

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



**B.S. DEGREE REQUIREMENTS CERTIFICATION
DUAL MAJOR: CIVIL & ENVIRONMENTAL ENGINEERING**

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 (24 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	PRE FIX / COURSE TITLE	COURSE TITLE	CRED. HOUR	UNIV. CODE ²	GRADE	SEM/YR
I	Mathematics	Met with Calculus and Engineering Math courses as required by dept. for B.S. degree.					
II	Eng. Comp. I	ENC 1101		3			
	Eng. Comp. II			3			
III	History			3			
	History			3			
	Social Science			3			
	Social Science			3			
IV	Humanities			3			
	Humanities			3			
V	Natural Science	Met with Chemistry and Physics courses as required by dept. for B.S. degree.					

²GR = GORDON RULE, FAMU & FSU

LR= Literature Requirement for Humanities, FSU ONLY

X = Cross Cultural studies, FSU ONLY

Y = Diversity in Western experience, FSU ONLY

AAE=Afr Am Exper, FAMU 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 32 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

ENGINEERING CORE REQUIREMENTS (42 credits)

COURSE NO	COURSE TITLE	CR	TR	GR	SEM/YR
EGN 1004L	First Year Engineering ⁶ (COE Requirement)	1			
EGN 2123	Engineering Graphics	2			
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	Thermodynamics	2			
EEL 3003	Intro to Electrical Engineering (lab not required)	3			
EGM 3512	Engineering Mechanics	4			
EGN 3331	Strength of Materials	3			
CCE 3101	Construction Materials	3			
CEG 3011	Soil Mechanics	3			
CES 3508L	Civil Engineering Materials Lab	1			
CES 3100	Structural Analysis	4			
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 or an acceptable substitute is a COE requirement (see your advisor for details)

⁷ FSU computer competency requirement is met w/CEG2202L; oral communications competency requirement is met w/ CGN4800 & CGN4802

CIVIL/ENV ENGINEERING SCIENCE AND DESIGN REQUIREMENTS (33 credits)

OR	CES 4605	Steel Design	3			
	CES 4702	Concrete Design				
OR	CEG 4801	Geotechnical Design	3			
	CEG 4111	Foundation Design				
OR	CCE 4__	Construction Elective	3			
	TTE 4__	Transportation Elective				
	ENV 4001	Environmental Engineering	3			
	CWR 4__	Water Resources Elective	3			
	() 4__	Group B (Eng/Math/Sci) ⁸ _____	3			
	() 4__	Group B (Eng/ Math/Sci) ⁸ _____	3			
	() 4__	Group C (Prof/Tech) ⁹ _____	3			
	() 4__	Design/Tech Elective _____	3			
	() 4__	Design/Tech Elective _____	3			
	() 4__	Design/Tech Elective _____	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 (5 credits)

CGN 4800	Pre Senior Design and Professional Issues ⁷	2			
CGN 4802	Civil and Environ. Eng. Sr. Design Project ⁷	3			

Liberal Studies Grad Check Completed _____

FE exam date (opt.) _____

100 Credit Hour Grad Check by Advisor _____

Date _____

Approved by Department _____

Date _____

BE SURE TO ATTACH A COPY OF YOUR UNOFFICAL TRANSCRIPT TO THIS FORM