Civil Engineering (Building Science)

FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH YEAR	
FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING
CHEM 105aL (GE E)*	GESM (GE B)#	PHYS 152L PHYS 151, (MATH 226)	CE 309 MATH 226g or 229, (CE 225) 4	GE D*	CE 467L CE 225	CE 408 (MATH 245)	ADVANCED COMPUTING ELECTIVE 4
WRIT 150	GE C	ARCH 205aL CE 106	ARCH 205bL ARCH 205aL 4	ARCH 305aL ARCH 205bL	ARCH 305bL ARCH 305aL 4	ARCH 405aL ARCH 305bL	ARCH 405bL ARCH 405aL 4
MATH 126 or MATH 129* MATH 125 4	MATH 226 or MATH 229 MATH 126 or 129 4	MATH 245 MATH 226 or 229 4	GE B	CE 358 CE 225	CE 457 CE 358L, CE 456 4	WRIT 340 WRIT 150	GE C
CE 106	CE 108	CE 215 PHYS 151Lg	CE 225 CE 215	CE 456 CE 225	CE 458 CE 358L	CE 334L CE 225 or AME 204, CHEM 105aLg, or 115aLg, PHYS 152L 4	CE 460
ENGR 102	PHYS 151L (GE E) MATH 125 or 126 or 226 4	CE 119 (CE 108, MATH 245) 2	ARCH 214 <i>A</i> G	OPTIONAL ELECTIVE	CE 330 CE 119	ARCH 214bg##	OPTIONAL ELECTIVE

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)

OPTIONAL ELECTIVE

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

OTHER SCIENCE (4 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

ARCHITECTURE (30 UNITS)

ARCH 214ag: World History of Architecture ARCH 214b: History of Architecture ARCH 205aL: Building Science I

ARCH 205bL: Building Science I ARCH 305aL: Building Science II ARCH 305bL: Building Science II ARCH 405aL: Building Science III ARCH 405bL: Building Science III

ENGINEERING (52 UNITS)

CE 106: Introduction to Civil Engineering CE 108: Intro. to CE Computer Methods CE 119: Probability Concepts and Civil Engineering

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 456: Structural Design I

CE 457: Structural Design II

CE 458: Computational Structural Analysis

CE 460: Construction Engineering CE 467L: Geotechnical Engineering

ENGR 102: Engineering Freshman Academy

SPECIAL NOTES

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

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

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, C, or D only. See page 17 for more information and consult your advisor for detailed assistance.

##: Completing ARCH 214bg will satisfy the GE A requirement.

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.

ARCH 205ABL, ARCH 305ABL, AND ARCH

405ABL: Minimum grade of "C" is required in order to continue in the Building Science sequence.

ADVANCED COMPUTING ELECTIVES: CE 423 OR ENE 440

MATH 125: For students starting with Calculus 1, Advanced Computing Elective will be waived for your requirements.