





















2021 - 2022 Major Map

Secondary Education (Chemistry), BAE

School/College: Mary Lou Fulton Teachers College
TECHMBAE

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

Term 1 0 - 18 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 CHM 113: General Chemistry I (SQ)	4	C	<ul style="list-style-type: none">ASU 101 or college-specific equivalent First-Year Seminar required of all first-year studentsPlease note that by the end of term 4, you must have a minimum 2.50 cumulative GPA in order to progress into the professional pathways programSelect your career interest communities and play me3@ASU.
ENG 101: First-Year Composition or ENG 102: First-Year Composition OR  ENG 105: Advanced First-Year Composition OR ENG 107: First-Year Composition or ENG 108: First-Year Composition	3	C	
MAT 270: Calculus with Analytic Geometry I (MA)	4	C	
TEL 101: Professional Educator Series: The Student Experience	1		
TEL 111: Exploration of Education (SB)	3	C	
TEL 208: Literacy in a Changing World (HU)	3	C	
Term hours subtotal:	18		
Term 2 18 - 32 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 CHM 116: General Chemistry II (SQ)	4	C	<ul style="list-style-type: none">Apply for identity verified print (IVP) fingerprint clearance card online.Your IVP fingerprint card will be needed for professional classroom experiences.Join a student club or professional organization
ENG 101: First-Year Composition or ENG 102: First-Year Composition OR  ENG 105: Advanced First-Year Composition OR ENG 107: First-Year Composition or ENG 108: First-Year Composition	3	C	
TEL 171: Professional Educator Series: Equity in Education	1		
TEL 212: Understanding the Culturally Diverse Learner (C)	3	C	
TEL 215: Introduction to Child and Adolescent Development (SB)	3	C	
Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Milestone: Submit Identity Verified Print (IVP) DPS fingerprint clearance card.			
Term hours subtotal:	14		
Term 3 32 - 46 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 TEL 203: Collaborating, Planning and Implementing Instruction in Diverse Contexts	3	C	<ul style="list-style-type: none">GCU 113 meets the US and AZ constitution requirement for teacher certification.Develop your skills.
CHM 233: General Organic Chemistry I AND CHM 237: General Organic Chemistry Laboratory I	4	C	
EDT 180: Technology Literacy: Problem Solving using Digital Technology Applications (CS)	3	C	
TEL 270: Professional Educator Series: Connecting Research to Practice	1		
Elective (GCU 113 recommended)	3		
 Complete Mathematics (MA) requirement.			

Term hours subtotal:		14	
Term 4 46 - 61 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 SPE 222: Orientation to Education of Exceptional Children (SB & C)	3	C	<ul style="list-style-type: none"> • Must complete at least 60 credits, including foundational coursework, to progress into the professional pathways program. • Meet with your advisor to submit intent to progress early in Term 4. • Attendance is required at an orientation prior to registration for Term 5. • Develop your professional online presence.
BLE 220: Foundations of Structured English Immersion (L)	3	C	
CHM 234: General Organic Chemistry II AND CHM 238: General Organic Chemistry Laboratory II	4	C	
PHY 101: Introduction to Physics (SQ)	4	C	
TEL 271: Professional Educator Series: Inclusivity in Practice	1		
 Milestone: Complete online Intent to Progress form (meet with advisor).			
 Minimum 2.50 GPA ASU Cumulative.			
Term hours subtotal:		15	
Term 5 61 - 77 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 SED 396: Clinical Experience I	1	C	<ul style="list-style-type: none"> • During your clinical experience internship, you will work alongside a lead teacher, in a 6-12th grade classroom. • Reliable transportation is required to get to school sites in terms 5-8.
CHM 341: Elementary Physical Chemistry	3	C	
SED 464: Middle-School Curr/Org	3	C	
TEL 311: Instruction and Management in the Inclusive Classroom	3	C	
 Humanities, Arts and Design (HU) AND Global Awareness (G)	3		
Elective	3		
Minimum 2.50 GPA ASU Cumulative.			
Term hours subtotal:		16	
Term 6 77 - 93 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 SED 397: Clinical Experience II	1	C	<ul style="list-style-type: none"> • During your clinical experience internship, you will work alongside a lead teacher, in a 6-12th grade classroom. • CHM 480 is only available in the summer or every other fall semester. PHY 480 is available in the spring terms. Work with your advisor to select appropriate methods course. • Complete an in person or virtual practice interview
BCH 361: Advanced Principles of Biochemistry OR CHM 302: Environmental Chemistry OR CHM 453: Inorganic Chemistry	3	C	
BLE 407: SEI for Secondary Students (L)	3	C	
CHM 480: Methods of Teaching Chemistry OR PHY 480: Methods of Teaching Physics OR PHY 494: Teaching Physical Science OR SES 480: Teaching Earth and Space Sciences	3	C	
SPE 417: Inclusion Practices at the Secondary Level	3	C	
Upper Division Humanities, Arts and Design (HU) AND Historical Awareness (H)	3		
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 93 - 108 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 SED 496: Clinical Experience III	1	C	<ul style="list-style-type: none"> • During your clinical experience internship, you will work alongside a lead teacher, in a 6-12th grade classroom. • Students seeking teacher certification must pass required educator exams. • Use Handshake to research employment opportunities.
RDG 323: Literacy Processes in Content Areas	3	C	
SED 322: Classroom Leadership in Secondary Schools (L)	3	C	
SED 482: Science Teaching Methods for Secondary Schools	3	C	
Elective	5		
Minimum 2.50 GPA ASU Cumulative.			
Term hours subtotal:		15	

Term 8 108 - 120 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ SED 478: Student Teaching: Secondary Education (Grades 6-12) Minimum 2.50 GPA ASU Cumulative.	12	C	• Your student teaching residency requires a full-time commitment in a 6-12th grade classroom for the semester.
Term hours subtotal:	12		

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

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.

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

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 2021 - 2022 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.