



Name: _____
 ID #: _____ E-mail: _____
 Entry: Fall ___ Spring ___ Summer ___ Year _____ Transfer Credits: ____
 Advisor: _____

Program Sheet for Major: **Civil Engineering**

Degree: Bachelor of Science

General Education

STUDY AREAS:

I. Arts and Humanities (9 credits)

	Crs
English Literature	3
English Literature or PHIL or Fine Arts	3
PHIL or Fine Arts	3

II. Social Sciences (6 credits)

History	3
ECON - ET 399-Engineering Economy**	3

III. Behavioral Sciences (3 credits)

Anthropology or Psychology or Sociology	3
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IV. Natural Sciences (8 credits)

PHYS 125-Univ. Physics I	4
PHYS 126-Univ. Physics II	4

SKILL AREAS:

I. Communication Skills (6 credits)

ENG 110 - Freshman Composition*	3
COMM140 - Public Speaking	3

II. Mathematics (6 or 8 credits)

MATH 152-Calculus I*	4
MATH 221-Calculus II	4

III.a Foreign Language (0-6 credits)

Required for students who have not completed 3 years in one language at HS level, or passed an exam with demonstrated foreign language equivalent, or demonstrated native proficiency.	0 - 3
	0 - 3

III.b International (6 credits)

IV. University Requirements (2-3 credits)

PE 144-Fitness/Wellness (or ENGR 150 Transfer Stud.)	2 - 3
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- * Placement examination may be required before enrolling in English and Mathematics, ** The recommended course
 *** Courses with designator [I] in course description fulfill the General Education requirement and the International component.
 **** BIO 121, BMS 102/103 or ESCI 121; the Additional Science Elective must include a laboratory.

Admission to the Civil Engineering Program requires: eligibility to enroll in or completion of MATH 152 (Calculus I) and eligibility to enroll in or completion of ENG 110 (Freshman Composition).

A minimum grade of C- is required in all courses in the major, all additional course requirements and courses in Study Area IV, Skill Area I and Skill Area II.

Major Requirements

		Crs	Sem.	
			F	S
ENGR 150	Introduction to Engineering	3	X	X
ENGR 251	Engr. Mechanics I (Statics)	3	X	
ENGR 252	Engr. Mechanics II (Dynamics)	3		X
ENGR 257	Mechanics of Materials	3		X
ME 258	Engineering Thermodynamics	3		X
ME 354	Fluid Mechanics	3	X	
CE 253	Intro. to Engr. Surveying	3	X	
CE 357	Adv. Surveying or CE 458-GPS Mapping	3	X	
CE 375	Hydraulic Engineering	3		X
CE 397	Structural Analysis	3	X	
CE 451	Soil Mechanics & Foundations /w Lab.	4		X
CE 454	Intro. To Transportation Engineering	3		X
CE 470	Structural Steel Design	3	X	
CE 471	Reinforced Concrete Structures	3		X
CE 475	Hydrology and Storm Drainage	3	X	
CE 476	Environmental Engineering	3		X
CE 497	Prof. Practice & Sr. Project Research	2	X	
CE 498	Senior Design Project (Capstone)	2		X

Additional Requirements

CET 236	Circuit Analysis	3		X
CHEM 161/2	General Chemistry I with Lab	4	X	X
CM 356	Materials of Construction or ETM 356	4 - 3	X	
ET 240	Spreadsheet & Prob. Solv. Tools	3	X	X
ETC 122	Intro. To CAD for AEC I	3	X	X
MATH 226	Linear Algebra and Probability for Engr.	4	X	
MATH 355	Intro. to Differential Equations	4		X
ENG 403	Technical Writing	3	X	X
BIO/ESCI	Additional Science Elective****	4	X	X
	Directed Technical Elective	3	X	X
Total Credits		129 to 130		

Recommended Directed Technical Electives:
 CE 472, CE 458, ET 495, ENGR 490, Math 222



Typical Course Schedule for **Civil Engineering**

CCSU, Department of Engineering

(For students without transfer credits who are qualified to take MATH 152 and ENG 110 in the first semester)

First Year					
Fall			Spring		
ENGR 150	Introduction to Engineering	3	MATH 221	Calculus II	4
CHEM 161/2	General Chemistry I and Lab	4	PHYS 125	University Physics I	4
MATH 152	Calculus I	4	ET 240	Spreadsheet & Engr. Solv. Tools	3
ENG 110	Freshman Composition	3	ETC 122	Intro. to CAD for AEC	3
PE 144	Fitness and Wellness	2	COMM 140	Public Speaking	3
Semester Total Hours = 16			Semester Total Hours = 17		

Second Year					
Fall			Spring		
MATH 226	Linear Algebra & Probability	4	MATH 355	Intro to Differential Equations	4
PHYS 126	University Physics II	4	ENGR 252	Engr. Mechanics II - Dynamics	3
ENGR 251	Engr. Mechanics I - Statics	3	ENGR 257	Mechanics of Materials	3
CE 253*	Intro. to Engineering Surveying	3	ME 258	Thermodynamics	3
	General Education (1)	3	CE 357*	Advanced Surveying	3
Semester Total Hours = 17			Semester Total Hours = 16		

Third Year					
Fall			Spring		
ME 354	Fluid Mechanics	3	CE 375**	Hydraulic Engineering	3
CE 397*	Structural Analysis	3	CE 451*	Soil Mech. & Foundations w/Lab.	4
ESCI/BIO	Directed Science Elective***	4	CE 454*	Intro. to Transportation Engr.	3
ETM/CM 356	Mat. Analysis or Mat. Of Const.	3 or 4	CE 471*	Reinforced Conc. Structures	3
	General Education (2)	3		General Education (3)	3
Semester Total Hours = 16 or 17			Semester Total Hours = 16		

Fourth Year					
Fall			Spring		
CE 470*	Structural Steel Design	3	CE 476*	Environmental Engineering	3
CE 475*	Hydrology & Storm Drainage	3	CE 498*	Senior Design Project (Capstone)	2
CE 497**	Prof. Practice & Sr. Proj. Research	2	CET 236	Circuit Analysis	3
ET 399	Engineering Economy (in SA II)	3		Civil Engr. Dir. Technical Elective	3
ENG 403	Technical Writing	3		General Education (5)	3
	General Education (4)	3	Semester Total Hours = 14		
Semester Total Hours = 17			Total Program Hours = 129 or 130		

Civil Engr. Dir. Technical Electives: CE 458* GPS Mapping for GIS (3); CE 472* Timber Structures (3); ENGR 490 Fundamentals of Engr. (FE) (3); ET 495 Topics in Engr. Tech. (3); Math 222 Calculus III (4)
 * Indicates a course with similar name and course content to an existing Civil Engineering Technology (ETC) course. ETC courses are not transferrable to CE courses & ET courses are not transferrable to ENGR courses.
 ** Indicates a new course for the Civil Engineering program
 *** BIO 121, BMS 102/103 or ESCI 121

CCSU, Dept. of Engineering - Civil Engineering Program Curriculum Flowchart

