CIVIL & ENVIRONMENTAL ENGINEERING CONCENTRATION MODEL PROGRAM

CALVIN
MINDS IN THE MAKING

FIRST YEAR

Fall (16)

☐	4	Chemistry 103	General Chemistry (F)
☐	2	Engineering 101	Intro to Engineering Design (F)
☐	2	Engineering 181	Graphical Communication Lab (F)
☐	4	Mathematics 161	Differential and Integral Calculus (F, S)
☐	3	English 101	Written Rhetoric
☐	1	Interdisciplinary 149	First Year Prelude

Interim (3)

☐	3	Interdisciplinary 150	Developing the Christian Mind

Spring (17)

☐	4	Engineering 106	Engineering Chemistry and Materials Science (S)
☐	4	Mathematics 162	Tech. of Integration, Intro to Infinite Series, & Multivariate Calculus (F, S)
☐	4	Physics 133	Introductory Physics: Mechanics and Gravity (F, S)
☐	4	History 151 or 152	History of the West and the World
☐	1	Health & Fitness	(PER 101-129)

SECOND YEAR

Fall (17)

☐	4	Engineering 209	Intro. to the Laws of Conservation & Thermodynamics (F,S)
☐	4	Mathematics 231	Differential Equations with Linear Algebra (F, S)
☐	4	Physics 235	Intro Physics: Electricity and Magnetism (F)
☐	2	Computer Sci. 104	Applied C++ (F)
☐	3-4	Economics 151 or 221	Principles of Economics/Principles of Microeconomics
☐	0	Internship Workshop	(must sign up with Prof. Nielsen)

Interim (4)

☐	3	Free Elective	(or consider taking CAS 101 here in place of IDIS102 later)

Spring (16)

☐	4	Engineering 202	Statics and Dynamics (F,S)
☐	4	Engineering 204	Intro. to Circuit Analysis and Electronics with Lab (S)
☐	4	Mathematics 232	Engineering Mathematics (F, S)
☐	3	Religion 121 or Religion 131	
☐	1	Health & Fitness	(PER 130-159) (or during interim)

THIRD YEAR

Fall (17)

☐	4	Engineering 305	Mechanics of Materials (F)
☐	4	Engineering 319	Intro. to Thermal/Fluid Sciences (F)
☐	4	Engineering 306	Environmental Engineering (F)
☐	3	The Arts	
☐	1	Health & Fitness	(PER 160-189)

Interim* (3)

☐	3	Cross-Cultural Engagement	

Spring (17)

☐	4	Engineering 320	Hydraulic Engineering (S)
☐	4	Engineering 326	Structural Analysis (S)
☐	4	One of	Engineering 308 – Environmental Engineering Design (S)* Engineering Elective (Minimum of 3 credits - see catalog for restrictions)
☐	3	Philosophy 153	Fundamental Questions in Philosophy
☐	2	IDIS 102	Oral Rhetoric for Engineers (F, S)

FOURTH YEAR

Fall (15)

☐	8	Two of	Engineering 321 - Hydraulic Engineering Design (F) * Engineering 327 - Structural Design (F) * Elective: Basic Science, Adv. Math, or Engr.
☐	2	Engineering 339	Senior Design Project (F)
☐	2	Business 357	Business Aspects for Engineers (F)
☐	3	Literature	

Interim (3)

☐	3	Engineering Special Topics Elective	

Spring (15)

☐	4	Engineering 340	Senior Design Project (S)
☐	4	Elective: Basic Science or Advanced Math	
☐	4	One of	Elective: Basic Science, Adv. Math, or Engr. (if not taken in fourth year fall) Engineering 308 – Environmental Engineering Design (S) * Engineering Elective (if not taken in third year spring)
☐	3	Free Elective	

Note to: HONORS Students
Engr 294/394 and Engr. 385
These courses are required of all students seeking to graduate with honors. Talk with advisor or consult the catalog about details.

Other Requirements

☐ 0-8 Foreign Language (2 years of high school or 1 year of college)

Pink listings (core courses) may be swapped as long all are completed by the end of the senior year.

*All CE concentration students must take at least two of Engineering 308, 321, or 327.

See Elective Options sheet for elective courses highlighted in green, red and blue.

Revised 13 November 2008