

Civil Engineering (Geotechnical/Structures Track) Four Year Academic Plan

Name: _____

UID: _____

Year 1	Fall		
Gateway requirements include: ENGL 101, CHEM 135, MATH 141, PHYS 161 and an approved Distributive Studies course. (Directly admitted freshman must successfully complete these courses and ENES 100 by 45 UM credits.)	Course	Credit	Grade
	ENCE 100	1	
	ENES 102	3	
	CHEM 135	3	
	MATH 140 (AR)	4	
	ENGL 101 (AW)	3	
	Total	14	

Spring		
Course	Credit	Grade
ENES100 (SP)	3	
MATH 141	4	
PHYS 161 (NS)	3	
Humanities (HU)*	3	
Hist & Social Sciences (HS)*	3	
Total	16	

Year 2	Fall		
	Course	Credit	Grade
	ENCE 200	3	
	ENES 220	3	
	MATH 241	4	
	PHYS 260 and PHYS 261 (NL)	3 & 1	
	Total	14	

Spring		
Course	Credit	Grade
ENCE 201	3	
ENCE 215	3	
ENCE 305	3	
MATH 246	3	
ORAL COMM (OC)	3	
Total	15	

Year 3	Fall		
Second benchmark requirements must be completed one year after students are reviewed for the gateway requirements and include: All required 100 and 200 level MATH and PHYS courses, ENES 100, ENES 102, ENES 220, ENCE 100 and ENCE 200.	Course	Credit	Grade
	ENES 221	3	
	ENCE 300	3	
	ENCE 340	3	
	ENCE 353	3	
	Science Requirement	3 or 4	
	Total	15 or 16	

Spring		
Course	Credit	Grade
ENCE 302	3	
ENCE 360	3	
ENCE Breadth Elective	3	
ENGL 393 (PW)	3	
Hist & Social Sciences (HS)*	3	
Total	15	

Year 4	Fall		
Third benchmark requirements must be completed one year after students are reviewed for the second benchmark and include: ENGL 393, ENES 221, ENCE 201, ENCE 300, ENCE 340 and ENCE 353.	Course	Credit	Grade
	ENCE 320	3	
	ENCE 441	3	
	ENCE 454	3	
	ENCE Elective (See advisor)	3	
	Scholarship in Practice (SP)*	3	
	Total	15	

Spring		
Course	Credit	Grade
ENCE 444	3	
ENCE 466	3	
ENCE Breadth Elective	3	
ENCE Elective (See advisor)	3	
Humanities (HU)*	3	
Total	15	

*All students must complete two Distributive Studies courses that are approved for I-series courses. The Understanding Plural Societies (UP) and Cultural Competence (CC) courses may also fulfill Distributive Studies categories.

CIVIL ENGINEERING (GEOTECHNICAL/STRUCTURES TRACK)

NAME: _____

UID: _____

General Education Requirements Fundamental Studies			
Requirements	Course	Credits	Grade
Academic Writing (AW)	ENGL101	3	
Professional Writing (PW)	ENGL 393	3	
Oral Comm. (OC)		3	
Math (MA)	-----	0	
Analytic Reasoning (AR)	MATH 140	0	

Distributive Studies			
Requirements	Course	Credits	Grade
Natural Science Lab (NL)	PHYS 260&261	0	
Natural Sciences (NS)	PHYS 161	0	
History/Social Sciences (HS)		3	
History/Social Sciences (HS)		3	
Humanities (HU)		3	
Humanities (HU)		3	
Scholarship in Practice (SP)	ENES100	0	
Scholarship in Practice (SP) non major		3	

I-Series Normally double counted with Distributive Studies			
Requirements	Course	Credits	Grade
I-Series (IS)			
I-Series (IS)			

Diversity (overlap permitted with Distributive Studies and/or I-series)			
Requirements	Course	Credits	Grade
Understanding Plural Societies (UP)			
Understanding Plural Societies (UP) or Cultural Competency (CC)			

Basic Sciences			
Requirements- The cumulative average of these courses must be a 2.0	Credits	Grade	
CHEM 135 - Chem for Eng	3		
PHYS 161 - General Physics I	3		
PHYS 260 and PHYS 261 - Gen Physics II & Lab	3 & 1		
MATH 140 - Calculus I	4		
MATH 141- Calculus II	4		
MATH 241 - Calculus III	4		
MATH 246 - Differential Equations	3		
Science Requirement (BSCI 106, ENSP 101 or GEOL 100)	3 or 4		

Engineering Sciences			
Requirements- The cumulative average of these courses must be a 2.0	Credits	Grade	
ENES 100 - Intro to Eng Design	3		
ENES 102 - Mechanics I	3		
ENES 220 - Mechanics II	3		
ENES 221 - Dynamics	3		

Major Requirements		
<i>The cumulative average of these courses must be a 2.0</i>		
Requirements	Credits	Grade
ENCE 100 - Intro to Civil Eng	1	
ENCE 200 - Civil Eng Computation	3	
ENCE 201 - Eng Info Processing	3	
ENCE 215 - Eng for Sustainability	3	
ENCE 300 - Fund of Eng Materials	3	
ENCE 302 - Probability & Stat for CEE	3	
ENCE 305 - Fund of Eng Fluids	3	
ENCE 320 - Eng Project Management	3	
ENCE 340 - Fund of Geotechnical Eng	3	
ENCE 353 - Intro to Structural Analysis	3	
ENCE 360 - Analysis of Civil Eng Systems	3	
ENCE 441 - Foundation Design	3	
ENCE 444 - Exp Methods Geotech & Struct. Eng	3	
ENCE 454 - Design Concrete Structures	3	
ENCE 466 - Design of Civil Eng Systems	3	
ENCE Breadth Elective*	3	
ENCE Breadth Elective*	3	
ENCE Elective*	3	
ENCE Elective*	3	
ENGL 393 - Technical Writing	3	

Gateway requirements		
Requirements	Credits	Grade
ENGL 101	3	
CHEM 135, 271 or 113	3	
MATH 141	4	
PHYS 161	3	
An approved Distributive Studies course	3	
ENES 100 (required only for Direct Admits)	3	

Benchmark 2 requirements		
Requirements	Credits	Grade
MATH 140, 141, 241 and 246	15	
PHYS 161, 260 and 261	7	
ENES 100, 102 and 220	9	
ENCE 100 and 200	2	

Benchmark 3 requirements		
Requirements	Credits	Grade
ENGL 393	3	
ENES 221, ENCE 300, ENCE 340 and ENCE 353	12	

Requirements for Graduation:	
<input type="checkbox"/>	At least 30 credits must be earned at UMD
<input type="checkbox"/>	15 of the final 30 credits must be earned at the 300-400 level
<input type="checkbox"/>	12 upper level major credits must be earned at UMD

Students must earn a minimum of 120 credits for the degree.