CIVIL ENGINEERING

BACHELOR OF SCIENCE (B.S.)

CORE Requirements	Credits
CORE 090 First Yr Exp.	1
CORE 100 Lib Arts Sem.	3
CORE 110 Effect Writ.	3
CORE 115 or 116 Oral Comm.	3
CORE 131 or 133 Civilization	3
CORE 140 or 141-145 Forgn.	3
CORE 150-159 Soc. Sci. [1]	3
CORE 160-169 Literature	3
CORE 170-179 The Arts	3
CORE 180-189 Amer. Studies[1]	3
CORE 190-199 Global Studies[1]	3
CORE 250-259 Syst. Theology	3
CORE 260-269 Mor. Theology	3
CORE 280 Philos. I	3
CORE 281-289 Philos. II	3
	43

Foundational Science and Mathematics Requirements	Credits
PHYS 113 Physics for Sc & Eng I	3
PHYS 113L Phy for Sc & Eng I Lab	1
PHYS 114 Physics for Sc & Eng II	3
PHYS 114L Phy for Sc & Eng II Lab	1
CHEM 113 Gen. Chem. I	3
CHEM 113L Gen. Chem. I Lab	1
CHEM 114 Gen. Chem. II	3
CHEM 114L Gen. Chem. II Lab	1
MATH 129 Calculus I	4
MATH 130 Calculus II	4
MATH 231 Calculus III	4
MATH 237 Math Meth. for Phys. Sci.	3
MATH 238 Differential Equations	3
	34

Civil Engineering Requirements	Credits
ENST 201 Environmental Science I	3
ENST 201L Environ Science I Lab	1
PHYS 241 Statics	3
PHYS 242 Mechanics of Solids	3
CS 111 Programing for Science & Eng	2
CS 111L Prog for Science & Eng Lab	1
ENGR 150 Engineering Seminar	2
ENGR 250 System Design & Analysis	3
ENGR 250L Sys Design & Analysis Lab	1
ENGR 320 Fluid Mechanics	3
ENGR 320L Fluid Mechanics Lab	.5
ENGR 330 Project Mgmt & Eng Econ	3
ENGR 350 Engineering Materials	3
ENGR 350L Engineering Materials Lab	.5
ENGR 360 Probability & Eng Statistics	3
CE 200 Introduction to Civil Engineering	3
CE 200L Intro to Civil Engineering Lab	.5
CE 300 Dynamics and Modeling	3
CE 320 Civil Engineering Materials	3
CE 320L Civil Eng Materials Lab	1
CE 340 Hydraulics and Hydrology	3
CE 340L Hydraulics and Hydrology Lab	1
CE 360 Geotechnical Engineering	3
CE 400 Structural Design and Analysis I	3
CE 400L Structural Design I Lab	1
CE 420 Transportation Engineering	3
CE 430 Environmental Engineering	3
CE 440 Structural Design and Analysis II	3
CE 440L Structural Design II Lab	1
CE 480 Senior Civil Engineering Seminar	2
	65.5

Total Credits = 142.5

[1]Students are required to take CORE 150, CORE 180 **OR** CORE 190 to fulfill the Interdisciplinary CORE requirement.

- If a student takes CORE 150, then choose from 181 – 188 to fulfill the 18x requirement AND from 191 – 198 to fulfill the 19x requirement.
- If a student takes CORE 180, then choose from 151 – 158 to fulfill the 15x requirement AND from 191 – 198 to fulfill the 19x requirement.
- If a student takes CORE 190, then choose from 151 – 158 to fulfill the 15x requirement AND from 181 – 188 to fulfill the 18x requirement.
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Civil Engineering students are eligible to sit for industry certification exams based on the completion of the following courses:

- ENGR 330: Proj Mgmt & Eng Econ: Certified Associate in Project Management (CAPM)® - Project Management Institute
- CE 480 Senior CE Seminar: Fundamentals of Engineering – Civil (NCEES)

See reverse side for a suggested sequence

CIVIL ENGINEERING

SUGGESTED SEQUENCE – 4 YEAR PROGRAM

- Use the information below as a guide when selecting courses.
- Refer to the reverse side in order when selecting major courses, major electives, core courses, and free electives when applicable.
- Consult your Academic Advisor prior to course registration.
- Refer to the King's College Catalog and/or website for course titles and descriptions.
- Choose one course from each CORE category as listed on the reverse side.
    - CORE courses may be taken in any order approved by the academic advisor with the following conditions:
        - CORE 100 and CORE 110 should be taken in the first year whenever possible.
        - CORE 115 (or 116) should be taken within the first two years whenever possible.
        - For students selecting a Foreign Language (CORE 14x), every effort should be made to register for that language in the first available semester at King's.

	1st Year - Fall	cr.		**1st Year - Spring**	cr.
____	CHEM 113 General Chemistry I	3	____	CHEM 114 General Chemistry II	3
____	CHEM 113L General Chemistry I Lab	1	____	CHEM 114L General Chemistry II Lab	1
____	PHYS 113 Physics for Scientists & Engineers I	3	____	PHYS 114 Physics for Scientists & Engineers II	3
____	PHYS 113L Physics for Scientists & Eng I Lab	1	____	PHYS 114L Physics for Scientists & Eng II Lab	1
____	MATH 129 Calculus I	4	____	MATH 130 Calculus II	4
____	ENGR 150 Engineering Seminar	2	____	CORE	3
____	CORE 090 First Year Exp.	1	____	CORE	3
		15			**18***
	2nd Year - Fall			**2nd Year – Spring**	
____	CE 200 Introduction to Civil Engineering	3	____	ENGR 250 System Design & Analysis	3
____	CE 200L Intro to Civil Engineering Lab	.5	____	ENGR 250L System Design & Analysis Lab	1
____	MATH 231 Calculus III	4	____	ENGR 350 Engineering Materials	3
____	MATH 237 Math Meth. for Phys. Sci.	3	____	ENGR 350L Engineering Materials Lab	.5
____	CS 111 Programming for Science & Eng	2	____	PHYS 241 Statics	3
____	CS 111L Programming for Science & Eng Lab	1	____	MATH 238 Differential Equations	3
____	CORE	3	____	CORE	3
			____	CORE	3
		16.5			**19.5***
	3rd Year – Fall			**3rd Year – Spring**	
____	ENGR 320 Fluid Mechanics	3	____	CE 320 Civil Engineering Materials	3
____	ENGR 320L Fluid Mechanics Lab	.5	____	CE 320L Civil Eng Materials Lab	1
____	ENGR 330 Project Mgmt & Eng Econ	3	____	CE 340 Hydraulics and Hydrology	3
____	CE 300 Dynamics and Modeling	3	____	CE 340L Hydraulics and Hydrology Lab	1
____	ENST 201 Environmental Science I	3	____	ENGR 360 Probability & Engineering Statistics	3
____	ENST 201L Environmental Science I Lab	1	____	PHYS 242 Mechanics of Solids	3
____	CORE	3	____	CORE	3
____	CORE	3			
		19.5*			**17**
	4th Year - Fall			**4th Year – Spring**	
____	CE 400 Structural Design and Analysis I	3	____	CE 440 Structural Design and Analysis II	3
____	CE 400L Structural Design and Analysis I Lab	1	____	CE 440L Structural Design and Analysis II Lab	1
____	CE 360 Geotechnical Engineering	3	____	CE 430 Environmental Engineering	3
____	CE 420 Transportation Engineering	3	____	CE 480 Senior CE Seminar	2
____	CORE	3	____	CORE	3
____	CORE	3	____	CORE	3
____	CORE	3	____	CORE	3
		19*			**18***

Total Credits Required for Graduation = 142.5

* Students are encouraged to take a summer course to relieve the credit load during this semester