ARIZONA STATE UNIVERSITY

Major Map : Exploratory Math, Physical Sciences, Engineering & Technology
University College, All Campuses
Catalog Year: 2009-2010

			Completed ATP: ☐ Yes ☐ No		*Completed AGEC:* ☐ Yes ☐ No
Course Subject and Title *(courses in bold/shading are critical)*	Hrs.	Upper Division	Transfer Course/Grade	Minimum Grade if Required	Additional Critical Tracking Notes
TERM ONE: 0-15 CREDIT HOURS					
ASU 101: The ASU Experience	1	☐			• ASU 101 is for freshman ASU students only. Not required for transfer students. • An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses • An ASU Math Placement Exam score determines placement in Mathematics course • Complete first course in First-Year Composition (WAC 101 or ENG 101 or ENG 107 or ENG 105)
UNI XXX: Special Topics: Career & Major Exploration	1	☐		Grade of C	
WAC 101: Introduction to Academic Writing OR WAC 107: Intro to Academic Writing for International Students OR ENG 101 or 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or 108: English for Foreign Students	3	☐		Grade of C	
MAT 117: College Algebra (does not meet MA) OR MAT 170: Pre-calculus or Calculus I	3-4	☐		Grade of C	
Natural Science (SQ/SG) Such as chemistry, physics, geography, geology or biology (particular course depends on majors interests)	4	☐		Grade of C	
Social/Behavioral Science (SB) or Humanities/Fine Arts/Design (HU) with Awareness Area or Second Language	3-4	☐			
TERM TWO: 16-30 CREDIT HOURS					
UNI XXX: Special Topics: Choosing a Major	1	☐		Grade of C	• Completed ENG 101/107/105 "C" or better
ENG 101 or 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or 108: English for Foreign Students	3	☐		Grade of C	
MAT 170: Pre-calculus or Calculus I or Calculus II or Science or Engineering	3-4	☐		Grade of C	
Natural Science-Quantitative or General (SQ/SG)	4	☐		Grade of C	
Computer Literacy/Statistics (CS)	3	☐			
Social/Behavioral Science (SB) or Humanities/Fine Arts/Design (HU) with Awareness Area or Second Language	3-4	☐			
TERM THREE: 31-45 CREDIT HOURS					
UNI XXX: Special Topics: Choosing a Major	1	☐		Grade of C	• Complete First-Year Composition requirement: ENG 101 & 102 OR ENG 107 & 108 or 105
ENG 102: First-Year Composition OR ENG 108: English for Foreign Students OR Literacy and Critical Inquiry (L) OR Social/Behavioral Science (SB) or Humanities/Fine Arts/Design (HU) – course that is appropriate for majors of interest	3	☐		Grade of C	
Calculus III or Science or Engineering	3-4	☐		Grade of C	
Natural Science – Quantitative (SQ):	3-4	☐		Grade of C	
Social/Behavioral Science (SB) or Humanities/Fine Arts/Design (HU) with Awareness Area	3-4	☐		Grade of C	
Elective or Second Language	3	☐			

Graduation Requirements Summary:

Total Hours (120 minimum)	Total UD Hours (minimum 45)	Cumulative GPA (2.00 minimum)	Total Hrs at ASU (minimum 30)	Resident Credit for Academic Recognition (minimum 56)	Total Comm. College Hrs. (maximum 64)

General University Requirements: Legend
- General Studies Core Requirements:
  - Literacy and Critical Inquiry (L)
  - Mathematical Studies (MA)
  - Computer/Statistics/Quantitative applications (CS)
  - Humanities, Fine Arts, and Design (HU)
  - Social and Behavioral Sciences (SB)
  - Natural Science-Quantitative (SQ)
  - Natural Science-General (SG)
- General Studies Awareness Requirements
  - Cultural Diversity in the US (C)
  - Global Awareness (G)
  - Historical Awareness (H)
- First-Year Composition

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Additional Notes: ASU Majors That May Be Tracked To This Path

MATH, PHYSICAL SCIENCES, ENGINEERING & TECHNOLOGY MAJOR TRACK

Majors	Academic Programs	Math	Additional Math
Aerospace Engineering (Aeronautics) – BSE	Ira A. Fulton School of Engineering (Tempe)	MAT 265, 266, 267	additional math required
Aerospace Engineering (Astronautics) – BSE	Ira A. Fulton School of Engineering (Tempe)	MAT 265, 266, 267	additional math required
Applied Computer Science – BS	College of Technology & Innovation (Polytechnic)	APM 265, 266	additional math required
Applied Computing – BS	New College of Interdisciplinary Arts & Sciences (West)	MAT 210	MAT 243, STP 300
Applied Math – BS	New College of Interdisciplinary Arts & Sciences (West)	MAT 210	MAT 243, STP 300
Bioengineering – BSE	Ira A. Fulton School of Engineering (Tempe)	MAT 265, 266, 267	additional math required
Chemical Engineering – BSE	Ira A. Fulton School of Engineering (Tempe)	MAT 265, 266, 267	additional math required
Chemistry – BA	College of Liberal Arts and Sciences (Tempe)	MAT 270	MAT 271
Chemistry – BS	College of Liberal Arts and Sciences (Tempe)	MAT 270	MAT 271, 272
Chemistry (Environmental Chemistry) – BS	College of Liberal Arts and Sciences (Tempe)	MAT 270	MAT 271, 272
Civil Engineering – BSE	Ira A. Fulton School of Engineering (Tempe)	MAT 265, 266, 267	additional math required
Civil Engineering (Construction Engineering) – BSE	Ira A. Fulton School of Engineering (Tempe)	MAT 265, 266, 267	additional math required
Civil Engineering (Environmental Engineering) – BSE	Ira A. Fulton School of Engineering (Tempe)	MAT 265, 266, 267	additional math required
Computational Mathematical Sciences – BS	College of Liberal Arts and Sciences (Tempe)	MAT 270, 271, 272	additional math required
Computer Science – BS	Ira A. Fulton School of Engineering (Tempe)	MAT 265, 266, 267	additional math required
Computer Systems (Computer Hardware Technology) – BS	College of Technology & Innovation (Polytechnic)	APM 265, 266	additional math required
Computer Systems (Embedded Systems Technology) – BS	College of Technology & Innovation (Polytechnic)	APM 265, 266	additional math required
Computer Systems Engineering – BSE	Ira A. Fulton School of Engineering (Tempe)	MAT 265, 266, 267	additional math required
Earth & Space Exploration – BS	College of Liberal Arts and Sciences (Tempe)	MAT 170, 265, 266, 267	additional math required
Electrical Engineering – BSE	Ira A. Fulton School of Engineering (Tempe)	MAT 265, 266, 267	additional math required
Electrical Engineering (Electric Power and Energy Systems) – BSE	Ira A. Fulton School of Engineering (Tempe)	MAT 265, 266, 267	additional math required
Electronics Engineering Technology (Alternate Energy Technologies) – BS	College of Technology and Innovation (Polytechnic)	APM 265, 266	additional math required
Electronics Engineering Technology (Electronic Systems) – BS	College of Technology and Innovation (Polytechnic)	APM 265, 266	additional math required
Electronics Engineering Technology (Integrated Systems) – BS	College of Technology and Innovation (Polytechnic)	APM 265, 266	additional math required
Electronics Engineering Technology (Telecommunications) – BS	College of Technology and Innovation (Polytechnic)	APM 265, 266	additional math required
Engineering – BSE	College of Technology and Innovation (Polytechnic)	APM 265, 266	additional math required
Engineering Special Studies (Premedical Engineering) – BSE	Ira A. Fulton School of Engineering (Tempe)	MAT 265, 266, 267	additional math required
Geography (Meteorology-Climatology) – BS	College of Liberal Arts and Sciences (Tempe)	MAT 270, 271, 272	additional math required
Geological Sciences – BS	College of Liberal Arts and Sciences (Tempe)	MAT 170, 270	MAT 271, 272
Industrial Engineering – BSE	Ira A. Fulton School of Engineering (Tempe)	MAT 265, 266, 267	additional math required
Interdisciplinary Studies – BIS	School of Letters & Sciences (Downtown Phoenix, Polytechnic, Tempe, West)	MAT 142 or higher	depends on concentration
Manufacturing Engineering Technology (Manufacturing Engineering Technology) – BS	College of Technology and Innovation (Polytechnic)	APM 265, 266	additional math required
Manufacturing Engineering Technology (Mechanical Engineering Technology) – BS	College of Technology and Innovation (Polytechnic)	APM 265, 266	additional math required
Materials Science & Engineering – BSE	Ira A. Fulton School of Engineering (Tempe)	MAT 265, 266, 267	additional math required
Mathematics – BA	College of Liberal Arts and Sciences (Tempe)	MAT 270, 271, 272	additional math required
Mathematics – BS	College of Liberal Arts and Sciences (Tempe)	MAT 270, 271, 272	additional math required
Mathematics (Statistics) – BS	College of Liberal Arts and Sciences (Tempe)	MAT 270, 271, 272	additional math required
Mechanical Engineering – BSE	Ira A. Fulton School of Engineering (Tempe)	MAT 265, 266, 267	additional math required
Mechanical Engineering (Computational and Mathematical Mechanics) – BSE	Ira A. Fulton School of Engineering (Tempe)	MAT 265, 266, 267	additional math required
Mechanical Engineering Technology (Aeronautical Engineering Technology) – BS	College of Technology and Innovation (Polytechnic)	APM 265, 266	additional math required
Mechanical Engineering Technology (Automation Engineering Technology) – BS	College of Technology and Innovation (Polytechnic)	APM 265, 266	additional math required
Mechanical Engineering Technology (Automotive Engineering Technology) – BS	College of Technology and Innovation (Polytechnic)	APM 265, 266	additional math required
Mechanical Engineering Technology (Mechanical Engineering Technology) – BS	College of Technology and Innovation (Polytechnic)	APM 265, 266	additional math required
Physics – BS	College of Liberal Arts and Sciences (Tempe)	MAT 270	MAT 271, 272
Secondary Education (Chemistry) – BAE	Mary Lou Fulton College of Education (Tempe)	MAT 270	MAT 271, 272
Secondary Education (Earth & Space Sciences) – BAE	Mary Lou Fulton College of Education (Tempe)	MAT 210 or MAT 270	N/A
Secondary Education (Mathematics) – BAE	Mary Lou Fulton College of Education (Tempe)	MAT 270, 271, 272	additional math required
Secondary Education (Mathematics) – BAE	College of Teacher Education and Leadership (Downtown Phoenix, West)	MAT 270, 271, 272	additional math required
Secondary Education (Physics) – BAE	Mary Lou Fulton College of Education (Tempe)	MAT 270	MAT 271, 272
Sustainability – BS	School of Sustainability (Tempe)	MAT 210, 211 or MAT 170, 251 or MAT 170, 265 or MAT 270, 271	N/A