

**Fulbright College Eight Semester Degree Completion Program
Bachelor of Science in Physics, Electronics Concentration 2008¹**

Fall Semester 1	Hours	Spring Semester 1	Hours
ENGL 1013 Composition I	3	ENGL 1023 Composition II	3
†MATH 2554 Calculus I	4	†MATH 2564 Calculus II	4
Core from areas a, b, c or e (as needed)	3	Core from areas a, b, c or e (as needed)	3
†PHYS 2054 University Physics I	4	PHYS 220V Electronics I ²	1
PHYS 220V Electronics I ²	1	†PHYS 2074 University Physics II	4
Total Hours	15	Total Hours	15
Fall Semester 2	Hours	Spring Semester 2	Hours
†PHYS 2094 University Physics III	4	‡PHYS 3614 Modern Physics	4
Core from areas a, b, c or e (as needed)	3	Core from areas a, b, c or e (as needed)	3
†MATH 2574 Calculus III	4	‡MATH 3404 Differential Equations	4
CHEM 1103/1101L University Chemistry I and Lab	4	CHEM 1123/1121L University Chemistry II and Lab	4
‡PHYS 320V Electronics II ²	1	‡PHYS 320V Electronics II ²	1
Total Hours	16	Total Hours	16
Fall Semester 3	Hours	Spring Semester 3	Hours
‡MATH 3423 Advanced Applied Math I	3	‡PHYS 3414 Electromagnetic Theory	4
Core from areas a, b, c or e (as needed)	3	‡PHYS 4333 Thermal Physics	3
Core from areas a, b, c or e (as needed)	3	Core from areas a, b, c or e (as needed)	3
Core from areas a, b, c or e (as needed)	3	†Core from area f (if needed) or General Elective	3
General Elective	3	General Elective or PHYS/ASTR Group A	3/4
Total Hours	15	Total Hours	16/17
Fall Semester 4	Hours	Spring Semester 4	Hours
‡PHYS 4073 Introduction to Quantum Mechanics	3	‡PHYS 4713 Introduction to Solid State Physics	3
‡PHYS 320V Electronics II ² or other ‡PHYS/ASTR Group A	2/3	‡PHYS/ASTR Group A (as needed) or General Electives	3
General Elective or ‡PHYS/ASTR Group A	3	‡PHYS 4991 Senior Seminar	1
Core from areas a, b, c or e (as needed)	3	General Elective	3
Core from areas a, b, c or e (as needed)	3	General Elective	3
General Elective (if needed for 124 hour rule)	1	General Elective	3
Total Hours	15/16	Total Hours	16

Core areas must be completed as outlined in Catalog of Studies or in the "Additional Fulbright College Core Requirement Areas" table on the reverse side.

Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

PHYS/ASTR Group A: Six hours required (Pre-requisite requirement in italics)

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| <input type="checkbox"/> PHYS 320V Electronics II (<i>PHYS 220V</i>) | <input type="checkbox"/> PHYS 306V Projects | <input type="checkbox"/> PHYS 3544 Optics (<i>PHYS 2074</i>) |
| <input type="checkbox"/> PHYS 3923H Honors Colloquium | <input type="checkbox"/> PHYS 399VH Independent Honors Study (<i>Junior standing</i>) | <input type="checkbox"/> PHYS 4213 Physics of Devices (<i>PHYS 3614</i>) |
| <input type="checkbox"/> PHYS 4621L Modern Physics Lab (<i>PHYS 3614</i>) | <input type="checkbox"/> PHYS 4713 Solid State Physics (<i>PHYS 3614</i>) | <input type="checkbox"/> PHYS 4734 Laser Physics (<i>PHYS 3414, 3544</i>) |
| <input type="checkbox"/> PHYS 4754 Non-linear Optics (<i>co-req PHYS 3414, 3544</i>) | <input type="checkbox"/> PHYS 4774 Optical Properties (<i>PHYS 3414, 3544</i>) | <input type="checkbox"/> PHYS 4794 Lightwave Communications (<i>PHYS 3414</i>) |
| <input type="checkbox"/> PHYS 4803 Mathematical Physics (<i>MATH 3404</i>) | <input type="checkbox"/> PHYS 498V Senior Thesis | <input type="checkbox"/> ASTR 3033 Solar System Astronomy (<i>PHYS 2033/2031L or 2074</i>) |
| <input type="checkbox"/> ASTR 3053 Stellar Systems (<i>PHYS 2033/2031L or 2074</i>) | <input type="checkbox"/> ASTR 4013 Astrophysics (<i>PHYS 3614, or CHEM 3504, or consent</i>) | |

NOTES:

1. **Boldface** indicates required courses for this track.
2. Electronics I & II are unusual in that they can be taken for variable amounts of credit.

† Meets 40-hour advanced credit hour requirement. See 3 on Graduation Requirements Checklist or see the Catalog of Studies.

‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See 2b on Graduation Requirements Checklist or see the Catalog of Studies.

Additional Fulbright College BS Core Requirement Areas *(Pre-requisite requirements in italics)*

Core Area	Hours	Courses
a. US History/American National Government and Western Civilization	9	<p>U.S. History/American National Government- 3 hours from: HIST 2003 History of the American People to 1877 or HIST 2013 History of the American People from 1877 or PLSC 2003 American National Government</p> <p>Western Civilization – 6 hours from: HIST 1003 Western Civilization I and HIST 1013 Western Civilization II OR HIST 1113 World Civilizations I and HIST 1123 World Civilizations II</p>
b. Foreign Language	Up to 9 hours (depending on placement)	<p>Completion through the Intermediate I (2003) level in a single language (Includes course numbers 1003*, 1013, 2003) *1003 is non-degree credit unless student completed two years in a single foreign language in high school and takes 1003 in a different language. Students under this plan must begin with a degree-credit course in foreign language.</p>
c. Fine Arts/ World Literature/Philosophy	9 hours total selected from at least 2 different areas	<p>Fine Arts: ARCH 1003 Architecture Lecture or LARC 1003 Landscape Architecture ARHS 1003 Art History or ARTS 1003 Art Studio COMM 1003 Film Lecture DANC 1003 Movement and Dance DRAM 1003 Theater Lecture HUMN 1003 Introduction to the Arts and Aesthetics MLIT 1003 Music Lecture</p> <p>World Literature: WLIT 1113 World Literature I WLIT 1123 World Literature II (<i>WLIT 1113</i>) OR a) a foreign language literature course b) any other WLIT course</p> <p>Philosophy: PHIL 2003 Introduction to Philosophy PHIL 2103 Introduction to Ethics PHIL 2203 Introduction to Logic</p>
d. Natural Sciences	Determined by the department of the major	
e. Social Sciences	3	<p>ANTH 1023 Introduction to Cultural Anthropology ECON 2013 Principles of Macroeconomics (<i>MATH 1203</i>) or ECON 2143 Basic Economics GEOG 2003 World Regional Geography PSYC 2003 General Psychology SOCI 2013 General Sociology</p>
f. Advanced Composition	3 hours - Exemption may be granted by either: a) grades of "A" or "B" in ENGL 1013 and "A" in ENGL 1023 taken at UA or b) passing the Advanced Composition Exam*	<p>ENGL 2003 Advanced Composition or ENGL 2013 Essay Writing *(Students must satisfy the ENGL 1013 and 1023 requirement and complete 30 credit hours before taking the Advanced Composition Exam. The exam must be taken before the student has completed 96 credit hours. Students who do not pass the Advanced Composition Exam must take ENGL 2003.)</p>