

University of Detroit Mercy
Bachelor of Civil Engineering—Concentration in Environmental Engineering
Course Requirements Flowchart (2016)

Freshman Fall

16 credits

ENGR 1050 Eng Graphic Design
MTH 1234 Engineering Math
BIO 1080 Biology
ENL 1310 Academic Writing (*placement*)
ENGR 3000 Coop Prep
CIVE 3410 Lab
PHL 1000 Intro to Philosophy

Freshman Winter

18 credits

PHY 1600 Physics (*MTH 1234*)
PHY 1610 Phys Lab (*co*)
MTH 1410 Calc I (*MTH 1234*)
CHM 1070 Chemistry I (*placement*)
CHM 1100 Chemistry Lab I (*co*)
CIVE 3400 Eng Survey (*ENGR 1050*)
Core Objective 5

Summer

2 credits

CTA 3010 Coop I

Sophomore Fall

16 credits

ENGR 3120 Statics (*Physics, MTH 1234*)
PHY 1620 Physics II (*Phys I*)
PHY 1630 Phys II Lab (*co*)
MTH 1420 Calc II (*Calc I*)
ENGR 1000 Eng Ethics
Core Objective 5

Sophomore Winter

17 credits

ENGR 3260 Mech. of Materials (*Statics*)
ENGR 3270 Mech. of Materials Lab (*co*)
MTH 2410 Calc III (*Calc 2*)
CST 1010 Speech (*co-ENL 1310*)
Core Objective 5
Core Objective 4

Summer

2 credits

CTA 3020 Coop II

Junior Fall

17 credits

ENGR 3170 Mat Science (*Chem., Statics*)
ENGR 3150 Thermo I (*Phys I, Chem, MTH 1234*)
CIVE 3480 Soil Mechanics (*Mech. of MTL*)
CIVE 3490 Soils lab (*co*)
MTH 3720 Differential Equations (*Calc 2*)
ENGR 3130 Dynamics (*Statics*)

Junior Winter

16 credits

CIVE 3420 Structural Theory (*Mech. of MTL*)
ENGR 3140 Fluid Mechanics (*co*)
CIVE 4722 Eng Geology (*Chem.*)
MTH 4270 Probability & Statistics (*MTH 1420*)
Core Objective 4

Summer

2 credits

CTA 3030 Coop III

Senior Fall

18 credits

CIVE 4100 Transportation Eng
CIVE 4530 Hydraulics (*Fluids*)
CIVE 4680 Design of Steel & Concrete (*Struct. Theory*)
CIVE 4860 Environmental Microbio.
Environmental Elective (*e.g groundwater*)
ENGR 3110 Prof. Pract. Engr.

Senior Winter

17 credits

CIVE 4820 Senior Design Project
CIVE 4500 Water / Waste Water Engin. (*Fluids*)
CIVE 4510 Water Eng Lab (*co*)
ENGR 3240 Engineering Econ. (*Calc 3*)
CIVE4840 Environmental Chem (*Chem*)
CIVE 3450 Construction Materials (*Mech. of MTLs*)
ENGR 3112 Fund. of Engr. Pract.