

CIVIL ENGINEERING
SUGGESTED 4 YEAR PLAN OF STUDY

1. Fall Semester

GE 100	Fundamentals of Engineering	3 Cr.
GE 199	Engineering Seminar	0 Cr.
CORE 110	The Human Experience	5 Cr.
MATH 131	Analytic Geometry and Calculus I	4 Cr.
PHYS 141	Mechanics and Heat	3 Cr.
PHYS 141L	Experimental Physics I	1 Cr.

2. Spring Semester

CE 151	Introduction to Computer-Aided Drafting	1 Cr.
GE 109	Mechanics-Statics	3 Cr.
CORE 115	The Human Experience	5 Cr.
MATH 132	Analytic Geometry and Calculus II	4 Cr.
	Humanities, Social Science, Theology Elective	3 Cr.
PE 100	Healthy Lifestyles	1 Cr.

3. Fall Semester

CE 202	Statistical Applications in Civil Engineering	3 Cr.
CE 215	Mechanics of Materials	3 Cr.
CHEM 115	Essentials of Chemistry	4 Cr.
MATH 253	Calculus III	4 Cr.
	Science Elective	3 Cr.

4. Spring Semester

CE 212	Materials Engineering	3 Cr.
CE 213	Tech. & Prof. Writing in Civil Engineering	1 Cr.
CE 216	Introduction to Structural Engineering	3 Cr.
CE 252	Introduction to Transportation Engineering	3 Cr.
CHEM 116	Applications of Chemistry in Engineering	4 Cr.
MATH 234	Differential Equations and Linear Algebra	4 Cr.

5. Fall Semester

CE 317	Design of Reinforced Concrete Structures	3 Cr.
CE 320	Soil Mechanics	4 Cr.
CE 334	Fluid Mechanics	4 Cr.
CE 364	Environmental Engineering I	4 Cr.

6. Spring Semester

CE 318	Design of Steel Structures	3 Cr.
CE 322	Soil and Foundation Engineering	3 Cr.
CE 332	Hydrology	3 Cr.
CE 354	Design of Transportation Facilities	3 Cr.
CE 365	Environmental Engineering II	3 Cr.
GE 301	Financial & Ethical Decisions in Engineering	3 Cr.

7. Fall Semester

CE 493	Sr. Design I: Project & Planning Management	3 Cr.
	Civil Engineering Elective	3 Cr.
	Civil Engineering Elective	3 Cr.
	Free Elective	3 Cr.
THEO 200	The Christian Tradition	3 Cr.

8. Spring Semester

CE 494	Sr. Design II: Project Development & Design	3 Cr.
	Civil Engineering Elective	3 Cr.
	Technical Elective	3 Cr.
	Foreign Language/Diversity Elective	3-4 Cr.
	Humanities, Social Science, Theology Elective	3 Cr.

TOTAL REQUIRED FOR GRADUATION 131-132 Cr.

CIVIL ENGINEERING
TYPICAL CO-OP PLAN OF STUDY

1. Fall Semester

GE 100	Fundamentals of Engineering	3 Cr.
GE 199	Engineering Seminar	0 Cr.
CORE 110	The Human Experience	5 Cr.
MATH 131	Analytic Geometry and Calculus I	4 Cr.
PHYS 141	Mechanics and Heat	3 Cr.
PHYS 141L	Experimental Physics I	1 Cr.

2. Spring Semester

CE 151	Introduction to Computer-Aided Drafting	13 Cr.
GE 109	Mechanics-Statics	3 Cr.
CORE 115	The Human Experience	5 Cr.
MATH 132	Analytic Geometry and Calculus II	4 Cr.
	Humanities, Social Science, Theology Elective	3 Cr.
PE 100	Healthy Lifestyles	1 Cr.

3. Fall Semester

CE 202	Statistical Application in Civil Engineering	3 Cr.
CE 215	Mechanics of Materials	3 Cr.
CHEM 115	Essentials of Chemistry	4 Cr.
MATH 253	Calculus III	4 Cr.
	Science Elective	3 Cr.

4. Spring Semester

CE 212	Materials Engineering	3 Cr.
CE 213	Tech. & Prof. Writing in Civil Engineering	1 Cr.
CE 216	Introduction to Structural Engineering	3 Cr.
CE 252	Introduction to Transportation Engineering	3 Cr.
CHEM 116	Applications of Chemistry in Engineering	4 Cr.
MATH 234	Differential Equations and Linear Algebra	4 Cr.

Summer Semester

GE 483	Cooperative Education III (Free Elective)	1 Cr.
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5. Fall Semester

GE 481	Cooperative Education I (Free Elective)	1 Cr.
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6. Spring Semester

CE 318	Design of Steel Structures	3 Cr.
CE 354	Design of Transportation Facilities	3 Cr.
CE 365	Environmental Engineering II	3 Cr.
GE 301	Financial & Ethical Decisions in Engineering	3 Cr.
	Foreign Language/Diversity Elective	3-4 Cr.

Summer Semester

GE 483	Cooperative Education III (Free Elective)	1 Cr.
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7. Fall Semester

CE 317	Design of Reinforced Concrete Structures	3 Cr.
CE 320	Soil Mechanics	4 Cr.
CE 334	Fluid Mechanics	4 Cr.
CE 364	Environmental Engineering I	4 Cr.

8. Spring Semester

GE 482	Cooperative Education II (Technical Elective)	2 Cr.
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Summer Semester

GE 483	Cooperative Education III (Technical Elective)	1 Cr.
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9. Fall Semester

CE 493	Sr. Design I: Project Planning & Management	3 Cr.
	Civil Engineering Elective	3 Cr.
	Civil Engineering Elective	3 Cr.
THEO 200	The Christian Tradition	3 Cr.

10. Spring Semester

CE 322	Soil and Foundation Engineering	3 Cr.
CE 332	Hydrology	3 Cr.
CE 494	Sr Design II: Project Development & Design	3 Cr.
	Civil Engineering Elective	3 Cr.
	Humanities, Social Science, Theology Elective	3 Cr.

TOTAL REQUIRED FOR GRADUATION 132-133 Cr.