**STUDENT INFORMATION**

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| **Name:** | **NAU ID:** |
| **NAU E-mail Address:** | **Phone Number:** |
| **Term of Admission:** | **Expected Graduation Term/Year:** |
| **Advisor:** | **Required Credits for Degree Program: 60** |

I. **Required coursework (minimum of 42 units required):**

* **Computing Foundations (6 units):** INF 502, INF 503
* **Professional Development (6 units):** INF 605, INF 501 or INF 623
* **Statistical Methods Foundations (9 units):** INF 504, INF 511, INF 512
* **Graduate Research (6 units): Select from** INF 684, INF 685, INF 690, INF 697
* **Dissertation (minimum of 15 units required):** INF 799

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| **Course** | **Course Title** | **Replacement Course** | **Semester** | **Year** | **Units** | **Grade** | **T/P/I/A\*\*** |
| INF 502 | Software Development Methodologies |  |  |  |  |  |  |
| INF 503 | Large-scale Data Structures and Organization |  |  |  |  |  |  |
| INF 504 | Data Mining and Machine Learning |  |  |  |  |  |  |
| INF 511 | Modern Regression I |  |  |  |  |  |  |
| INF 512 | Modern Regression II |  |  |  |  |  |  |
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**II. Emphasis Requirements (minimum of 18 units required):** Select one emphasis from the following emphases, **Health and Bioinformatics, Ecological and Environmental Informatics, Cyber and Software Systems, Bioengineering Informatics**

* **Option 1:** **Health and Bioinformatics Emphasis**
  + **Select coursework from the following courses (12 units required):** INF 604**,** INF 610, INF 611, or INF 612, INF 623. Topics courses may be repeated if each repeat covers a different topic.
  + **Seminars or Other Graduate-level Coursework (6 units required):** INF, CS, or EE graduate- level coursework, as guided by research needs and advisor input.

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| **Course** | **Course Title** | **Replacement Course** | **Semester** | **Year** | **Units** | **Grade** | **T/P/I/A\*\*** |
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* **Option 2: Ecological and Environmental Informatics Emphasis (18 units)**
  + **Ecoinformatics (6 units):** INF 550, INF 623
  + **Select coursework from the following courses (6 units):** INF 529,INF 604, INF 620, INF 621, or INF 626. Topics courses may be repeated if each repeat covers a different topic.
  + **Seminars or Other Graduate-level Coursework (6 units required):** INF, CS, or EE graduate- level coursework, as guided by research needs and advisor input.

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| **Course** | **Course Title** | **Replacement Course** | **Semester** | **Year** | **Units** | **Grade** | **T/P/I/A\*\*** |
| INF 550 | Advanced Survey in Ecoinformatics Tools |  |  |  |  |  |  |
| INF 623 | Contemporary Developments: Ecoinformatics Seminar |  |  |  |  |  |  |
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* **Option 3: Cyber and Software Systems Emphasis (18 units)**
  + **High Performance Computing (3 units):** CS 552
  + **Select coursework from the following courses (9 units required):** INF 630, INF 631, INF 632, INF 633, or INF639. Topics courses may be repeated if each repeat covers a different topic.
  + **Seminars or Other Graduate-level Coursework (6 units required):** INF, CS, or EE graduate- level coursework, as guided by research needs and advisor input.

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| **Course** | **Course Title** | **Replacement Course** | **Semester** | **Year** | **Units** | **Grade** | **T/P/I/A\*\*** |
| CS 552 | High Performance Computing |  |  |  |  |  |  |
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* **Option 4: Bioengineering Informatics Emphasis (18 units)**
  + **Bioengineering Foundations (9 units):** ME 563, ME 573, BIO 540
  + **Select ONE course from the following courses (1 units required):** BIO 698 or ME 698.
  + **Seminars or Other Graduate-level Coursework (8 units required):** INF, CS, or EE graduate- level coursework, as guided by research needs and advisor input.

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| **Course** | **Course Title** | **Replacement Course** | **Semester** | **Year** | **Units** | **Grade** | **T/P/I/A\*\*** |
| ME 563 | Biomechanical Engineering  *Pre-req: ME 252, ME 340, MAT 239, and CENE 253* |  |  |  |  |  |  |
| ME 573 | Biomaterials  *Pre-req: ME 252, ME 340, MAT 239, and CENE 253* |  |  |  |  |  |  |
| BIO 540 | Comparative Animal Physiology  *Pre-req: BIO 221 and (GLG 102 or GLG 225)* |  |  |  |  |  |  |
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**Additional Requirements**

In addition, students must successfully complete the following requirements:

**Comprehensive qualifying examination by the end of the fourth term**

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| **Date Held:** |  |
| **Result (pass or fail):** |  |

**Advancement to candidacy examination by the end of the seventh term**

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| **Date Held:** |  |
| **Result (pass or fail):** |  |

**Dissertation Defense**

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| **Date Held:** |  |
| **Result (pass or fail):** |  |

**ADDITIONAL INFORMATION**

This Program of Study documents your progress on your academic requirements for the degree and catalog year listed above. For Department of Defense-related requirements, it serves as the evaluated and approved educational plan.

In addition to all University and Graduate College policies, procedures, and requirements, graduate students must also adhere to the academic requirements, policies, procedures, and criteria outlined by their program’s Graduate Student Handbook.

**Students:**

You must secure official approval by your advisor and Department Chair/Director before submitting the final Program of Study.

By signing or entering your name 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.”*

**Advisors and Chairs/Directors:**

Please indicate approval of the curriculum on the Program of Study by placing your signature (formal digital signatures are permitted) in the space provided.

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| **Student:** | **Date:** |
| **Advisor:** | **Date:** |
| **Chair:** | **Date:** |

**\*\*Transfer/Previous Graduate Degree/Internal Transfer/Accelerated (T/P/I/A)** – Must have Advisor approval

Transfer T = Course transferred from another university

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

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

Accelerated Program “Dual-use” A = Courses completed during the undergraduate career and used to satisfy both the Bachelors and Master’s degree requirements. ONLY for designated Accelerated students.