

# CIVIL AND ENVIRONMENTAL ENGINEERING CURRICULUM SHEET | FALL 2015

## FRESHMAN (35)

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

## SOPHOMORE (32)

FALL			SPRING		
ECIV 201*	Prog. & Graphics for ECIV	3	ECIV 111	Intro to Engr. Graphics	1
ECIV 210*	Dynamics	3	ECIV 220*	Mechanics of Solids	3
MATH 241*	Vector Calculus	3	ECIV 360*	Fluid Mechanics	3
PHYS 212 &L*	Essentials of Physics II & Lab	4	MATH 242	Elem. Differential Equations	3
ELECTIVE	GHS: Historical Thinking	3	STAT 509	Statistics for Engineers	3
		16	ELECTIVE	Professional Development	3
					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 Eng.	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

### 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 (CMS/VSr overlay); or SPCH 140

#### **INF Information Literacy**

USC's 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**

PHIL 325 (CMS/VSr overlay), 322, 323, 324

\* Indicates a lower division course to be completed before junior level courses.

**ESM Electives (9 hours):**

One ESM elective must come from this Science Group -- BIOL 101, 102, 110, 250, 270, and 300 or above; ENVR 221/321, 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 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&L, PHYS 211&L, ECIV 200, 210, and 220.

Professional Development Requirement is satisfied by completing one or more program-accepted Carolina Core courses for CMS, VSR, or by ENGL 462, 463, or SPCH 230.

ENCP 101 can replace ECIV 101

ENCP 102 can replace ECIV 111

ENCP 200 can replace ECIV 200

ENCP 201 can replace ECIV 201

ENCP 210 can replace ECIV 210

ENCP 260 can replace ECIV 220

ENCP 360 can replace ECIV 360