

Name: _____

CMU ID#: _____

IMPORTANT NOTE: This sheet is only a worksheet to track your progress in the CMU/CU-Boulder Civil Engineering Partnership Program. An official review of your coursework will be performed by CU administration to ensure completion of all graduation requirements. The BSCE degree is conferred by the University of Colorado, Boulder.

- In order to take any Math, Science or Engineering courses, each listed prerequisite (or an equivalent course) must be completed with a grade of "C" or better.
- All engineering students must take ENGL 111 and 112 unless they meet or exceed one of the following criteria: ACT ENGL 24 or SAT Verbal 550 or AP English (Lit & Comp or Lang & Comp) 4 or IB English 4.

Minimum credits to graduate: 128 hrs

CMU/CU-BOULDER CIVIL ENGINEERING REQUIRED COURSES:

Course No	Title	Sem.hrs	Grade	Term	Trns
ENGR 101	Introduction to Engineering	1	_____	_____	_____
ENGR 140	First-Year Engr. Projects	3	_____	_____	_____
ENGR 261	Statics and Structures	3	_____	_____	_____
ENGR 263	Mechanics of Solids	3	_____	_____	_____
ENGR 343	Dynamics	3	_____	_____	_____

FOUNDATION COURSES (62 semester hours)

Mathematics and Computer Science (19 semester hours)

MATH 135	Engineering Calculus I	4	_____	_____	_____
MATH 136	Engineering Calculus II	4	_____	_____	_____
MATH 253	Calculus III	4	_____	_____	_____
MATH 236	Differential Equations & Linear Algebra	4	_____	_____	_____
CSCI 130	Intro to Engineering Computing	3	_____	_____	_____

Physical Science (15 semester hours)

PHYS 131	Fundamental Mechanics	4	_____	_____	_____
PHYS 131L	Fundamental Mechanics Laboratory	1	_____	_____	_____
PHYS 132	Electromagnetism & Optics	4	_____	_____	_____
PHYS 132	Electromagnetism & Optics Laboratory	1	_____	_____	_____
CHEM 151	Engineering Chemistry	4	_____	_____	_____
CHEM 151L	Engineering Chemistry Laboratory	1	_____	_____	_____

Basic Science (3 semester hours) Choose from the following courses.

- GEOL 103 – Weather and Climate
- GEOL 104 – Oceanography
- GEOL 105 – Geology of Colorado
- GEOL 107 – Natural Hazards and Environmental Geology
- GEOL 108 – Water, People and Environment
- GEOL 111/111L – Principles of Physical Geology (4 cr.)
- GEOL 113/113L – Field-Based Intro to Physical Geol (4 cr.)
- GEOL 250 – Environmental Geology
- ENV5 101 – Introduction to Environmental Science
- BIOL 102/102L – Plant and Animal Biodiversity (4 cr.)
- BIOL 105/105L – Attributes of Living Systems (4 cr.)
- BIOL 209/209L – Human Anatomy and Physiology (4 cr.)

English (3 semester hours)

ENGL 425	Scientific Writing	3	_____	_____	_____
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Basic Engineering (22 semester hours)

CIVE 127	Engineering Drawing	3	_____	_____	_____
CIVE 212	Intro to Geomatics	3	_____	_____	_____
CIVE 313	Theoretical Fluid Mechanics	3	_____	_____	_____

CMU/CU-Boulder Civil Engineering
Partnership Program

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ENGR 101	Introduction to Engineering	1	_____	_____	_____
ENGR 140	First-Year Engr. Projects	3	_____	_____	_____
ENGR 261	Statics and Structures	3	_____	_____	_____
ENGR 263	Mechanics of Solids	3	_____	_____	_____
ENGR 343	Dynamics	3	_____	_____	_____

CU-BOULDER ENGINEERING COURSES (36 semester hours)

CVEN 3227	Probability and Statistics	3	_____	_____	_____
CVEN 3246	Intro to Construction	3	_____	_____	_____
CVEN 3256	Construction Equipment & Methods	3	_____	_____	_____
CVEN 3323	Hydraulics	3	_____	_____	_____
CVEN 3414	Fundamental of Environmental Engineering	3	_____	_____	_____
CVEN 3525	Structural Analysis	3	_____	_____	_____
CVEN 3708	Geotechnical Engineering I	3	_____	_____	_____
CVEN 3718	Geotechnical Engineering II	3	_____	_____	_____
CVEN 4545	Steel Design	3	_____	_____	_____
CVEN 4897	Professional Issues	2	_____	_____	_____
CVEN 4899	CE Design Project	4	_____	_____	_____
MCEN 3012	Thermodynamics	3	_____	_____	_____

ELECTIVE COURSES

Humanities and Social Science (15 semester hours, of which 6 hours must be upper division)

9 semester hours Lower Division Humanities and Social Science
 SOCI 120 Technology and Society 3 _____

6 semester hours Upper Division Humanities & Social Science

Technical Electives (12 semester hours, including 6 hours CVEN and 6 hours upper division math, science or engineering courses).
 CVEN _____
 CVEN _____

Free Elective (3 semester hours)

This is a recommended sequence of course work. Certain courses may have prerequisites or are only offered during the Fall or Spring semesters. It is the student's responsibility to meet with their assigned advisor.

FRESHMAN YEAR

Fall Semester		Hours	Spring Semester		Hours
MATH 135	Engineering Calculus I	4	MATH 136	Engineering Calculus II	4
CHEM 151	Engineering Chemistry***	4	PHYS 131	Fundamental Mechanics	4
CHEM 151L	Engineering Chemistry Lab	1	PHYS 131L	Fundamental Mechanics Lab	1
ENGR 101	Intro to Engineering	1	ENGR 140	First-Year Engr. Projects	3
CIVE 127	Engineering Drawing for CE	3	CSCI 130	Intro to Engineering Computing	3
SOCI 120	Technology and Society	3			15
		16			

SOPHOMORE YEAR

Fall Semester		Hours	Spring Semester		Hours
MATH 253	Calculus III	4	MATH 236	Differential Equations & Linear Algebra	4
PHYS 132	Electro Mag & Optics	4	CIVE 313	Theoretical Fluid Mechanics	3
PHYS 132L	Electro Mag & Optics Lab	1	ENGR 343	Dynamics	3
ENGR 261	Statics and Structures	3	ENGR 263	Mechanics of Solids	3
CIVE 212	Introduction to Geomatics	3		Hum/Soc Sci Elect (Lower Div)**	3
	Basic Science *	3			16
		18			

JUNIOR YEAR

Fall Semester		Hours	Spring Semester		Hours
CVEN 3414	Fundamentals of Environmental Engr	3	CVEN 3227	Probability and Statistics	3
CVEN 3246	Introduction to Construction	3	CVEN 3323	Hydraulics	3
CVEN 3708	Geotechnical Engineering I	3	CVEN 3256	Construction Equipment & Methods	3
CVEN 3525	Structural Analysis	3	CVEN 3718	Geotechnical Engineering II	3
	Hum/Soc Sci Elect (Lower Div)	3	ENGL 425	Scientific Writing	3
		15			15

SENIOR YEAR

Fall Semester		Hours	Spring Semester		Hours
CVEN 4545	Steel Design	3	CVEN 4899	CE Design Project	4
CVEN 4897	Professional Issues	2		CVEN Technical Elective	3
MCEN 3012	Thermodynamics	3		General Technical Elective	3
	CVEN Technical Elective	3		Free Elective	3
	General Technical Elective	3		Hum/Soc Sci Elect (Upper Div)	3
	Hum/Soc Sci Elect (Upper Div)	3			16
		17			

Black – CMU courses, red – CU courses

**Basic Science courses include: GEOL 103 Weather and Climate, GEOL 104 Oceanography, GEOL 105 Geology of Colorado, GEOL 107 Natural Hazards and Environmental Geology, GEOL 108 Water, People and Environment, GEOL 111/111L Principles of Physical Geology (4 cr.), GEOL 113/113L Field-Based Intro to Physical Geol (4 cr.), GEOL 250 Environmental Geology, ENVS 101 Introduction to Environmental Science, BIOL 102/102L Plant and Animal Biodiversity (4 cr.), BIOL 105/105L Attributes of Living Systems (4 cr.), BIOL 209/209L Human Anatomy and Physiology (4 cr.)