

2026-2027 Degree Map-Bachelor of Science in Physics

This map is a term-by-term sample course schedule. The milestones listed to the right of each term are designed to keep you on course to graduate in four years. The Sample Schedule serves as a general guideline to help you build a full schedule each term. See course descriptions and prerequisites at <https://catalog.atu.edu/>

#Prerequisite Courses: ENGL 0303 ___ MATH 0803 ___ MATH 1003 ___ MATH 0903 ___ MATH 1113 ___ MATH 1110 ___ MATH 1203 ___ MATH 1914 ___

Possible Careers: Astronomy/Astrophysics, Biophysics, Chemical Physics, Condensed Matter, Engineering Physics, Geophysics, Medical/Health Physics, Nuclear Physics, etc

| Sample Schedule | Milestones/Notes | | Semester 1 |
|--|------------------|------------|--|
| Semester 1 | Hrs. | Grade | |
| ENGL 1013-Comp I (ACTS=ENGL 1013) | 3 | # | |
| COMS 1013/1011-Programming I & Lab | 4 | | Prereq: #C or > in MATH 1113 or higher math |
| MATH 2914-Calculus I (ACTS=MATH 2405) | 4 | # | Prereq: MATH ACT >26, or C> in MATH 1203/1914 |
| CHEM 2124/2120-General Chemistry I and lab | 4 | | Prereq: MATH ACT >21, or C> in MATH 1113 or CHEM 1113/1111 |
| PHSC 1001-Orientation to Physical Science | 1 | | |
| Total hours | 16 | GPA | Meet with Career Services |

| Sample Schedule | Milestones/Notes | | Semester 5 |
|--|------------------|------------|--|
| Semester 5 | Hrs. | Grade | |
| COMS 2323-Programming in Python | 3 | | Prereq: COMS 2203 |
| Elective | 4 | | Meet with faculty advisor about interships |
| Fine Arts & Humanities | 3 | | |
| PHYS 3023-Mechanics or PHYS 4013-Quantum Mechanics | 3 | | PHYS 3023 offered in even fall semesters |
| PHYS 3133-Elec/Magnet or PHYS 4023-Comp Phys | 3 | | PHYS 3133 offered in even fall semesters |
| Total hours | 16 | GPA | |

| Semester 2 | Milestones/Notes | | Semester 2 |
|---|------------------|------------|---------------------------------------|
| Semester 2 | Hrs. | Grade | |
| ENGL 1023-Comp II (ACTS= ENGL 1023) | 3 | # | |
| PHYS 2114/2000-Calculus-Based Physics I and lab | 4 | | Coreq: MATH 2914 & PHYS 2000 |
| MATH 2924-Calculus II (ACTS= MATH 2505) | 4 | | Prereq: C> in MATH 2914 |
| PHSC 1011-Orientation to Physical Science II | 1 | | No substitutions allowed |
| Elective | 4 | | Create résumé and upload to Handshake |
| Total hours | 16 | GPA | Attend Career fairs on campus |

| Semester 6 | Milestones/Notes | | Semester 6 |
|---|------------------|------------|--|
| Semester 6 | Hrs. | Grade | |
| Fine Arts & Humanities | 3 | | |
| PHYS 4003-Thermodynam/Stat Mech or Elective (3000-4000 level) | 3 | | Excludes: MATH 3003, 3033, 4113 |
| PHYS 3003-Optics or PHYS 4113-Advanced Physics Lab | 3 | | PHYS 3003 offered in even spring semesters |
| Elective* | 2 | | |
| STAT 3153-Applied Statistics | 3 | | Prereq: MATH 2924 |
| Total hours | 14 | GPA | APPLY FOR GRADUATION |

| Semester 3 | Milestones/Notes | | Semester 3 |
|--|------------------|------------|----------------------------|
| Semester 3 | Hrs. | Grade | |
| COMS 2203-Programming Foundations II | 3 | | Prereq: C> in COMS 1013 |
| MATH 2934-Calculus III (ACTS= MATH 2603) | 4 | | Prereq: C> in MATH 2924 |
| PHYS 2124/2010-Calculus-Based Physics II and lab | 3 | | Prereq or Coreq: MATH 2924 |
| Social Science | 4 | | |
| Total hours | 14 | GPA | SEE NOTE 1: AB2M |

| Semester 7 | Milestones/Notes | | Semester 7 |
|---|------------------|------------|--|
| Semester 7 | Hrs. | Grade | |
| PHYS 3023-Mechanics or PHYS 4013-Quantum Mechanics | 3 | | PHYS 3023 offered in even fall semesters |
| PHYS 3133-Elec/Magnet or PHYS 4023-Computational Phys | 3 | | PHYS 3133 offered in even fall semesters |
| Social Science | 3 | | |
| Elective* (3000-4000 level) | 3 | | |
| Elective* (3000-4000 level) | 3 | | |
| Total hours | 15 | GPA | |

| Semester 4 | Milestones/Notes | | Semester 4 |
|------------------------------------|------------------|------------|-------------------------------|
| Semester 4 | Hrs. | Grade | |
| Biological Science with lab | 4 | | Work on resume for interships |
| ELEG 2103-Electric Circuits I | 3 | | Prereq: C> in MATH 2924 |
| MATH 3243-Differential Equations I | 3 | | Prereq: C> in MATH 2924 |
| PHYS 3213-Modern Physics | 3 | | Prereq: PHYS 2124 |
| U.S. History & Government | 3 | | |
| Total hours | 16 | GPA | PHYS ADVISOR ASSIGNED |

| Semester 8 | Milestones/Notes | | Semester 8 |
|---|------------------|------------|---|
| Semester 8 | Hrs. | Grade | |
| Social Sci./Fine Arts/Humanities/Comm | 3 | | Graduation Requirements: Min. hours 3000-4000 level courses: 40 No more than 4 PE activity hours Min. hours required: 120 2.00+ GPA No more than 12 hours of "D" grades |
| PHYS 4003-Thermodynam/Stat Mech or Elective (3000-4000 level) | 3 | | |
| PHYS 3003-Optics or PHYS 4113-Advanced Physics Lab | 3 | | |
| PHYS 4951-Physics or Engineering Physics Capstone | 1 | | |
| Elective* (3000-4000 level) | 3 | | |
| Total Hours | 13 | GPA | |

The Arkansas Course Transfer System (ACTS) is designed to assist in planning the academic progress of students. This system contains information about the transferability of courses within Arkansas public colleges and universities. The Arkansas Course Transfer System can be accessed by searching keyword "ACTS" at <https://adhe.edu/>

Electives: 19 hours (1000-4000 level) 9 hours (3000-4000 level) *6 hours must be physical sciences, biology, engineering, or computer science

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|--|--|
| Fine Arts and Humanities ART 2123 Experiencing Art (ACTS=ARTA1003) MUS 2003 Survey of Music History (ACTS=MUSC1003) TH 2273 Introduction to Theatre (ACTS=DRAM 1003) ENGL/JOUR 2173 Introduction to Film ENGL 2003 Introduction to World Literature (ACTS=ENGL2113) ENGL 2013 Intro. to American Literature (ACTS=ENGL2653) PHIL 2003 Introduction to Philosophy (ACTS=PHIL1103) PHIL 2053 Introduction to Critical Thinking (ACTS=PHIL 1003) 1013 from SPAN, FR, GER, JPN, CHIN, or LAT 1023 from SPAN, FR, GER, JPN, CHIN, or LAT LEAD 2003 Ethics in Leadership | U.S. History & Government HIST 1903 Survey of American History HIST 2003 U.S. History to 1877 (ACTS=HIST2113) HIST 2013 U.S. History since 1877 (ACTS=HIST2123) POLS 2003 American Government (ACTS=PLSC2003) |
| University Honors students should consult Course Catalog for appropriate Fine Arts/Humanities, US History/Government and Social Science options for University Honors Curriculum | |

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|--|---|
| Social Sciences HIST 1503 World History to 1500 (ACTS=HIST1113) HIST 1513 World History since 1500 (ACTS=HIST1123) HIST 2003 U.S. History to 1877 (ACTS=HIST2113) HIST 2013 U.S. History since 1877 (ACTS=HIST2123) HIST 1903 Survey of American History POLS 2003 American Government (ACTS=PLSC2003) ECON 2003 Principles of Macroeconomics (ACTS=ECON2103) ECON 2013 Principles of Microeconomics (ACTS=ECON2203) SOC 1003 Introductory Sociology (ACTS=SOC1013) PSY 2003 General Psychology (ACTS=PSYC1103) | ANTH 1213 Intro. to Anthropology (ACTS=ANTH1013) ANTH 2003 Cultural Anthropology (ACTS=ANTH2013) GEOG 2013 Regional Geography of the World (ACTS=GEOG2103) AMST 2003 American Studies FIN 2013 Personal Finance LEAD 1003 Introduction to Leadership |
| NOTE 1 - Consider Accelerated BS Physics to MA in Teaching. See Catalog BEFORE Junior Year. | |

indicates a "C" or better is required