

# CIVIL ENGINEERING UNDERGRADUATE PROGRAM: 2004 Version

## 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
CHE 105 - Gen Coll Chem I	3	CHE 107 - Gen Coll Chem I	3
ENG 104 - Writing Composition or GLY 220	4	GLY 220 - Physical Geology or ENG 104	4
MA 113 - Calculus	4	MA 114 - Calculus I	4
US: Social Science Elective	3	US: ECO 201 (R - Social Science)	3
<b>Semester Hours</b>	<b>15</b>	<b>Semester Hours</b>	<b>17</b>

## SOPHOMORE YEAR

<u>First Semester</u>	Credit Hours	<u>Second Semester</u>	Credit Hours
CE 211 - Surveying	4	Statistics Course Elective (1)	3
CE 303 - Intro to Constr Engrg**	4	COM - Communications Elective (2)	3
MA 213 - Calculus II	4	EM 221 - Statics	3
PHY 231 - Gen Univ Physics	4	MA 214 - Calculus IV	3
PHY 241 - Gen Univ Physics Lab	1	PHY 232 - Gen Univ Physics	4
		PHY 242 - Gen Univ Physics Lab	1
<b>Semester Hours</b>	<b>17</b>	<b>Semester Hours</b>	<b>17</b>

## JUNIOR YEAR

<u>First Semester</u>	Credit Hours	<u>Second Semester</u>	Credit Hours
CE 331 - Transportation Engrg**	3	CE 321 - CE Systems Analysis	2
CE 341 - Fluid Mechanics	4	CE 351 - Intro Envr Engrg	3
CE 381 - CE Materials**	3	CE 382 - Structural Mechanics	3
EM 302 - Mech of Deform Solids	3	CE 471G - Soil Mechanics**	4
MNG 303 - Deformable Solids Lab	1	CS 221 - 1st Crse CS for Engrs	2
US: Humanities Elective (3)	3	US: HIS 107 (R - Humanities)	3
<b>Semester Hours</b>	<b>17</b>	<b>Semester Hours</b>	<b>17</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 (6)	3
Structures Elective (4)	3	Supportive Elective (7)	3
Tech Elective 1***	3	Tech Elective 3***	3
Tech Elective 2***	3	US: Cross Cultural Elective (3)	3
Engr Science Elective (5)	3		
<b>Semester Hours</b>	<b>16</b>	<b>Semester Hours</b>	<b>16</b>

**TOTAL SEMESTER HOURS**

**132**

**R = Recommended University Studies Course**

\*\* CE communication throughout the curriculum componer

\*\*\* Technical Electives are to be chosen from any of the courses at the 300-level or above that carry a CE prei and in which a student is qualified to enroll, exclusive of required courses. CHE 230 or CHE 236 and EM 5 are acceptable. **Engineering elective courses are typically taught once per year**

(1) CE 221 - CE Uncertainty Analysis and Risk Assessment or STA 381 - Statistics for Engineer

**NOTE: A C or better must be earned in the statistics elective**

(2) COM 252 - Interpersonal Communication or COM 281 - Communication in Small Group

(3) The second-tier University Writing requirement for a reading and writing intensive course can be used to sim taneously satisfy either the Humanities Elective by choosing from the ENG 200-level humanities courses the Cross Cultural requirement by choosing ENG 264

(4) CE 482 (non-structural option) or CE 486G and CE 487G (technical elective)

(5) ME 220 - Thermodynamics or EM 313 - Dynamic

(6) CE 403, 451, 505, 533, 539, 549, 579 or 589 **NOTE:** CE 579 is a co-requisite for CE 589

(7) Supportive elective is to be chosen from any university course excluding more elementary versions required courses such as pre-calculus mathematics or PHY 211. However, each CE area has at lea one recommendation for the supportive elective. Please review the Optional Specialization section in th Civil Engineering Undergraduate Handbook. The supportive elective can be taken P/