











## 2024 - 2025 Major Map



### Mathematics (Statistics), BS

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

Term 1 0 - 14 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 CSE 110: Principles of Programming (QTRS OR CS)	3	C	<ul style="list-style-type: none"> <li>ASU 101 or college-specific equivalent First-Year Seminar required of all first-year students.</li> <li>Select your <b>Career Interest Communities</b> and play <b>me3@ASU</b>.</li> </ul>
 MAT 270: Calculus with Analytic Geometry I (MATH OR MA)	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		
Global Communities, Societies and Individuals (GCSI)	3		
Maintain 3.00 GPA in Critical Tracking Courses.			
Term hours subtotal:	14		

Term 2 14 - 30 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 MAT 271: Calculus with Analytic Geometry II (MATH OR MA)	4	C	<ul style="list-style-type: none"> <li>Join a <b>student club</b> or professional organization.</li> </ul>
CSE 205: Object-Oriented Programming and Data Structures (QTRS OR CS)	3	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	
Humanities, Arts and Design (HUAD)	3		
Social and Behavioral Sciences (SOBE)	3		
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Maintain 3.00 GPA in Critical Tracking Courses.			
Term hours subtotal:	16		

Term 3 30 - 44 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 MAT 272: Calculus with Analytic Geometry III (MATH OR MA)	4	C	<ul style="list-style-type: none"> <li>STP and upper-division MAT courses should be taken through the Tempe campus, unless approved by a SoMSS advisor.</li> <li>Meet with your academic advisor to discuss summer <b>internship</b> and/or Research Opportunities for Undergraduates (REU).</li> </ul>
 STP 420: Introductory Applied Statistics (QTRS OR CS)	3	C	
Humanities, Arts and Design (HUAD)	3		
Scientific Thinking in Natural Sciences (SCIT)	4		
 Complete First-Year Composition requirement.			
Complete Mathematics (MATH) requirement.			
Maintain 3.00 GPA in Critical Tracking Courses.			
Term hours subtotal:	14		

Term 4 44 - 60 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 MAT 300: Mathematical Structures (L)	3	C	

❖ MAT 342: Linear Algebra OR MAT 343: Applied Linear Algebra	3	C
❖ STP 429: Applied Regression (QTRS OR CS)	3	C
Governance and Civic Engagement (CIVI)	3	
Scientific Thinking in Natural Sciences (SCIT)	4	
Maintain 3.00 GPA in Critical Tracking Courses.		
Term hours subtotal:	16	

- Meet with your academic advisor to discuss options for adding a minor, certificate, or concurrent major to your degree program.
- STP and upper-division MAT courses should be taken through the Tempe campus, unless approved by a SoMSS advisor.

Term 5 60 - 75 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ MAT 371: Advanced Calculus I	3	C	
STP 421: Probability	3	C	
Science and Society Elective	3	C	
American Institutions (AMIT)	3		
Elective	3		
Term hours subtotal:	15		

- Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation.
- STP and upper-division MAT courses should be taken through the Tempe campus, unless approved by a SoMSS advisor.

Term 6 75 - 90 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ STP 427: Mathematical Statistics	3	C	
★ MAT or STP Advanced Course	3	C	
Related Field Course	3	C	
Sustainability (SUST)	3		
Upper Division Elective OR MAT 484: Internship	3		
Term hours subtotal:	15		

- Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation.
- STP and upper-division MAT courses should be taken through the Tempe campus, unless approved by a SoMSS advisor.
- Develop your **professional online presence**.
- Use Handshake to research **employment opportunities**.

Term 7 90 - 105 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ Upper Division MAT or STP Advanced Course	3	C	
Related Field Course	3	C	
Upper Division Science and Society Elective	3	C	
Complete 2 courses:	6		
Upper Division Elective			
Term hours subtotal:	15		

- Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation.
- STP and upper-division MAT courses should be taken through the Tempe campus, unless approved by a SoMSS advisor
- Gather **professional references**.

Term 8 105 - 120 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ Upper Division MAT or STP Advanced Course	3	C	
Related Field Course	4	C	
Elective	2		
Complete 2 courses:	6		
Upper Division Elective			
Term hours subtotal:	15		

- Minimum grade of C required in all MAT and STP classes; grade of B or better strongly correlated with timely graduation.
- STP and upper-division MAT courses should be taken through the Tempe campus, unless approved by an SoMSS advisor.
- Meet with your academic advisor for final degree check and apply for graduation through **My ASU**.
- Apply for **full-time career opportunities**.

- All students pursuing a BS or BSP degree in The College of Liberal Arts and Sciences must complete two courses from the Science and Society list found at <https://thecollege.asu.edu/resources/science-society>. At least one of the two courses must be upper-division and students must earn a C or better in the courses. Both Science and Society courses (i.e., all six credits) may count towards any major, minor, related fields, and ASU General Studies requirements.

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

Related Field Course	MAT or STP Advanced Course
ACT Upper Division Elective	ACT 430: Mathematics of Financial Derivatives
AST Upper Division Elective	ACT 435: Statistics for Risk Modeling
BCH 4** Elective	ACT 450: Actuarial Models
BME Upper Division Elective	ACT 451: Short-Term Actuarial Mathematics
CEE Upper Division Elective	MAT 275: Modern Differential Equations (MATH OR MA)
CHE Elective	MAT 372: Advanced Calculus II
CHM 341: Elementary Physical Chemistry	MAT 420: Scientific Computing
CHM 343: Elementary Physical Chemistry Laboratory	MAT 421: Applied Computational Methods (MATH OR CS)
CHM 345: Physical Chemistry I	MAT 423: Numerical Analysis I (MATH OR CS)
CHM 346: Physical Chemistry II	MAT 442: Advanced Linear Algebra
CHM 348: Physical Chemistry Laboratory I (L)	MAT 472: Intermediate Real Analysis I
CHM 349: Physical Chemistry Laboratory II (L)	STP 4** Elective
CHM 453: Inorganic Chemistry	
CHM 460: Biological Chemistry	
CHM 471: Solid-State Chemistry	
CIS 2** Elective	
CIS Upper Division Elective	
CSE Elective	
DAT 301: Exploring Data in R and Python	
DAT 402: Machine Learning for Data Science	
ECN Upper Division Elective	
EEE Elective	
FIN Upper Division Elective	
GLG 418: Geophysics	
GLG 419: Geodynamics	
GLG 470: Hydrogeology	
GLG 481: Geochemistry	
IEE Upper Division Elective	

MAE Elective

MAT Upper Division Elective

MSE Elective

PHI 333: Symbolic Logic

PHI 413: Advanced Symbolic Logic

PHY 121: University Physics I: Mechanics  
(SCIT OR SQ)

PHY 122: University Physics Laboratory I  
(SCIT OR SQ)

PHY 131: University Physics II: Electricity  
and Magnetism (SCIT OR SQ)

PHY 132: University Physics Laboratory II  
(SCIT OR SQ)

PHY 150: Physics I (SCIT OR SQ)

PHY 151: Physics II (SCIT OR SQ)

PHY 2\*\* Elective

PHY Upper Division Elective

STP Upper Division Elective

- **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.