

# NORTHERN ARIZONA UNIVERSITY

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## Accelerated Master of Science in Civil Engineering Department of Civil Engineering

ACCELERATED PROGRAM: **BS Environmental Engineering – MS Environmental Engineering (Non-Thesis)**

### Overview

*This plan includes 6 units that are used to complete both the undergraduate and the graduate requirements: any combination of 0-6 units at the undergraduate level and 0-6 units at the graduate level. Students must receive a grade of "B" or higher in this coursework used towards both degrees.*

### Undergraduate requirements for students in the accelerated program

The following 110 - 112 units:

Preprofessional Requirements (60-62 units)

Mathematics and Science courses (39-41 units)

- [BIO 100\\*](#) or [BIO 181\\*](#) (3 units)
- [CHM 151\\*](#), [CHM 151L\\*](#), [CHM 152\\*](#), and ([CHM 230\\*](#) or [CHM 235\\*](#)) (11-12 units)
- [ENV 115](#), [GLG 115](#), or [GSP 365](#) (3-4 units)
- [MAT 136\\*](#), [MAT 137\\*](#), [MAT 238\\*](#), and [MAT 239\\*](#) (15 units)
- [PHY 161\\*](#) and [PHY 262\\*](#) (7 units)

Engineering Science courses (18 units)

- [CENE 180\\*](#), [CENE 225\\*](#), [CENE 251\\*](#), and [CENE 286\\*](#) (12 units)
- [EGR 186\\*](#) (3 units)
- [ME 291](#) (3 units)

Additional requirements (3 units)

- Select one: [PHI 105](#), [PHI 331](#), or [PHI 334](#)

Major Courses (50 units):

- [CENE 150\\*](#), [CENE 150L\\*](#), [CENE 270\\*](#), [CENE 280\\*](#), [CENE 281L\\*](#), [CENE 282\\*](#), [CENE 330](#), [CENE 332\\*](#), [CENE 333\\*](#), [CENE 333L\\*](#), [CENE 335\\*](#), [CENE 336\\*](#), [CENE 410L](#), [CENE 431L](#), [CENE 434](#), [CENE 480](#) (37 units)
- [CENE 386W\\*](#) which meets the junior-level writing requirement (3 units)
- ([CENE 476\\*](#) and [CENE 486C](#)) together meet the senior capstone requirement (4 units)

Technical Electives; select from the following (6 units):

- [CENE 419](#), [CENE 430](#), [CENE 440](#), [CENE 460](#), [CENE 462](#), [CENE 470](#), [CENE 485](#), [CENE 497](#), [CENE 499](#), [CENE 503](#), [CENE 540](#), [CENE 560](#), [CENE 562](#), [CENE 565](#), [CENE 568](#), [CENE 599](#), or [GLG 451](#)

*\*Prerequisites to Engineering coursework that must be completed with grades of "C" or better. In addition, [ENG 105](#) must be completed with a grade of "C" or better.*

### Graduate requirements for students in the accelerated program

The following 30 units:

- Graduate-level mathematics or statistics, e.g., [STA 570](#) (3 units)
- Environmental Engineering core coursework (12 units); select from:

- [CENE 502](#), [CENE 503](#), [CENE 540](#), [CENE 550](#), [CENE 560](#), [CENE 562](#), [CENE 565](#), [CENE 568](#), [CENE 599](#) - Advanced Wastewater Design, [CENE 599](#) -Air Quality Engineering, [CENE 697](#) for a maximum of 3 units
- Technical Electives (15 units)
  - 3 units of 500-level electives in consultation with your advisor
  - 6 units of 400 or 500-level electives in consultation with your advisor
  - [CENE 690](#) (Project) or additional 500-level CENE electives (6 units)

## Sample Progression Plan

^ Denotes undergraduate course required for the undergraduate degree

% Denotes a course that applies towards both degrees

\* Denotes graduate course required for the graduate degree

Fall Year 1 (Term 1: 16 units)	Spring Year 1 (Term 2: 17 units)
<a href="#">^MAT 136</a>	<a href="#">^MAT 137</a>
<a href="#">^CHM 151 and 151L</a>	<a href="#">^CHM 152</a>
<a href="#">^ENG 105</a>	<a href="#">^CENE 180</a>
<a href="#">^Liberal studies or Diversity</a>	<a href="#">^CENE 150 and CENE 150L</a>
	<a href="#">^EGR 186</a>

Fall Year 2 (Term 3: 17 units)	Spring Year 2 (Term 4: 16-17 units)
<a href="#">^MAT 238</a>	<a href="#">^MAT 239</a>
<a href="#">^CENE 225</a>	<a href="#">^CHM 230 or CHM 235</a>
<a href="#">^CENE 280</a>	<a href="#">^CENE 251</a>
<a href="#">^BIO 100 or BIO 181</a>	<a href="#">^CENE 281L</a>
<a href="#">^PHY 161</a>	<a href="#">^PHY 262</a>
	<a href="#">^Liberal studies or Diversity</a>

Fall Year 3 (Term 5: 15 units)	Spring Year 3 (Term 6: 15-16 units)
<a href="#">^CENE 270</a>	<a href="#">^CENE 282</a>
<a href="#">^CENE 286</a>	<a href="#">^CENE 332</a>
<a href="#">^CENE 330</a>	<a href="#">^CENE 333L</a>
<a href="#">^CENE 333</a>	<a href="#">^CENE 386w</a>
<a href="#">^Liberal studies or Diversity</a>	<a href="#">^ENV 115, GLG 115, or GSP 365</a>
	<a href="#">^ PHI 105, PHI 331, or 334</a>

Fall Year 4 (Term 7: 16 units)	Spring Year 4 (Term 8: 16 units; graduate with the BS)
<a href="#">^CENE 335</a>	<a href="#">^CENE 410L</a>
<a href="#">^CENE 336</a>	<a href="#">^CENE 434</a>
<a href="#">^CENE 476</a>	<a href="#">^CENE 431L</a>
<a href="#">^ME 291</a>	<a href="#">^CENE 480</a>
<a href="#">^Liberal studies or Diversity</a>	<a href="#">^CENE 486c</a>
<a href="#">%400 or 500-level technical elective</a>	<a href="#">^Liberal studies or Diversity</a>
	<a href="#">%400 or 500-level technical elective</a>

Fall Year 5 (Term 9: 12 units)	Spring Year 5 (Term 10: 12 units; graduate with the MS)
<a href="#">*CENE Core</a>	<a href="#">*STA 570 or approved graduate-level math course</a>
<a href="#">*CENE Core</a>	<a href="#">*CENE Core</a>
<a href="#">*CENE Core</a>	<a href="#">*CENE 690 or 500-level CENE elective</a>
<a href="#">*Additional 500-level technical elective</a>	<a href="#">*CENE 690 or 500-level CENE elective</a>