

**DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING
FAMU-FSU COLLEGE OF ENGINEERING**



**B.S. DEGREE REQUIREMENTS CERTIFICATION
MAJOR: ENVIRONMENTAL ENGINEERING FALL 2020 & LATER**

Student's name _____ STUDENT # _____

Advisor _____ Home University _____

AA school & year received _____ Year entered university _____

Permanent (post-graduation) mailing address _____ email address _____

GENERAL EDUCATION / LIBERAL STUDIES REQUIREMENTS (21 credits)¹

¹ Civil/Env Engineering advisors can review general education/liberal studies courses; however, your home University has final approval. Please see a University advisor and/or do a liberal studies grad check to ensure that all requirements have been met.

	AREA	COURSE NO	COURSE TITLE	CRED. HOUR	UNIV. CODE ²	GRADE	SEM/YR	
<i>Multiple LS requirements Can be met w/one course in the areas of Ethics Hum History Soc Sci X, Y</i>	Mathematics	Met with Calculus and Engineering Math courses as required by dept. for B.S. degree.						
	English Comp 1	ENC 1xxx		3				
	English Comp 2	ENC 2xxx		3				
	Liberal Studies			3				
	Liberal Studies			3				
	Liberal Studies			3				
	Liberal Studies			3				
	Liberal Studies			3				
	Natural Science	Met with Chemistry and Physics courses as required by dept. for B.S. degree.						

² GR = GORDON RULE, FAMU & FSU LR= Literature Requirement for Humanities, FSU ONLY AAE=Afr Am Exper, FAMU ONLY
X = Cross Cultural studies, FSU ONLY Y = Diversity in Western experience, FSU ONLY

MATHEMATICS AND BASIC SCIENCES REQUIREMENTS (40 credits)

COURSE NO.	COURSE TITLE	CR	CREDITS (if transferred)	GR	SEM/YR
MAC 2311	Calculus with Analytic Geometry I	4			
MAC 2312	Calculus with Analytic Geometry II	4			
MAC 2313	Calculus with Analytic Geometry III	5			
MAP 2302/3305	Ordinary Differential Eq. OR Engineering Math I	3			
PHY 2048C	General Physics with Laboratory I	5			
PHY 2049C	General Physics with Laboratory II	5			
CHM 1045	General Chemistry I	3			
CHM 1045L	General Chemistry I Laboratory	1			
()	Chemistry II w/Lab or Microbiology w/Lab ³	4			
()	Group A Science ⁴	3			
STA	Group D Statistics ⁵	3			

Total credits (transfer students only; **must exceed 30 credits**): _____

³ FAMU: CHM 1046/L General Chemistry II w/Laboratory OR MCB 3305C Microbiology; FSU: STA MCB 2004/L Microbiology for Health Science w/Laboratory
⁴ FAMU: BSC 1010C General Biology, EVR 3235 Atmospheric Processes, GLY 2010 Principles of Geology, PCB 2033 General Ecology, OR OCE 4008 Principles of Oceanography; FSU: BSC 2010 Biological Science, MET 2700 General Meteorology, GLY 2010C Physical Geology, GLY 1030 Environmental Issues in Geology, PCB 3043 General Ecology, OR OCE 4008 Principles of Oceanography
⁵ FAMU: STA 3034 Mathematical Statistics; FSU: STA 2122, Introduction to Applied Statistics, OR STA 3032 Applied Statistics for Engineers and Scientists, OR STA 2023 Business Statistics

ENGINEERING CORE REQUIREMENTS (37/38 credits)

COURSE NO	COURSE TITLE	CR	TR	GR	SEM/YR
EGN 1004L	First Year Engineering ⁶	1			
CEG 2202	Intro to Geomatics Engineering	3			
CEG 2202L	Intro to Geomatics Engineering Lab ⁷	1			
EGN 3613	Principles of Engineering Economy	2			
EML 3100 OR EEL 3003	Thermodynamics Intro to Electrical Engineering (lab not required)	2 3			
EGM 3512	Engineering Mechanics	4			
EGN 3331	Strength of Materials	3			
CCE 3101	Construction Materials	3			
CEG 3011	Soil Mechanics	3			
CGN 3326	Civil Engineering Graphics & Design Tools	3			
CGN 3508L	Civil Engineering Materials Lab	1			
EES 3040	Intro to Environmental Engineering	3			
CWR 3201	Hydraulics	3			
CWR 3200L	Environmental/Hydraulic Engineering Lab	1			
TTE 3004	Transportation Engineering	3			

⁶ EGN 1004L can be waived under certain circumstances (see your advisor for details)

⁷ CEG2202L meets FSU computer competency requirement

CIVIL ENGINEERING SCIENCE AND DESIGN REQUIREMENTS (24 credits)

	CEG 4801	Geotechnical Design	3			
OR	CCE 4	Construction Elective	3			
	TTE 4	Transportation Elective				
OR	ENV 4001	Environmental Engineering	3			
	ENV 4500	Env Unit Processes & Operations				
	CWR 4	Water Resources Elective	3			
	() 4	Group B (Eng/Math/Sci) ⁸	3			
	() 4	Group B (Eng/ Math/Sci) ⁸	3			
	() 4	Group B (Eng/ Math/Sci) ⁸	3			
	() 4	Group C (Prof/Tech) ⁹	3			

⁸ **Engineering/Math/Science Elective Courses:** Any 4000 level course offered by Department of Civil and Environmental Engineering that is not being used to meet another requirement, OR specified 3000 or 4000 level engineering, math, or science courses. See academic map for a complete listing of courses.

⁹ **Professional/Technical Elective Course:** A course outside the CEE department emphasizing professional development, computing, and other professional/technical skills. See academic map for a complete listing of courses.

MAJOR DESIGN EXPERIENCE (6 credits)

CGN 4800	Senior Design I ¹⁰	3	na		
CGN 4802	Senior Design II ¹⁰	3	na		

¹⁰ CGN 4800 meets FSU's UDW & SIP requirements; CGN 4802 meets FSU's FE (Formative Experience) requirements; together they meet FSU's oral communications competency requirement.

Liberal Studies Grad Check with university **BY STUDENT** _____ FE exam date (opt.) _____

100 Credit Hour Grad Check **WITH** Advisor _____ Date _____

Approved by Department _____ Date _____