# Bachelor of Science in Construction Engineering

<table>
<thead>
<tr>
<th>Fall 15 Hours</th>
<th>FRESHMAN YEAR</th>
<th>Spring 15 Hours</th>
<th>SOPHOMORE YEAR</th>
<th>Spring 16 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125 Calculus I MA (4)</td>
<td>MATH 126 PH 105</td>
<td>MATH 126 Calculus II MA (4)</td>
<td>AEM 250 AEM 264 GES 255 MATH 227 MATH 238</td>
<td>MATH 126 MATH 227 Calculus III MA (4)</td>
</tr>
<tr>
<td>CH 101 Chemistry I N (4)</td>
<td>MATH 125</td>
<td>PH 105 Physics I w/CAL I N (4)</td>
<td>PH 106 AEM 201</td>
<td>Approved Natural Science N (4)</td>
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<tr>
<td>ENGR 103 Engineering Foundations (3)</td>
<td>AEM 201</td>
<td>ENGR 171 Large Scale Graphics (1)</td>
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<td>See Natural Science Notes</td>
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<tr>
<td>CE 121* Intro to CCEE (1)</td>
<td>ENGR 103</td>
<td>HI/SB Elective (3)</td>
<td>CE 260</td>
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<tr>
<td>EN 101 English Comp I FC (3)</td>
<td>EN 102</td>
<td>EN 102 English Comp II FC (3)</td>
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<tr>
<td>ENGR 103</td>
<td>AEM 201</td>
<td>GES 255 Engineering Statistics (3)</td>
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<td>MATH 126</td>
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<td>MATH 126</td>
<td>AEM 311</td>
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<td>MATH 238 Differential Equations MA (3)</td>
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<td>ECE 320</td>
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**Natural Science (N)**
- Required: CH 101 or 117, PH 105 or 125, PH 106 or 126 Natural Science (N) Elective
- BSC 114/115 or 118, or CH 102 GEO 101, 102, 104 or 105, OR GY 101, 102, 202 or 207

**Advising Notes**
- HU/L/FA = Humanities/Literature/Fine Arts
- Foreign language is recommended as HU
- HI/SB = History/Social and Behavioral Science
- EC 110 is recommended as SB
- FC = Freshman Composition  W = Writing
- MA = Mathematics  C = Computer Science
- *ENGR 111 or any engineering major intro course will meet requirements of CE 121.

- A grade of C- or higher is required in each course that is a prerequisite to any course needed to meet degree requirements.
- Honors College participants refer to your DegreeWorks for Honors College requirements and course options.
- A max of 12 hours of 300/400 level courses can be transferred.
- Students are limited to a max of three attempts per course offered by the College, excluding withdrawals.

**KEY**
- Prerequisite Course(s)
- Corequisite Course(s)
- Course ### Title (Credits)
- Downward Dependencies

This is a coursework planning tool. The UA Undergraduate Catalog contains the official listing of academic information.

Department of Civil, Construction and Environmental Engineering
Rev 05/26/2022 PAP
# Bachelor of Science in Construction Engineering

## JUNIOR YEAR

**Fall**
- 16 Hours
  - AEM 250
  - CE 331 Intro to Structural Engineering (3)
  - CE 366
  - CE 461 Horizontal Construction Methods Fall Only (3)
  - HI/SB Elective (3)

**Spring**
- 15 Hours
  - AEM 262
  - CE 340 Geotechnical Engineering W (4)
  - CE 402 Engineering Management Spring Only (3)
  - CE 404
  - See Engineering Systems Elective Notes

## SENIOR YEAR

**Fall**
- 15 Hours
  - GES 255
  - CE 366
  - CE 433 Reinforced Concrete Struct 1 or CE 434 Struct Steel Design I (3)
  - COM 123 HU/L/FA (3)

**Spring**
- 16 Hours
  - CE 402 or CE 404 Capstone Design Building: ConE
  - CE 404 Capstone Design Site: ConE
  - CE 464 Safety Engineering Spring Only (3)

### Notes
- **Engineering Systems Elective** Choose two from: ECE 320 Fundamentals of Electrical Engineering, ME 215 Thermodynamics I or ME 216 Thermal Engineering Survey, and AEM 311 Fluid Mechanics.
- **Senior Plan of Study and Capstone Design electives must include CE 433 or CE 434 for Capstone Design (CD); one course in project management (PM); and one in Construction Engineering, which can be a general technical (GT), design (D) or project management (PM) courses. See the department for a list of approved electives.
- **Capstone Design Construction Engineering Requirements**
  - CE 402 Capstone Design Site: ConE
    - Prerequisites (C- or greater): CE 340, CE 366 and CE 331
    - Prerequisites with concurrency: CE 461, 468 + 1 of CE (433 or 434)
  - CE 404 Capstone Design Building: ConE
    - Prerequisites (C- or greater): CE 340, CE 366 and CE 331 +1 of (433 or 434)
    - Prerequisites with concurrency: CE 462 and CE 468
    - Capstone Design CE 402 & CE 404 must be taken at UA. No transfer credit accepted.