2024 - 2025 Major Map

Physics, BA

School/College: The College of Liberal Arts and Sciences
LAPHYBA

Term 1 0 - 14 Credit Hours Critical course signified by	Hours	Minimum Grade	Notes
MAT 270: Calculus with Analytic Geometry I (MATH OR MA) OR MAT 265: Calculus for Engineers I (MATH OR MA)	3-4	C	• ASU 101 or college-specific equivalent First-Year Seminar required of all first-year students • PHY 191 is recommended • CHM 114 may be taken in place of CHM 113 • Select your career interest communities and play me3@ASU
CHM 113: General Chemistry I (SCIT OR SQ)	4	C	
ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition	3	C	
LIA 101: Student Success in The College of Liberal Arts and Sciences	1	C	
Humanities, Arts and Design (HUAD)	3		
Maintain 2.00 GPA in Critical Tracking Courses.			
Term hours subtotal:	14-15		

Term 2 14 - 28 Credit Hours Critical course signified by	Hours	Minimum Grade	Notes
MAT 271: Calculus with Analytic Geometry II (MATH OR MA) OR MAT 266: Calculus for Engineers II (MATH OR MA)	3-4	C	• ASU Language Placement: Only true beginners are eligible for 101-level courses. All other students are required to take a placement exam, regardless of prior credit earned. • Join a student club or professional organization.
PHY 150: Physics I (SCIT OR SQ) OR PHY 121: University Physics I: Mechanics (SCIT OR SQ) AND PHY 122: University Physics Laboratory I (SCIT OR SQ)	4	C	
ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition	3	C	
Second Language: Requirement satisfied through the following: * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV.	4	C	
Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Maintain 2.00 GPA in Critical Tracking Courses.			
Term hours subtotal:	14-15		

Term 3 28 - 42 Credit Hours Critical course signified by	Hours	Minimum Grade	Notes
MAT 272: Calculus with Analytic Geometry III (MATH OR MA) OR MAT 267: Calculus for Engineers III (MATH OR MA)	3-4	C	• Look into internship opportunities.
PHY 151: Physics II (SCIT OR SQ) OR PHY 131: University Physics II: Electricity and Magnetism (SCIT OR SQ) AND PHY 132: University Physics Laboratory II (SCIT OR SQ)	4	C	
Second Language: Requirement satisfied through the following: * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV.	4	C	
Social and Behavioral Sciences (SOBE)	3		
Maintain 2.00 GPA in Critical Tracking Courses.			

Complete Mathematics (MATH) requirement.		
Term hours subtotal:	14-15	

Term 4 42 - 59 Credit Hours Critical course signified by	Hours	Minimum Grade	Notes
PHY 201: Mathematical Methods in Physics I (MATH OR CS)	3	C	• Visit Career and Professional Development Services and meet with a career advisor for assistance with career planning and networking.
PHY 252: Physics III (SCIT OR SQ) OR PHY 241: University Physics III AND PHY 202: Programming for Physicists	4	C	
Second Language: Requirement satisfied through the following: * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV.	4	C	
Humanities, Arts and Design (HUAD)	3		
Quantitative Reasoning (QTRS)	3		
Maintain 2.00 GPA in Critical Tracking Courses.			
Term hours subtotal:	17		

Term 5 59 - 75 Credit Hours Necessary course signified by	Hours	Minimum Grade	Notes
PHY 302: Mathematical Methods in Physics II	3	C	• Develop your online professional presence.
PHY 310: Classical Particles, Fields, and Matter I	3	C	
PHY 314: Quantum Physics I	3	C	
Second Language: Requirement satisfied through the following: * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV.	4	C	
Sustainability (SUST)	3		
Term hours subtotal:	16		

Term 6 75 - 90 Credit Hours Necessary course signified by	Hours	Minimum Grade	Notes
PHY 311: Classical Particles, Fields, and Matter II	3	C	• Complete a practice interview.
American Institutions (AMIT)	3		
Global Communities, Societies and Individuals (GCSI)	3		
Upper Division Elective OR PHY 484: Internship	3		
Upper Division Elective	3		
Term hours subtotal:	15		

Term 7 90 - 105 Credit Hours Necessary course signified by	Hours	Minimum Grade	Notes
Upper Division Physics Elective	3	C	• Courses other than those in the track list below must be approved by the Department of Physics academic advisor. • Meet with your academic advisor for a final degree check before registering for your final semester. • Use Handshake to view career postings.
Complete 4 courses: Upper Division Elective	12		
Term hours subtotal:	15		

Term 8 105 - 120 Credit Hours Necessary course signified by	Hours	Minimum Grade	Notes
Upper Division Physics Elective	3	C	• Apply for graduation. • Apply for full-time career opportunities .
Governance and Civic Engagement (CIVI)	3		
Complete 3 courses: Upper Division Elective	9		
Term hours subtotal:	15		

Hide Course List(s)/Track Group(s)

Upper Division Physics Elective
PHY 315: Quantum Physics II
PHY 333: Electronic Circuits and Measurements
PHY 334: Advanced Laboratory I (L)
PHY 361: Introductory Modern Physics
PHY 432: Computational Methods in Physics
PHY 452: Physical Optics
PHY 462: Particle and Nuclear Physics
PHY 480: Methods of Teaching Physics
PHY 481: Materials Physics I
PHY 494: Special Topics
PHY 495: Project Research
PHY 498: Pro-Seminar

- **Total Hours:** 120
- **Upper Division Hours:** 45 minimum
- University Undergraduate Graduation Requirements

Notes:
Mathematics Placement Assessment score determines placement in first mathematics course.
Please keep in mind that the applicability of a specific transfer course toward an ASU degree program depends on the requirements of the department, division, college or school in which you are enrolled at ASU. Transfer agreements that guarantee the completion of university level requirements do not necessarily meet college and major requirements. Please consult with an advisor for more information.

> General Studies designations listed next to courses on the major map were valid for the 2024 - 2025 academic year. Please refer to the course catalog for current General Studies designations at time of class registration. General Studies credit is applied according to the designation the course carries at the time the class is taken.