Civil Engineering

FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH YEAR	
FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING
CHEM 105aL (GE E)* 4	GESM (GE B)# 4	PHYS 152L *PHYS 151L, (MATH 226)* 4	CE 330 *CE 119* 2	CE 408 *(MATH 245)* 2	DESIGN ELECTIVE 4	WRIT 340 *WRIT 150* 4	ADVANCED COMPUTING ELECTIVE 4
WRIT 150 4	GE C 4	GE D* 4	CE 107 2	CE 334L *CE 225 or AME 204, CHEM 105aLg, or 115aLg, PHYS 152L* 4	CE 483 *(CE 215)* 4	DESIGN ELECTIVE 4	GE C 4
MATH 126 (GE F)* *MATH 125* 4	MATH 226 or MATH 229 *MATH 126 or 129* 4	MATH 245 *MATH 226 or 229* 4	GE A* 4	CE 358 *CE 225* 4	CE 451 *CE 309* 4	CE 471 *MATH 226g or 227 or 229* 4	CE 480 *CE 408 and either CE 456, 457, 476 or 485* 4
CE 106 2	PHYS 151L (GE E) *MATH 125 or 126 or 226* 4	CE 215 *PHYS 151Lg* 4	CE 225 *CE 215* 4	CE 456 *CE 225* 4	CE 467L *CE 225* 4	CE 453 *CHEM 105aLg or 115aL, (CE 309)* 4	CE ELECTIVE 2-4
ENGR 102 2	CE 108 2	CE 119 *(MATH 245)* 2	CE 309 *MATH 226g or 229, (CE 225)* 4	GE B 4	OPTIONAL ELECTIVE 2	OPTIONAL ELECTIVE 2	OPTIONAL ELECTIVE 3-5
OPTIONAL ELECTIVE 2							

MATHEMATICS (12 UNITS)

MATH 126 or MATH 129: Calculus II*
MATH 226 or MATH 229: Calculus III
MATH 245: Mathematics of Phys. and Engr.

PHYSICS (8 UNITS)

PHYS 151L: Mechanics and Thermodynamics
PHYS 152L: Electricity and Magnetism

OTHER SCIENCE (8 UNITS)

CHEM 105aL: General Chemistry*

GENERAL EDUCATION (32 UNITS)

GE A The Arts (1 Course)*
GE B Humanistic Inquiry (2 Courses)
GE C Social Analysis (2 Courses)
GE D Life Sciences (1 Course)*
GE E Physical Sciences (1 Course)*
GE F Quantitative Reasoning (1 Course)*
GE G,H Global Perspectives (2 Courses)*
GESM General Education Seminar (1 Course)

WRITING (8 UNITS)

WRIT 150: Writing and Critical Reasoning
WRIT 340: Advanced Writing

ENGINEERING (72-74 UNITS)

CE 106: Introduction to Civil Engineering
CE 107: Intro. To Civil Engineering Graphics
CE 108: Intro. to CE Computer Methods
CE 119: Probability Concepts & Civil Engr
CE 215: Statics & Dynamics
CE 225: Mechanics of Deformable Bodies
CE 309: Fluid Mechanics
CE 330: Computational Methods in ENGR
CE 334L: Mechanical Behavior of Materials
CE 358: Elementary Theory of Structures
CE 408: Risk & Decision Analysis in Civil Engr.
CE 450: Coastal Engineering & Design
CE 451: Water Resources Coastal Engineering
CE 453: Water Quality Science & Engineering
CE 456: Structural Design I
CE 457: Structural Design 2
CE 458: Computational Structural Analysis
CE 459: Intro to Structural Dynamics
CE 460: Construction Engineering
CE 465: Water Supply & Sewerage System Design
CE 467L: Geotechnical Engineering
CE 471: Principles of Transportation Engr.
CE 480: Civil & Environmental Engineering Capstone Design
CE 482: Water & Wastewater Treatment Design
CE 483: Engineering Economics in Civil Engineering
ENGR 102: Engineering Freshman Academy
CE ELECTIVE
DESIGN ELECTIVES
ADVANCED COMPUTING ELECTIVES

SPECIAL NOTES

GE D (Biology Requirement): Must be an approved BISC course as listed in your STARS report.

*Courses with the * symbol may be satisfied with AP, IB or A-Level exams. See page 18 for more information.*

GESM#: GESM can be taken from GE categories: A, B, C, or D. Courses listed in the guide are options for a four-year course plan.

GE: Engineering students are encouraged to satisfy GE G and GE H with a course that also satisfies a Core Literacy. GE H may be satisfied by AP/IB. Additionally, your GESM course should be taken in categories A, B, or C only. See page 17 for more information and consult your advisor for detailed assistance.

OPTIONAL ELECTIVES: Consult with your academic advisor to explore optional elective courses. These courses are not required.

CE 215, 225, AND 309: Minimum grade of "C" is required.

CIVIL ENGINEERING ELECTIVE: Choose at least two units of upperdivision CE coursework that is not already required.

DESIGN ELECTIVES: Choose eight units from CE 450, 457, 465, 476, 482, or 485.

ADVANCED COMPUTING ELECTIVE: Choose one course from CE 423 or ENE 440.

MATH 125: For students starting with Calculus 1, the advanced computational course will be waived for your requirements.