**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. **Applied Physics and Materials Science Foundations (11 units required):**

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| **Course**  | **Course Title** | **Replacement Course** | **Semester** | **Year** | **Units** | **Grade** | **T/P/I/A\*\*** |
| APMS 593 | Workshop |       |       |       | 1 |       |       |
| APMS 601 | Condensed Matter of Physics of Materials |       |       |       | 3 |       |       |
| APMS 602 | APMS Methods in Research |       |       |       | 1 |       |       |
| APMS 609 | Professional Proposal Writing in Applied Sciences |       |       |       | 3 |       |       |
| APMS 611 | Thermodynamics of Disparate Materials |       |       |       | 3 |       |       |

II. **Applied Physics and Materials Science Professional Communication (9 units required):**

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| **Course**  | **Course Title** | **Replacement Course** | **Semester** | **Year** | **Units** | **Grade** | **T/P/I/A\*\*** |
| APMS 607 | Directed Readings |       |       |       | 4 |       |       |
| APMS 610 | Fundamentals of Applied Physics and Materials Science Teaching |       |       |       | 1 |       |       |
| APMS 687 | Professional Development Seminar |       |       |       | 3 |       |       |
| APMS 698 | Graduate Seminar |       |       |       | 1 |       |       |

III. **Emphasis (15 units required):** Select one of the following options.

* **Applied Physics Emphasis:** Select from AMPS 571, APMS 572, INF 639, PHY 540, PHY 545, PHY 550, PHY

560, or PHY 581.

* **Materials Science Emphasis:** Select from APMS 618, APMS 619, APMS 620, APMS 621, APMS 624, CHM 530, CHM 535, CHM 560, CHM 620, CHM 650, INF 639, ME 573, ME 575, ME 599, or other coursework selected in consultation with your advisor

**Chosen Emphasis:**

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| **Course**  | **Course Title** | **Replacement Course** | **Semester** | **Year** | **Units** | **Grade** | **T/P/I/A\*\*** |
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IV. **Graduate Research (12 units required):** APMS 685

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| **Course**  | **Course Title** | **Replacement Course** | **Semester** | **Year** | **Units** | **Grade** | **T/P/I/A\*\*** |
| APMS 685 | Graduate Research |       |       |       |       |       |       |
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V. **Reading for Comprehensive Exam (3 units required):** APMS 597

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| **Course**  | **Course Title** | **Replacement Course** | **Semester** | **Year** | **Units** | **Grade** | **T/P/I/A\*\*** |
| APMS 597 | Reading for Comprehensive Exam |       |       |       |       |       |       |
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VI. **Dissertation (10 units required):** APMS 799

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| **Course**  | **Course Title** | **Replacement Course** | **Semester** | **Year** | **Units** | **Grade** | **T/P/I/A\*\*** |
| APMS 799 | Dissertation |       |       |       |       |       |       |
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**ADDITIONAL INFORMATION**

Milestones:

* Advisor Affiliation: Students will actively engage with faculty during their first semester through rotations and research overview coursework (see above). Once a student decides on a faculty mentor, and that mentor concurs, a formal paperwork will be complete and filed indicating that selection and acceptance within that mentors' group. While it is anticipated that most students will select a faculty mentor by the end of their first semester of their first year, all students are required to make that selection by the end of the second semester of their first year.
* Advancement to Candidacy: The examination consists of a written proposal and oral defense of the proposal. The proposal is fashioned after an NSF proposal, where the student motivates the subject matter with an appropriate survey of the fundamental concept and related work, proposes a series of questions or hypotheses to investigate, presents preliminary work (completed in the end of the first year and beginning of the second year), and proposes detailed experimental/theoretical methodology to answer the defined questions. The student then defends that proposal to their dissertation committee. The outcomes of this exam will be a Pass or Fail. Students that do not achieve a Pass on this exam many elect to re-take the exam within a six-month period from their first attempt.
* Dissertation Defense: The examination consists of a written dissertation, per all requirements of the institution, and oral defense of the thesis to the student's dissertation committee. The student then defends that dissertation to their committee. The outcomes of this exam will be a Pass or Fail, Students that do not achieve a Pass on this exam may elect to re-take the exam within a six-month period from their first attempt.

Some courses may have prerequisites. For prerequisite information, view the course on LOUIE or see your advisor.

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 Office of Graduate & Professional Studies (OGPS) 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 your final Program of Study for graduation.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. Plain text typed signatures will not be accepted.

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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 Bachelor’s and Master’s degree requirements. ONLY for designated Accelerated students.