University Core Requirements

Please see your Fulbright adviser for an official degree plan.

**ENGLISH COMPOSITION (2 courses • 6 hours)**
- ENGL 1013 Composition I
- ENGL 1023 Composition II

**U.S. HISTORY & GOVERNMENT (1 course-3 hours)**
- HIST 2003 History of the American People to 1877
- HIST 2013 History of the American People 1877 to Present
- PLSC 2003 American National Government

**FINE ARTS (1 course • 3 hours)**
- ARCH 1003 Architecture Lecture
- ARHS 1003 Art Lecture
- COMM 1003 Film Lecture
- DANC 1003 Movement and Dance
- LARC 1003 The American Landscape
- MLIT 1003 Music Lecture
- MLIT 1013 Music Lecture for Music Majors
- THTR 1003 Theatre Appreciation
- THTR 1013 Musical Theatre Appreciation

**HUMANITIES (1 course • 3 hours)**
- AAST 2023 The African American Experience
- ARCH 1013 Diversity and Design
- CLST 1003 Intro to Classical Studies: Greece
- CLST 1013 Intro to Classical Studies: Rome
- COMM 1233 Media, Community, and Citizenship
- ENGL 1213 Intro to Literature
- GNST 2003 Intro to Gender Studies
- HUMN 1124H* Honors Eq. of Cultures, 500-1600
- HUMN 2124H* Honors 20th Century Global Culture
- MUSY 2003 Music in World Cultures
- PHIL 2003 Intro to Philosophy
- PHIL 2103 Intro to Ethics
- PHIL 2203 Logic
- PHIL 3103 Ethics and the Professions
- WLIT 1113 World Literature I
- WLIT 1123 World Literature II
- World language at Intermediate I (2003) level

**SOCIAL SCIENCES (3 courses from at least 2 fields • 9 hours)**
- AGEC 1103 Principles of Agricultural Microeconomics
- AGEC 2103 Principles of Agricultural Macroeconomics
- ANTH 1023 Intro to Cultural Anthropology
- COMM 1023 Communication in a Diverse World
- ECON 2013 Principles of Macroeconomics
- ECON 2023 Principles of Microeconomics
- ECON 2143 Basic Economics: Theory and Practice
- GEOG 1123 Human Geography
- GEOG 2003 World Regional Geography
- HESC 1403 Life Span Development
- HESC 2413 Family Relations
- HIST 1113 Institutions and Ideas of World Civilizations I
- HIST 1123 Institutions and Ideas of World Civilizations II
- HIST 2003 History of the American People to 1877
- HIST 2013 History of the American People 1877 to Present
- HUMN 1114H* Honors Roots of Culture to 500 C.E.
- HUMN 2114H* Honors Birth of Modern Culture, 1600-1900
- PLSC 2003 American National Government
- PLSC 2013 Intro to Comparative Politics
- PLSC 2203 State and Local Government
- PSYC 2003 General Psychology
- RESM 2853 Leisure and Society
- RSOC 2603 Rural Sociology
- SOCI 2013 General Sociology
- SOCI 2033 Social Problems

**UNIV 1001**: University Perspectives
(Freshmen must complete during first year)

Minimum degree credit hours required to graduate = 120 (Core + Major + General Electives)

Please visit catalog.uark.edu for an extensive list of graduation and prerequisite requirements.
**Bachelor of Science (BS) in Physics /Grades 7-12 Physics Licensure**

**Major Requirements**

Please see your Fulbright adviser for an official degree plan.

### Chemistry (2 courses - 8 hours)
- ☐ CHEM 1103/1101I University Chemistry I
- ☐ CHEM 1123/1121I University Chemistry II
- Or an approved 8 hours of laboratory-based courses in CSCE:
  - ☐ CSCE 2004 Programming Foundations I
  - ☐ CSCE 2014 Programming Foundations II

### Physics Core (7 courses – 23 hours)
- ☐ PHYS 2054 University Physics I
- ☐ PHYS 2074 University Physics II
- ☐ PHYS 2093 University Physics III
- ☐ PHYS 3414 Electromagnetic Theory
- ☐ PHYS 3613 Modern Physics
- ☐ PHYS 4073 Intro to Quantum Mechanics
- ☐ *PHYS 4991 Physics Senior Seminar

### Mathematics (5 courses – 19 hours)
- ☐ MATH 2554 Calculus I
- ☐ MATH 2564 Calculus II
- ☐ MATH 2574 Calculus III
- ☐ MATH 2584 Differential Equations and Laplace Transform
- ☐ *MATH 3423 Advanced Applied Mathematics

**Note:** CSCE 3513, CSCE 4423 GEOS 4223, or MEEG 2703 can be substituted for MATH 3423 with a departmental advisor’s approval.

### UTeach Requirements (26 hours)
- ☐ ARSC 1201 Step 1: Inquiry Approaches to Teaching
- ☐ ARSC 1221 Step 2: Inquiry Based Lesson Design
- ☐ STEM 2103 Knowing and Learning in Science and Mathematics Instruction
- ☐ STEM 2203 Classroom Interactions in Science and Mathematics Instruction
- ☐ *PHYS 3273 Research Methods
- ☐ STEM 4333 Perspectives in Science
- ☐ STEM 3303 Project Based Instruction in Science and Mathematics Classrooms
- ☐ STEM 4409 Supervised Clinical Teaching in Science and Mathematics Instruction

**Note:** PHYS 3273 satisfies a 3000 level PHYS elective, senior writing requirement in PHYS 4991, and UTeach course requirement

### Physics Electives—Students must complete one concentration below; discuss with your advisor.
- ☐ Astronomy (16 hrs. Minimum)
- ☐ Biophysics (16 hrs. Minimum)
- ☐ Computational (16 hrs. Minimum)
- ☐ Electronics (16 hrs. Minimum)
- ☐ Geoscience Concentration (16 hr. Minimum)
- ☐ Optics (16 hrs. Minimum)
- ☐ Professional (16 hrs. Minimum)

### Other Possible Options

**Courses required to add a math minor:**
- ☐ MATH 2603 Discrete Math
  - OR
  - ☐ MATH 2803 Intro. to Math. Proof

**Courses recommended for a CSCE Minor**
- ☐ CSCE 2004 Programming Foundations I
- ☐ CSCE 2014 Programming Foundations II
- ☐ CSCE 3193 Programming Paradigms

**Three additional CSCE courses 2000 level or higher**
- ☐
- ☐
- ☐
Sample Course Sequence

Please see your Fulbright adviser for an official degree plan.

<table>
<thead>
<tr>
<th>Fall Semesters</th>
<th>Hours</th>
<th>Spring Semesters</th>
<th>Hours</th>
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<td><strong>Freshman Year</strong> (total of 30 credit hours)</td>
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<td>ARSC 1221  Step II Inquiry Based Lesson Design</td>
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<td><strong>TOTAL</strong> 16</td>
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| Sophomore Year** (total of 30 credit hours) |       |                                       |       |
| STEM 2103  Knowing and Learning          | 3     | STEM 2203  Classroom Interactions      | 3     |
| PHYS 2094/L University Physics III       | 4     | PHYS 3613  Modern Physics              | 3     |
| MATH 2574  Calculus III                  | 4     | MATH 2584  2584 Diff. Equations        | 4     |
| Free Elective                          |       | Free electives as needed               | 3     |
| **TOTAL** 15                           |       | **TOTAL** 17                           |       |

| Junior Year** (total of 30 to 32 credit hours) |       |                                       |       |
| MATH 3423  Advanced Applied Mathematics     | 3     | STEM 4333  Perspectives on Math and Science | 3     |
| PHYS/ASTR Elective 3000 level or higher    | 4     | PHYS 3414  Electromagnetic Theory      | 4     |
| PHYS/ASTR Elective 3000 level or higher    | 3     | PHYS 3273  Research Methods            | 3     |
| FA/PHIL/HIST/SS Required Core Electives    | 3     | FA/PHIL/HIST/SS Required Core Electives | 3     |
| FA/PHIL/HIST/SS Required Core Electives    | 3     | PHYS/ASTR Elective 3000 level or higher | 3     |
| **TOTAL** 16                               |       | **TOTAL** 16                           |       |

| Senior Year** (total of 28 to 30 credit hours) |       |                                       |       |
| PHYS 4073  Quantum Mechanics              | 3     | STEM 4409  Supervised Teaching         | 9     |
| FA/PHIL/HIST/SS Required Core Electives    | 3     | PHYS 4991  Senior Seminar (if needed)  | 1     |
| STEM 3303  Project-Based Instruction       | 3     |                                       |       |
| PHYS/ASTR Elective 3000 level or higher    | 4     |                                       |       |
| Free electives As needed for 120 hrs.      | 3     |                                       |       |
| **TOTAL** 16                               |       | **TOTAL** 10                           |       |

Total hours for degree: 120