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Accelerated Master of Science in Climate Science and Solutions

School of Earth and Sustainability

Accelerated Program: BS (Environmental Sciences, Applied Statistics emphasis) – MS (Climate Science & Solutions)

**Overview**

*Note: This plan includes 12 units that are used to complete both the undergraduate and the graduate requirements: 6 at the graduate level and 6 at the undergraduate 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**

**Take the following 86 units and maintain a minimum GPA of 3.5:**

**Core requirements (47 units):**

* [CHM 151](http://catalog.nau.edu/Courses/course?courseId=001281&catalogYear=2122), [CHM 151L](http://catalog.nau.edu/Courses/course?courseId=001282&catalogYear=2122), [CHM 152](http://catalog.nau.edu/Courses/course?courseId=001284&catalogYear=2122), and [CHM 152L](http://catalog.nau.edu/Courses/course?courseId=001285&catalogYear=2122) (9 units)
* [ENV 115](http://catalog.nau.edu/Courses/course?courseId=010197&catalogYear=2122), [ENV 120](http://catalog.nau.edu/Courses/course?courseId=002891&catalogYear=2122), [ENV 171](http://catalog.nau.edu/Courses/course?courseId=002893&catalogYear=2122), [ENV 181](http://catalog.nau.edu/Courses/course?courseId=009900&catalogYear=2122), [ENV 226](http://catalog.nau.edu/Courses/course?courseId=013307&catalogYear=2122), [ENV 226L](http://catalog.nau.edu/Courses/course?courseId=010079&catalogYear=2122), and [ENV 360](http://catalog.nau.edu/Courses/course?courseId=002894&catalogYear=2122) (19 units)
* [ENV 385W](http://catalog.nau.edu/Courses/course?courseId=002907&catalogYear=2122) which meets the junior-level writing requirement (4 units)
* [ENV 408](http://catalog.nau.edu/Courses/course?courseId=002915&catalogYear=2122) or [ENV 485](http://catalog.nau.edu/Courses/course?courseId=002923&catalogYear=2122) (3 units)
* [ENV 490C](http://catalog.nau.edu/Courses/course?courseId=002925&catalogYear=2122) which meets the senior capstone requirement (3 units)
* [POS 659](http://catalog.nau.edu/Courses/course?courseId=006850&catalogYear=2122) and ([STA 270](http://catalog.nau.edu/Courses/course?courseId=008088&catalogYear=2122) or [STA 275](http://catalog.nau.edu/Courses/course?courseId=010056&catalogYear=2122)) (6 units)
* ENV 675 – Fall Rotation 1: Adaptation (3 units)

**Emphasis requirements (39 units):**

* [BIO 182](http://catalog.nau.edu/Courses/course?courseId=000909&catalogYear=2122) and [BIO 182L](http://catalog.nau.edu/Courses/course?courseId=010537&catalogYear=2122) (4 units)
* [CS 126](http://catalog.nau.edu/Courses/course?courseId=001727&catalogYear=2122) and [CS 126L](http://catalog.nau.edu/Courses/course?courseId=010376&catalogYear=2122) (4 units)
* ENV 440 and ENV 440L (4 units)
* [GSP 239](http://catalog.nau.edu/Courses/course?courseId=003612&catalogYear=2122) and [GSP 406](http://catalog.nau.edu/Courses/course?courseId=006779&catalogYear=2122) (7 units)
* [MAT 136](http://catalog.nau.edu/Courses/course?courseId=005211&catalogYear=2122) and [MAT 137](http://catalog.nau.edu/Courses/course?courseId=005213&catalogYear=2122) (8 units)
* [STA 371](http://catalog.nau.edu/Courses/course?courseId=008089&catalogYear=2122) and [STA 471](http://catalog.nau.edu/Courses/course?courseId=008093&catalogYear=2122) (6 units)
* Applied Statistics Emphasis electives - select from (6 units):
  + Advanced Statistics: [STA 473](http://catalog.nau.edu/Courses/course?courseId=008096&catalogYear=2122), [STA 477](http://catalog.nau.edu/Courses/course?courseId=010061&catalogYear=2122), or [STA 570](http://catalog.nau.edu/Courses/course?courseId=008101&catalogYear=2122)
  + Bioinformatics:  [BIO 344](http://catalog.nau.edu/Courses/course?courseId=000963&catalogYear=2122), [BIO 450](http://catalog.nau.edu/Courses/course?courseId=010233&catalogYear=2122), or [CS 290](http://catalog.nau.edu/Courses/course?courseId=011360&catalogYear=2122)
  + Computation:  [CS 136](http://catalog.nau.edu/Courses/course?courseId=001728&catalogYear=2122), [CS 136L](http://catalog.nau.edu/Courses/course?courseId=010377&catalogYear=2122) [CS 249](http://catalog.nau.edu/Courses/course?courseId=001737&catalogYear=2122), or [CS 290](http://catalog.nau.edu/Courses/course?courseId=011360&catalogYear=2122)
  + GIS and Remote Sensing: [GSP 320](http://catalog.nau.edu/Courses/course?courseId=003631&catalogYear=2122), [GSP 331](http://catalog.nau.edu/Courses/course?courseId=003634&catalogYear=2122), [GSP 433](http://catalog.nau.edu/Courses/course?courseId=003673&catalogYear=2122), [GSP 435](http://catalog.nau.edu/Courses/course?courseId=009715&catalogYear=2122), [GSP 437](http://catalog.nau.edu/Courses/course?courseId=003674&catalogYear=2122), or [GSP 438](http://catalog.nau.edu/Courses/course?courseId=009717&catalogYear=2122)
  + Additional mathematics, statistics, and/or science courses chosen with your advisor's approval (excluding [BIO 226](http://catalog.nau.edu/Courses/course?courseId=000927&catalogYear=2122), [BIO 226L](http://catalog.nau.edu/Courses/course?courseId=000928&catalogYear=2122), any recitation ("R") courses).

**Graduate requirements for students in the accelerated program**

Take the following **36 units** while remaining in [good academic standing](https://www5.nau.edu/policies/Client/Details/520?whoIsLooking=Students&pertainsTo=Graduate%20students&sortDirection=Ascending&page=1):

**Core courses** (**27 units**):

* ENV 591 (3 units)
* ENV 595 (3 units)
* ENV 675 (3 units) – Fall Rotation 1: Adaptation
* ENV 675 (3 units) – Spring Rotation: Energy
* ENV 675 (3 units) – Fall Rotation 2: Mitigation
* ECO 526 (3 units)
* ENV 408 or ENV 485 (3 units)
* ENV 490C (3 units)
* POS 659 (3 units)

**CSS graduate-level elective course**: **3 units** from the following CSS Elective list in consultation with graduate advisor\*:

BIO 578, CENE 502, CENE 503, CENE 540, CENE 562, CENE 568, EES 580, EES 680, ENV 530, ENV 550, ENV 555, ENV 571, ENV 596, ENV 650, FOR 500, FOR 504, FOR 563, FOR 565, FOR 580, FOR 582, FOR 633, GLG 575, GLG 670, ME 535, POS 659, STA 570, or STA 571.

\*Other relevant courses may satisfy this requirement with approval from CSS Program Director.

**Other**: the following **6 units**:

* EES 687 (1 unit) – Seminar rotation 1
* EES 687 (1 unit) – Seminar rotation 2
* EES 687 (1 unit) – Seminar rotation 3
* EES 608 (3 units) – Fieldwork Experience

**Suggested Progression Plan**

^ Denotes undergraduate course applied towards the undergraduate degree

% Denotes a course that applies towards both degrees

\* Denotes graduate course applied towards the graduate degree

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| **Fall Year 1 (Term 1: 18 units)** | **Spring Year 1 (Term 2: 17 units)** |
| ^ ENV 171 (4 units) | ^ MAT 136 (4 units) |
| ^ ENV 181 (3 units) | ^ CS 126 (3 units) |
| ^ ENV 120 (1 unit) | ^ CS 126L (1 unit) |
| ^ Foundation English (4 units) | ^ ENV 115 (3 units) |
| ^ General Elective Course (3 units) | ^ STA 270 or STA 275 (3 units) |
| ^ General Elective Course (3 units) | ^ General Elective Course (3 units) |

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| **Fall Year 2 (Term 3: 16 units)** | **Spring Year 2 (Term 4: 17 units)** |
| ^ MAT 137 (4 units) | ^ CHM 152 (3 units) |
| ^ CHM 151 (4 units) | ^ CHM 152L (1 unit) |
| ^ CHM 151L (1 unit) | ^ STA 371 (3 units) |
| ^ ENV 226 (3 units) | ^ GSP 239 (4 units) |
| ^ ENV 226L (1 unit) | ^ General Elective Course (3 units) |
| ^ Liberal Studies and/or Diversity (3 units) | ^ Liberal Studies and/or Diversity (3 units) |
|  | *Discuss internship or research options with your advisor* |

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| **Fall Year 3 (Term 5: 17 units)** | **Spring Year 3 (Term 6: 16 units)** |
| ^ ENV 360 (4 units) | ^ ENV 385W (4 units) |
| ^ BIO 182 (3 units) | ^ GSP 406 (3 units) |
| ^ BIO 182L (1 unit) | ^ Applied Statistics Emphasis Elective (3 units) |
| ^ Liberal Studies and/or Diversity (3 units) | ^ Liberal Studies and/or Diversity (3 units) |
| % ENV 408 or ENV 485 (3 units) | ^ General Elective Course (3 units) |
| % POS 659 (3 units) |  |

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| **Fall Year 4 (Term 7: 14 units)** | **Spring Year 4 (Term 8: 16 units - graduate with the BS)** |
| ^ Applied Statistics Emphasis Elective (3 units) | % ENV 490C (3 units) |
| ^ ENV 440 (3 units) | ^ General Elective Course (3 units) |
| ^ ENV 440L (1 unit) | ^ General Elective Course (3 units) |
| ^ STA 471 (3 unit) | ^ Liberal Studies and/or Diversity (3 units) |
| % ENV 675 (3 units) Fall Rotation 1: Adaptation | ^ Liberal Studies and/or Diversity (3 units) |
| \* EES 687 (1 unit) - Seminar Rotation 1 | \* EES 687 (1 unit) - Seminar Rotation 2 |

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| **Summer Between Years 4-5 (Term 8.5: 3 units)** |
| \* EES 608 (3 units) Summer Internship |

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| **Fall Year 5 (Term 9: 10 units)** | **Spring Year 5 (Term 10: 9 units - graduate with the MS)** |
| \* ENV 591 (3 units) | \* ECO 526 (3 units) |
| \* ENV 595 (3 units) | \* ENV 675 (3 units) - Spring Rotation: Energy |
| \* ENV 675 (3 units) - Fall Rotation 2: Mitigation | \* CSS Graduate Elective (3 units) |
| \* EES 687 (1 unit) - Seminar Rotation 3 |  |