

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*

GEOL 305L: Intro. to Engineering Geology

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

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.