














2020 - 2021 Major Map

Mathematics (Secondary Education), BS

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

ASU is no longer accepting new students to this program. Please explore Degree Search for other similar program options.

Term 1 0 - 15 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 MAT 207: Algebra and Geometry in the High School	3	C	<ul style="list-style-type: none"> An SAT, ACT, Accuplacer, IELTS, or TOEFL score determines placement into first-year composition courses Mathematics Placement Assessment score determines placement into mathematics course ASU 101 or college-specific equivalent First-Year Seminar required of all first-year students. Select your Career Interest Communities and play me3@ASU.
 MAT 270: Calculus with Analytic Geometry I (MA)	4	C	
 MTE 210: Mentored Tutoring Internship	1	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		
SPE 222: Orientation to Education of Exceptional Children (SB & C)	3	C	
 Maintain 3.00 GPA in Critical Tracking Courses.			
Term hours subtotal:	15		
Term 2 15 - 32 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 MAT 208: Discrete Mathematics for Secondary Teachers	3	C	<ul style="list-style-type: none"> GCU 113 satisfies the US and AZ constitution requirement needed for teacher certification.
 MAT 271: Calculus with Analytic Geometry II (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	
Natural Science - Quantitative (SQ) OR Natural Science - General (SG)	4		
Social-Behavioral Sciences (SB) AND Historical Awareness (H) (GCU 113 recommended)	3		
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
 Maintain 3.00 GPA in Critical Tracking Courses.			
Minimum 2.50 GPA ASU Cumulative.			
Term hours subtotal:	17		
Term 3 32 - 49 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 MAT 272: Calculus with Analytic Geometry III (MA)	4	C	<ul style="list-style-type: none"> Meet with your academic advisor to discuss summer internship and/or Research Opportunities for Undergraduates (REU)
 MTE 250: Technology and Mathematical Visualization	3	C	
Science and Society Elective	3	C	
Humanities, Arts and Design (HU) AND Global Awareness (G)	3		
Natural Science - Quantitative (SQ)	4		

❗ Complete First-Year Composition requirement.

❗ Maintain 3.00 GPA in Critical Tracking Courses.

Complete Mathematics (MA) requirement.

Term hours subtotal: 17

Term 4 49 - 64 Credit Hours Critical course signified by ❗	Hours	Minimum Grade	Notes
❗ MAT 300: Mathematical Structures (L)	3	C	<ul style="list-style-type: none">• Apply for an Identity Verified Print (IVP) fingerprint clearance card. This is required by AZ state law for participation in internships in 6-12 grade schools.• Upper-division MAT/STP/MTE courses should be taken through the Tempe campus, unless approved by a SoMSS advisor.
❗ MAT 310: Introduction to Geometry	3	C	
❗ MAT 342: Linear Algebra OR MAT 343: Applied Linear Algebra	3	C	
❗ MTE 320: Conceptual Foundations of 7-12 Mathematics Curricula and Assessment	3	C	
Humanities, Arts and Design (HU)	3		
❗ Maintain 3.00 GPA in Critical Tracking Courses.			
Term hours subtotal:	15		

Term 5 64 - 79 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ MAT 371: Advanced Calculus I	3	C	<ul style="list-style-type: none">• Meet with your advisor early in the semester to submit an intent to progress form that notifies the Teacher's College that you will be ready to enroll in your first internship the following term. You will upload a copy of your IVP fingerprint card with this form. Teacher's College will then invite you to attend a mandatory Professional Pathways Orientation.• Upper-division MAT/STP/MTE courses should be taken through the Tempe campus, unless approved by a SoMSS advisor.
★ MTE 430: The Development of Mathematical Thinking	3	C	
★ STP 420: Introductory Applied Statistics (CS)	3	C	
EDP 313: Childhood and Adolescence (SB) OR TEL 315: Child and Adolescent Development (L or SB)	3	C	
MAT OR STP Upper Division Elective (MAT 274 OR MAT 275 recommended)	3	C	
★ Milestone: Complete online Intent to Progress form (meet with advisor).			
★ Milestone: Submit Identity Verified Print (IVP) DPS fingerprint clearance card.			
Minimum 2.50 GPA ASU Cumulative.			
Term hours subtotal:	15		

Term 6 79 - 95 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ BLE 407: SEI for Secondary Students (L)	3		<ul style="list-style-type: none">• During your clinical experience internships, you will work alongside a lead teacher in a 6-12th grade classroom. Reliable transportation is required to get to school sites in terms 6-8.• Upper-division MAT/STP/MTE courses should be taken through the Tempe campus, unless approved by a SoMSS advisor• Build your professional connections -- join the ASU Mentor Network
★ MAT 415: Introduction to Combinatorics OR MAT 416: Graph Theory	3	C	
★ SED 398: Clinical Experience	1	C	
★ SPE 417: Inclusion Practices at the Secondary Level	3	C	
★ TEL 311: Instruction and Management in the Inclusive Classroom	3	C	
Upper Division Science and Society Elective	3	C	
★ Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).			
Minimum 2.50 GPA ASU Cumulative.			
Term hours subtotal:	16		

Term 7 95 - 108 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ MTE 482: Methods of Teaching Mathematics in Secondary School	3	C	<ul style="list-style-type: none">• Students seeking teacher certification must pass required educator exams. Please speak with your Teachers College advisor to plan appropriately.
★ RDG 323: Literacy Processes in Content Areas	3		

★ SED 322: Classroom Leadership in Secondary Schools (L)	3	C
★ SED 496: Clinical Experience III	1	C
MAT 441: Ring Theory OR MAT 445: Theory of Numbers OR MAT 440: Group Theory	3	C
Minimum 2.50 GPA ASU Cumulative.		
Term hours subtotal:		13

- Upper-division MAT/STP/MTE courses should be taken through the Tempe campus, unless approved by a SoMSS advisor.
- Use Handshake to research **employment opportunities**

Term 8 108 - 120 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ SED 478: Student Teaching: Secondary Education (Grades 6-12)	12	C	
Minimum 2.50 GPA ASU Cumulative.			
Term hours subtotal:		12	

- Gather **professional references**.
- Your student teaching residency requires a full time commitment in a 6-12 grade classroom for the semester.

- 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)

Notes:

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 2020 - 2021 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.