

# Civil Engineering - General Program

2012-2013 Catalog

128 Total Credits

## First Year

### Semester 1

- 3 CE 160 (Engr Problem Solving)
- 4 Chem 177 (General Chemistry I)
- 1 Chem 177L (Gen Chemistry Lab)
- 3 Engl 150 (Critical Think Comm)
- 4 Math 165 (Calculus I)
- 1 Lib 160 (Library)
- R Engr 101 (Engr Orientation)
- R CE 120 (Learning Community)

16 Total Credits

### Semester 2

- 1 CE 105 (Intro to Profession)
- 3 CE 111 (Surveying I)
- 2 CE 170 (Civil Engr Graphics)
- 4 Math 166 (Calculus II)
- 5 Phys 221 (Classical Physics I)
- 3 SSH Elective
- R CE 120 (Learning Community)

18.0 Total Credits

## Sophomore Year

### Semester 3

- R CE 101 (Transfer Students Only)
- 3 Engl 250 (WOVE Comp)
- 3 Chem 178 (General Chemistry II)
- 1 Chem 178L (Gen Chemistry II Lab)
- 3 EM 274 (Statics)
- 3 Math 266 (Differential Equations)
- 3 Geol 201 (Geology for Engineers)

16.0 Total Credits

### Semester 4

- 3 CE 206 (Economic Analysis)
- 3 EM 324 (Mechanics of Materials)
- 1 EM 327 (Mech of Materials Lab)
- 3 Sp Cm 212 (Public Speaking)
- 3 Numerical Analysis Elective
- 3 Statistics Elective

16.0 Total Credits

## Junior Year

### Semester 5

- 3 CE 326 (Environmental Engr)
- 3 CE 332 (Structural Analysis I)
- 3 CE 360 (Geotechnical Engineering)
- 3 EM 378 (Mechanics of Fluids)
- 3 Technical Communications
- 3 CE 355 (Transportation Engr)

18.0 Total Credits

### Semester 6

- 3 CE 334 (Concrete Design I)
- 3 CE 372 (Engr Hydro & Hydraulics)
- 3 CE 382 (Design of Concretes)
- 3 CE 306 (Project Management)

12.0 Total Credits

## Senior Year

### Semester 7

- 3 CE 333 (Steel Design I)
- 3 CE 453 (Highway Design)
- 3 CE 485 (CE Design I)
- 3 EM 345 (Dynamics)
- 2 Engr Topic Elective
- 3 SSH Elective

17.0 Total Credits

### Semester 8

- R CE 403 (Outcomes Assessment)
- 3 CE Design Elective
- 6 Engr Topic Elective
- 6 SSH Elective

15.0 Total Credits

\* CE 460 may be substituted for CE 333 or CE 334

# Civil Engineering - Environmental Specialization

2012-2013 Catalog

**129 Total Credits**

**First Year**

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## Semester 1

3 CE 160 (Engr Problem Solving)  
4 Chem 177 (General Chemistry I)  
1 Chem 177L (Gen Chemistry Lab)  
3 Engl 150 (Critical Think & Comm)  
R Engr 101 (Engr Orientation)  
1 Lib 160 (Library)  
4 Math 165 (Calculus I)  
R CE 120 (Learning Community)

*16 Total Credits*

## Semester 2

1 CE 105 (Intro to Profession)  
3 CE 111 (Surveying 1)  
2 CE 170 (Civil Engr Graphics)  
5 Phys 221 (Classical Physics I)  
4 Math 166 (Calculus II)  
3 SSH Elective  
R CE 120 (Learning Community)

*18 Total Credits*

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## Sophomore Year

### Semester 3

R CE 101 (Transfer Student Only)  
3 Chem 178 (General Chemistry II)  
1 Chem 178L (Gen Chemistry II Lab)  
3 EM 274 (Statics)  
3 Math 266 (Differential Equations)  
3 Engl 250 (WOVE Comp)  
3 Geol 201 (Geology for Engineers)

*16 Total Credits*

### Semester 4

3 CE 206 (Economic Analysis)  
3 Chem 231 (Organic Chemistry)  
1 Chem 231L (Organic Chem Lab)  
3 EM 324 (Mechanics of Materials)  
1 EM 327 (Mech of Materials Lab)  
3 Statistics Elective  
3 Sp Cm 212 (Public Speaking)

*17 Total Credits*

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## Junior Year

### Semester 5

3 CE 332 (Structural Analysis I)  
3 CE 360 (Geotechnical Engineering)  
3 EM 378 (Mechanics of Fluids)  
3 Technical Communications Elective  
3 CE 355 (Transportation Engr)  
3 CE 326 (Environmental Engr)

*18 Total Credits*

### Semester 6

3 CE 306 (Project Management)  
3 CE 334 (Concrete Design I)  
3 Biol 173 or 211 (Biology)  
3 CE 372 (Engr Hydro & Hydraulics)  
3 CE 382 (Design of Concretes)

*15 Total Credits*

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## Senior Year

### Semester 7

3 CE 485 (CE Design I)  
3 CE 420 (Environmental Engr Chem)  
3 CE 421 (Envr Biotechnology)  
2 Micro 201 (General Microbiology)  
3 SSH Elective  
3 Numerical Analysis Elective

*17 Total Credits*

### Semester 8

R CE 403 (Outcomes Assessment)  
3 CE 428 (Treatment Plant Design)  
3 Engr Topic Electives  
3 SSH Elective  
3 SSH Elective

*12 Total Credits*