

# 2007 CIVIL ENGINEERING UNDERGRADUATE PROGRAM

## FRESHMAN YEAR

<u>First Semester</u>	Credit Hours	<u>Second Semester</u>	Credit Hours
CE 120 - Intro to Civil Engrg	1	CE 106 - Computer Graphics/Comm	3
ENG 104 - Writing: An Accelerated Foundational Crse	4	CHE 105 - Gen Coll Chem I	3
MA 113 - Calculus I	4	MA 114 - Calculus II	4
US: Social Science Elective	3	PHY 231 - Gen Univ Physics	4
US: ECO 201 (R - Social Science)	3	PHY 241 - Gen Univ Physics Lab	1
<b>Semester Hours</b>	<b>15</b>	<b>Semester Hours</b>	<b>15</b>

## SOPHOMORE YEAR

<u>First Semester</u>	Credit Hours	<u>Second Semester</u>	Credit Hours
CE 211 - Surveying	4	COM - Communications Elective (1)	3
CHE 107 - Gen Coll Chem II	3	EM 302 - Mech of Deform Solids	3
EM 221 - Statics	3	MNG 303 - Deformable Solids Lab	1
GLY 220 - Physical Geology	4	MA 214 - Calculus IV	3
MA 213 - Calculus III	4	PHY 232 - Gen Univ Physics	4
		PHY 242 - Gen Univ Physics Lab	1
		STA 381 - Statistics for Engrs	3
<b>Semester Hours</b>	<b>18</b>	<b>Semester Hours</b>	<b>18</b>

## JUNIOR YEAR

<u>First Semester</u>	Credit Hours	<u>Second Semester</u>	Credit Hours
CE 303 - Intro to Constr Engrg**	4	CE 351 - Intro Envr Engrg	3
CE 331 - Transportation Engrg**	3	CE 382 - Structural Mechanics	3
CE 341 - Fluid Mechanics I	4	CE 471G - Soil Mechanics**	4
CE 381 - CE Materials**	3	CS 221 - 1st Crse CS for Engrs	2
Engr Science Elective (2)	3	US: HIS 107 (R - Humanities)	3
		Math Elective (3) or Tech Elective***	3
<b>Semester Hours</b>	<b>17</b>	<b>Semester Hours</b>	<b>18</b>

## SENIOR YEAR

<u>First Semester</u>	Credit Hours	<u>Second Semester</u>	Credit Hours
CE 401 - Seminar**	1	CE 429 - CE Systems Design**	4
CE 461G - Hydrology**	3	CE Tech Design Elective (7)	3
Structures Elective (4)	3	Supportive Elective (8)	3
Science Elective (5)	3	Tech Elective***	3
Tech Elective***	3	US: Cross Cultural Elective (6)	3
US: Humanities Elective (6)	3		
<b>Semester Hours</b>	<b>16</b>	<b>Semester Hours</b>	<b>16</b>

## TOTAL SEMESTER HOURS

**133**

R = Recommended University Studies Course

\*\* CE communication throughout the curriculum component

\*\*\* Technical Electives are to be chosen from any of the courses at the 300-level or above that carry a CE prefix and in which a student is qualified to enroll, exclusive of required courses. **Engineering elective courses are typically taught once a year.**

- (1) COM 252 - Interpersonal Communication or COM 281 - Communication in Small Groups
- (2) ME 220 - Thermodynamics or EM 313 - Dynamics
- (3) Math Elective Options: MA 321, MA 322, MA 416G or MA 432G
- (4) CE 482 (non-structural option) or CE 486G and CE 487G (technical elective)
- (5) Science Elective Options: BIO 208, CHE 230, CHE 236, EE 305, GEO 409G, GLY 430, GLY 560, MNG 551 or the other half of the Engineering Science Elective in (2)
- (6) Either the Humanities or Cross-Cultural Elective can be used to simultaneously satisfy the second-tier University Writing requirement. In the Humanities area, choosing from the ENG 200-level humanities courses satisfies both. In the Cross Cultural area ENG 264 satisfies both. Only one second-tier writing course is required to meet the graduation writing requirements. Completion of the second-tier course must be in the sophomore year or later and after ENG 104.
- (7) CE 403, 451, 505, 533, 539, 549, 579 or 589 (**NOTE:** CE 579 is a co-requisite for CE 589)
- (8) Supportive elective is to be chosen from any university course excluding more elementary versions of required courses such as pre-calculus mathematics or PHY 211. However, each CE area has at least one recommendation for the supportive elective. Please review the Optional Specialization section in the Civil Engineering Undergraduate Handbook. The supportive elective can be taken P/F.

## B.S.C.E. CURRICULUM FLOWCHART WITH PRE- AND CO-REQUISITES

