CMW)

Writing

USC ENGL 101, 102 or approved courses from Carolina Core list

Global Citizenship and Multicultural Understanding

Historical Thinking (GHS)

approved Carolina Core course

Social Science (GSS)

approved Carolina Core course

Foreign Language (GFL)

score of "2" or higher or approved Carolina Core course(s)

Analytical Reasoning and Problem Solving (ARP)

USC MATH 141, 142 or approved courses from Carolina Core list

Scientific Literacy (SCI) CHEM 111 and 112 or PHYS 211 & L, PHYS 212 & L

Overlay Courses

Spoken Component (CMS)

approved Carolina Core course

Information Literacy (INF)

USC ENGL 102 or approved Carolina Core course

Values, Ethics, Social Resp (VSR)

approved Carolina Core course

Notes:

C or better required in ENGL 101, 102, MATH 141, 142, 241, 242, CHEM 111, PHYS 211 & 211L, ECIV 200, 210, and 220.