



























## 2023 - 2024 Major Map

### Physics, BA

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

Term 1 - A 0 - 7 Credit Hours	Hours	Minimum Grade	Notes
ASU 101-LA: The ASU Experience	1		<ul style="list-style-type: none"> <li>ASU 101 or college-specific equivalent First-Year Seminar is required for all first-year students.</li> <li>Select your <b>career interest area</b> and play <b>me3@ASU</b>.</li> </ul>
ENG 101 or ENG 102: First-Year Composition OR			
ENG 105: Advanced First-Year Composition OR	3	C	
ENG 107 or ENG 108: First-Year Composition			
Humanities, Arts and Design (HU) AND Cultural Diversity in the U.S. (C)	3		
Term hours subtotal:	7		
Term 1 - B 7 - 13 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 MAT 265: Calculus for Engineers I (MA)	3	C	<ul style="list-style-type: none"> <li>View ASU Online first-year student registration information <a href="#">here</a>.</li> </ul>
ENG 101 or ENG 102: First-Year Composition OR			
ENG 105: Advanced First-Year Composition OR	3	C	
ENG 107 or ENG 108: First-Year Composition			
 Maintain 2.00 GPA in Critical Tracking Courses.			
Term hours subtotal:	6		
Term 2 - A 13 - 20 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 MAT 266: Calculus for Engineers II (MA)	3	C	<ul style="list-style-type: none"> <li><b>ASU Language Placement:</b> Only those students with no experience with the language may take a 101-level course. All other students are required to take a language placement exam, regardless of prior credit earned.</li> <li>Join a student <b>club or professional organization</b>.</li> </ul>
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	
 Maintain 2.00 GPA in Critical Tracking Courses.			
Term hours subtotal:	7		
Term 2 - B 20 - 28 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 PHY 121: University Physics I: Mechanics (SQ) AND PHY 122: University Physics Laboratory I (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	
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:	8		
Term 3 - A 28 - 35 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 MAT 267: Calculus for Engineers III (MA)	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		• Review the <a href="#">Career Guide for ASU Online students</a> to learn about available career planning resources.
Term hours subtotal:	7			
Term 3 - B 35 - 43 Credit Hours <b>Critical course signified by</b> 	Hours	Minimum Grade	Notes	
 PHY 131: University Physics II: Electricity and Magnetism (SQ) AND PHY 132: University Physics Laboratory II (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		
Complete Mathematics (MA) requirement.				
Term hours subtotal:	8			
Term 4 - A 43 - 50 Credit Hours <b>Critical course signified by</b> 	Hours	Minimum Grade	Notes	
 PHY 241: University Physics III AND PHY 202: Programming for Physicists	4	C		• Register for a <a href="#">Handshake</a> account and participate in <a href="#">virtual career advising</a> .
Literacy and Critical Inquiry (L)	3			
Term hours subtotal:	7			
Term 4 - B 50 - 59 Credit Hours <b>Critical course signified by</b> 	Hours	Minimum Grade	Notes	
 PHY 201: Mathematical Methods in Physics I (CS)	3	C		
Humanities, Arts and Design (HU) AND Historical Awareness (H)	3			
Elective	3			
Term hours subtotal:	9			
Term 5 - A 59 - 68 Credit Hours <b>Necessary course signified by</b> 	Hours	Minimum Grade	Notes	
 PHY 302: Mathematical Methods in Physics II	3	C		
Social-Behavioral Sciences (SB)	3			
Elective	3			
Term hours subtotal:	9			
Term 5 - B 68 - 74 Credit Hours <b>Necessary course signified by</b> 	Hours	Minimum Grade	Notes	
 PHY 314: Quantum Physics I	3	C		
Social-Behavioral Sciences (SB) AND Global Awareness (G)	3			
Term hours subtotal:	6			
Term 6 - A 74 - 81 Credit Hours <b>Necessary course signified by</b> 	Hours	Minimum Grade	Notes	
 PHY 310: Classical Particles, Fields, and Matter I	3	C		• Develop your <a href="#">professional online presence</a>
CHM 113: General Chemistry I (SQ)	4	C		• CHM 114 may be taken in place of CHM 113
Term hours subtotal:	7			
Term 6 - B 81 - 90 Credit Hours <b>Necessary course signified by</b> 	Hours	Minimum Grade	Notes	
 PHY 311: Classical Particles, Fields, and Matter II	3	C		
Upper Division Literacy and Critical Inquiry (L) ( PHY 334 recommended)	3			
Upper Division Elective	3			
 Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).				



Term hours subtotal: 9

Term 7 - A 90 - 99 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ Upper Division Physics Elective	3	C	• Complete practice interview.
Upper Division Elective	3		
Elective	3		
Term hours subtotal:	9		

Term 7 - B 99 - 105 Credit Hours	Hours	Minimum Grade	Notes
Upper Division Humanities, Arts and Design (HU) OR Upper Division Social-Behavioral Sciences (SB)	3		
Upper Division Elective	3		
Term hours subtotal:	6		

Term 8 - A 105 - 111 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ Upper Division Physics Elective	3	C	• Apply for graduation.
Upper Division Elective	3		
Term hours subtotal:	6		

Term 8 - B 111 - 120 Credit Hours	Hours	Minimum Grade	Notes
Complete 3 courses: Upper Division Elective	9		• Apply for full-time positions.
Term hours subtotal:	9		

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

Upper Division Physics Electives
PHY 315: Quantum Physics II
PHY 333: Electronic Circuits and Measurements
PHY 334: Advanced Laboratory I (L)
PHY 361: Introductory Modern Physics
PHY 394: Intro to Research Technique

#### Notes:

- First-Year Composition: All students are placed in ENG 101 unless submission of SAT, ACT, Accuplacer, IELTS, or TOEFL score, or college-level transfer credit or test credit equivalent to ASU's first-year composition course(s), determine otherwise. Students on Polytechnic, Downtown Phoenix and West Campuses are encouraged to complete the Directed Self-Placement survey to choose the first-year composition option they believe best suits their needs. Visit: <https://cisa.asu.edu/DSP>
- 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.

**Total Hours:** 120



**Upper Division Hours:** 45 minimum  
**Major GPA:** 2.00 minimum  
**Cumulative GPA:** 2.00 minimum  
**Total hrs at ASU:** 30 minimum  
**Hrs Resident Credit for  
Academic Recognition:** 56 minimum  
**Total Community College Hrs:** 64 maximum  
**Total College Residency Hrs:** 12 minimum

#### **General University Requirements Legend**

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Arts and Design (HU)
- Social-Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed next to courses on the major map were valid for the 2023 - 2024 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.