**STUDENT INFORMATION**

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| **Student’s Name:** | **NAU ID:** |
| **E-mail Address:**      @nau.edu | **Phone Number:** |
| **Enrollment Term:**        (ex. Summer 2013) | **Expected Graduation:**       (ex. Spring 2015) |
| **Advisor:** | |
| **Total Required Credits for this Degree Program:** **60** | |
| **This is the:**  **Initial** (upon admission)  **Final** (submitted with Graduation Application) **Program of Study** | |

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| **\*** | **Course No.** | **Course Title** | **Replacement Course** | **Semester** | **Year** | **Hours** | **Grade** | **T/E/P\*\*** |
| 1. **Required Courses (5 units required)** | | | | | | | | |
| \* | ENV 555 | The Environmental Science-Policy Interface |  |  |  |  |  |  |
| \* | EES 605 | Regional Topics in Earth and Environmental Science and Policy |  |  |  |  |  |  |
| \* | EES 606 | Research Methods in Earth and Environmental Science |  |  |  |  |  |  |
| 1. **Professional Experience (6 units required):** Coursework (either regularly scheduled or individualized) is selected by student and committee (Examples include ENV 698, EGR 501, and ETC 655). | | | | | | | | |
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| **\*** | **Course No.** | **Course Title** | **Replacement Course** | **Semester** | **Year** | **Hours** | **Grade** | **T/E/P\*\*** |
| 1. **Emphasis Area and Dissertation Topic (30 units required):** Select courses specific to area of emphasis and dissertation topic with at least 6 units in the area of emphasis choses from the following courses. | | | | | | | | |
| 1. **Climate and Environmental Change Emphasis:** Choose from ENV 595, ENV 540, ENV 544, ENV 550, ENV 580, ENV 591, ENV 596, GLG 537, GLG 670, BIO 426C, BIO 479, FOR 500, STA 570, or STA 571. | | | | | | | | |
| 1. **Earth and Planetary Systems Emphasis:** Choose from GLG 516, GLG 520, GLG 542, GLG 560, GLG 561, GLG 565, GLG 570, GLG 575, GLG 612, GLG 615, GLG 617, GLG 625, GLG 627, GLG 629, PHY 590, STA 570, or STA 571. | | | | | | | | |
| 1. **Engineering Sustainable Solutions Emphasis:** Choose from CENE 502, CENE 540, CENE 543, CENE 550, CENE 551, CENE 560, CENE 562, ME 510, ME 520, ME 525, ME 530, ME 535, ME 560, ME 570, ME 575, ME 580, ME 698, EGR 501, EGR 502, GLG 670, STA 570, or STA 571. | | | | | | | | |
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| 1. **Seminar Courses (4 units required):** Selected by student and committee (698 course suffix) | | | | | | | | |
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| 1. **Dissertation (15 units required):** For research, writing, and oral defense of an approved dissertation. Students can only count 15 units of dissertation credit toward the degree; however, students may end up taking additional units because students must enroll for it each term while working on the dissertation. | | | | | | | | |
| \* | EES 779 | Dissertation |  |  |  |  |  |  |

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**ADDITIONAL REQUIREMENTS**

You may have no more than 6 units of 400-level courses. These 400-level courses cannot have been used to satisfy the requirements for any previous degree program(s). You must get your dissertation committee's approval for any courses taken outside of NAU.

Be aware that some courses may have prerequisites that you must also take. For prerequisite information click on the course or see your advisor.

**RESEARCH REQUIREMENTS**  
In addition to completing 45 units of coursework, you must demonstrate your independence, research skill, and experience in a discipline within earth sciences and environmental sustainability by choosing a problem and research area in consultation with your dissertation committee and then satisfactorily completing a dissertation.  
  
Your dissertation research meets our standards when it is soundly based in the theoretical context of the subject, proceeds with a sound design that gives due attention to statistical adequacy, and concludes with findings and inferences set forth within an appropriate theoretical context. Your dissertation must demonstrate that you have mastered your field of specialization, carried out independent scholarly work, and contributed significant new knowledge. You must pass an oral defense of your dissertation.  
  
**COMPREHENSIVE EXAM**  
We also require that you demonstrate written and oral communication skills in English at a level that will allow you to effectively communicate your ideas and knowledge to a wide range of audiences. Part of this demonstration involves comprehensive oral exams by the end of your 4th semester designed to establish your competence in a breadth and depth of subjects within your emphasis area and the larger field of earth sciences and environmental sustainability. If the comprehensive exam is unlikely to be completed by the fifth semester following admission to the program, student should submit, in writing, and explanation for the longer timeline. Exemptions to the five-semester timeline that are requested following the first committee meeting will only be granted in extenuating circumstances.  
  
**RESEARCH COMPETENCY REQUIREMENT**  
NAU policy for PhD programs includes a research competency requirement that must be satisfied before a student can be admitted to candidacy. This interdisciplinary doctoral program recognizes [ENV 555](http://catalog.nau.edu/Courses/course?courseId=002933&catalogYear=1415), [EES 605](http://catalog.nau.edu/Courses/course?courseId=003801&catalogYear=1415), and [EES 606](http://catalog.nau.edu/Courses/course?courseId=003802&catalogYear=1415), plus one graduate level course with significant content in statistics and/or science/engineering research methods, as meeting this requirement.

**Signatures**

By signing below, you agree to the following statement:

*“Students are responsible for complete knowledge of Academic Catalog requirements in their degree plan for their catalog year and adhering to all policies in the Academic Catalog.”*

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| **Student:** | **Date:** |
| **Advisor:** | **Date:** |
| **Chair** (required for Final)**:** | **Date:** |

**\*\*Transfer/Equivalent/Previous Graduate Degree** – Must have Advisor approval

Transfer T = Course transferred from another university

Previous Graduate Degree P = Course taken at NAU from previous graduate degree

Equivalent E = Course taken at NAU in place of required course

Internal Transfer I = Graduate level course taken as undergraduate; Not applied to undergraduate degree

**Transfer Credit Example:**

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|  | **ABC 123** | **Fundamentals of English** | **ASU 456** | **Fall** | **2012** | **3** | **A** | **T/ASU** |