2022 - 2023 Major Map

Biomedical Informatics, BS

School/College: College of Health Solutions
ESBMIBS

Term 1 0 - 14 Credit Hours Critical course signified by ⬥	Hours	Minimum Grade	Notes
⬥ BIO 181: General Biology I (SQ)	4	C	• ASU 101 or college-specific equivalent First-Year Seminar required of all first-year students. College of Health Solutions majors take CHS 101 to fulfill this requirement.
⬥ CHS 101: The ASU Experience for Health Solutions Students	1		
CHS 100: Optimizing Your Health and Performance (SB) OR CHS 300: An Exploration of Well-Being (SB)	3	C	• First-year students must complete CHS 100; students who enter with more than 45 hours should complete CHS 300 instead.
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	• Students who test into MAT 251 can take MAT 170 in Term 1 as a refresher or take an elective course instead.
Elective (MAT 170 recommended)	3		
Term hours subtotal:	14		

Term 2 14 - 30 Credit Hours Critical course signified by ⬥	Hours	Minimum Grade	Notes
⬥ BMI 110: Introduction to Python	3	C	• Visit the CHS Student Site for resources, forms, appointment scheduling, internship information, etc.
⬥ BMI 201: Introduction to Clinical Informatics	3	C	
⬥ MAT 251: Calculus for Life Sciences (MA)	3	C	• Join a student club or professional organization.
BIO 182: General Biology II (SG)	4	C	• Create a first draft resume.
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	• Select your Career Interest Communities and play me3@ASU.
⬥ Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:	16		

Term 3 30 - 46 Credit Hours Critical course signified by ⬥	Hours	Minimum Grade	Notes
⬥ BMI 210: Data Structures and Algorithms in Python	3	C	• Develop your skills
⬥ CHM 113: General Chemistry I (SQ)	4	C	
BMI 102: Introduction to Population Health Informatics	3	C	
MAT 243: Discrete Mathematical Structures	3	C	
Elective	3		
Complete Mathematics (MA) requirement.			
Term hours subtotal:	16		

Term 4 46 - 61 Credit Hours Critical course signified by ⬥	Hours	Minimum Grade	Notes
⬥ BMI 221: Knowledge Representation for Biomedical Informatics	3	C	• Explore an internship
BMI 211: Modeling Biomedical Decisions	3	C	

	Hours	Minimum Grade
BMI 310: App Development for Clinical and Population Health	3	C
STP 231: Statistics for Life Science (CS)	3	C
Humanities, Arts and Design (HU) AND Historical Awareness (H)	3	
⬥ Complete BMI 102 AND BMI 201 course(s).		
Term hours subtotal:	15	

Term 5 61 - 76 Credit Hours Necessary course signified by ⭐	Hours	Minimum Grade	Notes
⭐ BIO 340: General Genetics	4	C	• Update your resume.
BMI 311: Modeling Biomedical Knowledge	3	C	• Thinking about graduate school? Consider registering for a grad school test prep course.
BMI 330: Topics in Translational Bioinformatics	3	C	
Social-Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C)	3		
Upper Division Elective	2		
Term hours subtotal:	15		

Term 6 76 - 91 Credit Hours Necessary course signified by ⭐	Hours	Minimum Grade	Notes
⭐ BMI 312: Modeling Biomedical Data	3	C	• Use Handshake to research employment opportunities
BMI 440: Software Engineering for Biomedical Informatics	3	C	• Complete an in person or virtual practice interview
BMI 465: Introduction to Comparative Genomics	3	C	
Humanities, Arts and Design (HU) AND Global Awareness (G)	3		
Elective	3		
⭐ Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).			
Term hours subtotal:	15		

Term 7 91 - 106 Credit Hours Necessary course signified by ⭐	Hours	Minimum Grade	Notes
⭐ BMI 461: Advanced Topics in Biomedical Informatics I	3	C	• Students are recommended to take BMI 484: Internship, CHS 394: Peer Instructional Facilitator, CHS 484: Citizen Science in Health or CHS 494: Advanced Undergraduate TA for their upper division elective. Visit the CHS student website to learn more.
⭐ BMI 482: Capstone I (L) OR CHS 492: Honors Directed Study	3	C	
BMI 410: Database Management in Health Care	3	C	
Upper Division Humanities, Arts and Design (HU) OR Upper Division Social-Behavioral Sciences (SB)	3		
Upper Division Elective (BMI 484 OR CHS 394 OR CHS 484 OR CHS 494 recommended)	3		
Term hours subtotal:	15		

Term 8 106 - 120 Credit Hours Necessary course signified by ⭐	Hours	Minimum Grade	Notes
⭐ BMI 404: Clinical Environments	3	C	• Apply for full-time career opportunities.
⭐ BMI 483: Capstone II (L) OR CHS 493: Honors Thesis (L)	3	C	• BMI 483 and CHS 493 fulfill the college's experiential learning requirement.
Literacy and Critical Inquiry (L)	3		• Barrett Honors College students who take CHS 492 and CHS 493 will need a Literacy and Critical Inquiry (L) course in Term 8. Non-Barrett students who take BMI 482 and BMI 483 may take an elective course instead.
Complete 2 courses: Elective	5		
Term hours subtotal:	14		

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 2022 - 2023 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.