Civil Engineering

Prerequisite Flowchart

These requirements are effective for students admitted to the Civil Engineering major beginning Fall 2014.

**LEGEND**
- **Prerequisite**: Course must be completed before the major track course will be allowed for credit.
- **Prerequisite or Concurrent**: Course may be taken either Fall or Spring.
- **Dashed box**: Course may be taken either Fall or Spring (excluding summer).
- **Rounded box**: Offered only in the semester listed (excluding summer).

**F R E S H M A N   Y E A R**

**FALL Term 1**
- CEM 161 – 1
  - Cem Lab I

**SPRING Term 2**
- CEM 141 -OR- CEM 151 - 4
  - Gen Cem
- EGR 100 - 2
  - Intro Engr Design
- EGR 102 - 2
  - Intro Engr Model
- MTH 132 - 3
  - Calc I
- MTH 133 - 4
  - Calc II
- MTH 234 - 4
  - Multivar Calc
- PHY 183 – 4
  - Physics I
- WRA XXX – 4
  - Univ Writing
- ISS 2XX – 4
  - 1st Int Soc Sci

**S O P H O M O R E   Y E A R**

**FALL Term 3**
- CE 271 - 3
  - Intro to Civil Engr
- CE 272 - 3
  - Intro to Civil Engr
- MTH 235 - 3
  - Diff Equations
- CE 221 – 3
  - Statics
- GLG 301 - 3
  - Geo of the Great Lakes Region
- PHY 184 – 4
  - Physics II
- IAH 20X – 4
  - 1st Int Arts & Hum
- IAH XXX – 4
  - 2nd Int Arts & Hum
- Bioscience – 3/4
  - Choose 1 from approved list
- ENE 280 - 3
  - Prin of Env Engr and Sci

**SPRING Term 4**
- ME 222 - 3
  - Mech of Defrm Sol
- CEM 141
  - Gen Cem
- MTH 234
  - Multivar Calc
- PHY 183 – 4
  - Physics I
- MTH 132 - 3
  - Calc I
- MTH 133 - 4
  - Calc II
- MTH 234 - 4
  - Multivar Calc
- PHY 184 – 4
  - Physics II
- IAH 20X – 4
  - 1st Int Arts & Hum
- IAH XXX – 4
  - 2nd Int Arts & Hum
- Bioscience – 3/4
  - Choose 1 from approved list
- ENE 280 - 3
  - Prin of Env Engr and Sci

**J U N I O R   Y E A R**

**FALL Term 5**
- ME 222 - 3
  - Mech of Defrm Sol
- CEM 141
  - Gen Cem
- MTH 234
  - Multivar Calc
- PHY 183 – 4
  - Physics I
- MTH 132 - 3
  - Calc I
- MTH 133 - 4
  - Calc II
- MTH 234 - 4
  - Multivar Calc
- PHY 184 – 4
  - Physics II
- IAH 20X – 4
  - 1st Int Arts & Hum
- IAH XXX – 4
  - 2nd Int Arts & Hum
- Bioscience – 3/4
  - Choose 1 from approved list
- ENE 280 - 3
  - Prin of Env Engr and Sci

**SPRING Term 6**
- ME 222 - 3
  - Mech of Defrm Sol
- CEM 141
  - Gen Cem
- MTH 234
  - Multivar Calc
- PHY 183 – 4
  - Physics I
- MTH 132 - 3
  - Calc I
- MTH 133 - 4
  - Calc II
- MTH 234 - 4
  - Multivar Calc
- PHY 184 – 4
  - Physics II
- IAH 20X – 4
  - 1st Int Arts & Hum
- IAH XXX – 4
  - 2nd Int Arts & Hum
- Bioscience – 3/4
  - Choose 1 from approved list
- ENE 280 - 3
  - Prin of Env Engr and Sci

**S E N I O R   Y E A R**

**FALL Term 7**
- ME 222 - 3
  - Mech of Defrm Sol
- CEM 141
  - Gen Cem
- MTH 234
  - Multivar Calc
- PHY 183 – 4
  - Physics I
- MTH 132 - 3
  - Calc I
- MTH 133 - 4
  - Calc II
- MTH 234 - 4
  - Multivar Calc
- PHY 184 – 4
  - Physics II
- IAH 20X – 4
  - 1st Int Arts & Hum
- IAH XXX – 4
  - 2nd Int Arts & Hum
- Bioscience – 3/4
  - Choose 1 from approved list
- ENE 280 - 3
  - Prin of Env Engr and Sci

**SPRING Term 8**
- ME 222 - 3
  - Mech of Defrm Sol
- CEM 141
  - Gen Cem
- MTH 234
  - Multivar Calc
- PHY 183 – 4
  - Physics I
- MTH 132 - 3
  - Calc I
- MTH 133 - 4
  - Calc II
- MTH 234 - 4
  - Multivar Calc
- PHY 184 – 4
  - Physics II
- IAH 20X – 4
  - 1st Int Arts & Hum
- IAH XXX – 4
  - 2nd Int Arts & Hum
- Bioscience – 3/4
  - Choose 1 from approved list
- ENE 280 - 3
  - Prin of Env Engr and Sci

**Major Track Course**
- CE 305 - 4
  - Intro to Struct Analysis & Design
- CE 312 – 4
  - Soil Mechanics
- CE 337 - 4
  - Civil Engr Maths I
- CE 341 - 3
  - Transprtn Engr
- CE 321 – 4
  - Intro to Fluid Mech
- CE 461 - 3
  - Comp Mthd in CE P: EGR 102 & CE 221 & MTH 235
- ME 361 - 3
  - Dynamics P: ME 221 & MTH 235

**Other Track Course**
- Elective – Var 3-4 crs of Gen Elecs
- Other Track Course - 3
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- Other Track Course - 3

**Other Track Course**
- Elective – Var 3-4 crs of Gen Elecs
- Other Track Course - 3
- Other Track Course - 3
- Other Track Course - 3

**Major Track Course**
- Elective – Var 3-4 crs of Gen Elecs
- Other Track Course - 3
- Other Track Course - 3
- Other Track Course - 3

**Elective – Var 3-4 crs of Gen Elecs**
- Other Track Course - 3
- Other Track Course - 3
- Other Track Course - 3

**BE 351 -OR- ECE 345 - OR- ME 201 - OR- MSE 250**
- 3 credits

**Senior Design**
- CE 495 - 3
  - Senior Design

**Elective – Var 3-4 crs of Gen Elecs**
- Other Track Course - 3
- Other Track Course - 3
- Other Track Course - 3

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http://www.egr.msu.edu/undergraduate/academics/programs

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