

# CIVIL AND ENVIRONMENTAL ENGINEERING CURRICULUM SHEET | FALL 2013

## 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
					18
					17

## SOPHOMORE (31)

FALL			SPRING		
ECIV 201	Prog. & Graphics for ECIV	3	ECIV 220	Mechanics of Solids	3
ECIV 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
					15
					16

## 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
					15
					16

### ADDITIONAL REQUIREMENTS (0-12)

These additional University requirements may be satisfied through overlay courses, by placement testing, or by stand alone courses beyond the curriculum requirements above.

#### **CMS Effective, Engaged, and Persuasive Communication: Spoken Component**

PHIL 325, or other approved Carolina Core CMS overlay or stand alone course.

#### **INF Information Literacy**

USC ENGL 102, or other approved Carolina Core INF overlay or stand alone course.

#### **GFL Global Citizenship and Multicultural Understanding: Foreign Language**

Score of two or better on foreign language test, or equivalent study of approved Carolina Core GFL course(s).

#### **VSR Values, Ethics and Social Responsibility**

BIOL 208, HIST 108, PHIL 103, 211, 320, 321, 322, 325, POLI 303, SAEL 200 or other approved Carolina Core VSR overlay or stand alone course.

**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, 110, 250, 300 and above; **MSCI** 300 and above; any **CHEM** above 112; **MATH** 521, 544, 550; **STAT** 511, NAVY 201, 202, 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.

**Curriculum Notes:**

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

Professional Development course may meet CMS Spoken component or VSR Values, Ethics and Social Responsibility or both CMS and VSR if PHIL 325 is used.

**Carolina Core (31-36 hours)**

<b>AIU: Aesthetic &amp; Interpretive Understanding</b> any approved Carolina Core course for AIU	<b>GHS: Global Citizenship Historical Thinking</b> any approved Carolina Core course for GHS
<b>ARP: Analytical Reasoning &amp; Prob. Solving</b> MATH 141, MATH 142	<b>GSS: Global Citizenship Social Science</b> any approved Carolina Core course for GSS
<b>CMW: Communication - Writing</b> ENGL 101, ENGL 102	<b>SCI: Scientific Literacy</b> CHEM 111, PHYS 211 & L
<b>GFL: Global Citizenship - Foreign Language</b> Score of "2" or better on FLPT, any approved Carolina Core course(s) for GFL	