










## 2022 - 2023 Major Map

### Human Systems Engineering, BS

School/College: Ira A. Fulton Schools of Engineering  
ESHSEBS

Term 1 - A 0 - 7 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 ASU 101-TPS: The ASU Experience OR FSE 310: Transfer Success in Engineering	1		<ul style="list-style-type: none"> <li>ASU 101 is required of all first-year students; FSE 310 is required for all new transfer students; LIA 294 is highly recommended for all new veteran students.</li> <li>Prep for success using the <a href="#">Freshman Guide</a>.</li> <li>Join a <a href="#">Fulton community</a>.</li> <li>Explore <a href="#">engineering and technical professions</a>.</li> </ul>
 HSE 101: Introduction to Human Systems Engineering (SB)	3	C	
ENG 101 or ENG 102: First-Year Composition OR			
ENG 105: Advanced First-Year Composition OR	3	C	
ENG 107 or ENG 108: First-Year Composition			
Term hours subtotal:	7		
Term 1 - B 7 - 14 Credit Hours	Hours	Minimum Grade	Notes
MAT 170: Precalculus (MA)	3	C	<ul style="list-style-type: none"> <li>View ASU Online first-year student registration information <a href="#">here</a>.</li> </ul>
Natural Science - Quantitative (SQ)	4		
Term hours subtotal:	7		
Term 2 - A 14 - 24 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 HSE 230: Statistics for Human Systems Research I (CS)	3	C	<ul style="list-style-type: none"> <li>Create a <a href="#">Handshake</a> profile.</li> <li>Get involved with EPICS, the Generator Labs, and the <a href="#">Fulton Start-Up Center</a>.</li> </ul>
ENG 101 or ENG 102: First-Year Composition OR			
ENG 105: Advanced First-Year Composition OR	3	C	
ENG 107 or ENG 108: First-Year Composition			
Natural Science - General (SG) OR Natural Science - Quantitative (SQ)	4		
Term hours subtotal:	10		
Term 2 - B 24 - 30 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
FSE 100: Introduction to Engineering	2		
Humanities, Arts and Design (HU) AND Cultural Diversity in the U.S. (C)	3		
Elective	1		
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:	6		
Term 3 - A 30 - 39 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 HSE 290: Experimental Methods for Human Systems Research (L)	3	C	<ul style="list-style-type: none"> <li>Prep for success using the <a href="#">Sophomore Guide</a>.</li> <li>Consult the <a href="#">Resume, Presentation, and Resource Library</a> for tips on how to create a technical resume, job shadow, do</li> </ul>
HSE 223: Applied Biology of Human Behavior (SB)	3	C	
Humanities, Arts and Design (HU) AND Historical Awareness (H)	3		

Term hours subtotal: 9

informational interviews and mentor with alumni.

Term 3 - B 39 - 45 Credit Hours <b>Critical course signified by</b> 🚩	Hours	Minimum Grade	Notes
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HSE 224: Applied Social Science (SB)

3

C

Technical Elective

3

🚩 Complete Mathematics (MA) requirement.

Term hours subtotal: 6

Term 4 - A 45 - 51 Credit Hours <b>Critical course signified by</b> 🚩	Hours	Minimum Grade	Notes
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🚩 HSE 225: Human Systems Integration

3

C

CIS 105: Computer Applications and Information Technology (CS)

OR CSE 180: Computer Literacy (CS) OR EDT 180: Technology

Literacy: Problem Solving using Digital Technology Applications

(CS) OR IFT 101: Information Technology Programming Logic

3

- Pursue an **undergraduate research** experience.

- Apply for **internships**.

- Attend **career fairs** and events.

Term hours subtotal: 6

Term 4 - B 51 - 60 Credit Hours	Hours	Minimum Grade	Notes
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Technical Elective

3

Global Awareness (G)

3

Elective

3

Term hours subtotal: 9

Term 5 - A 60 - 69 Credit Hours <b>Necessary course signified by</b> ★	Hours	Minimum Grade	Notes
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★ HSE 324: Applied Cognitive Science (SB)

3

C

HSE Elective

3

Elective

3

- Plan for success using the **Junior Guide**.

- Network at **student organization** competitions or professional societies.

Term hours subtotal: 9

Term 5 - B 69 - 75 Credit Hours	Hours	Minimum Grade	Notes
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HSE 390: Qualitative Research Methods (L)

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C

Upper Division Elective

3

Term hours subtotal: 6

Term 6 - A 75 - 84 Credit Hours <b>Necessary course signified by</b> ★	Hours	Minimum Grade	Notes
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★ HSE 323: Perceptual Systems (SB)

3

C

Upper Division HSE Elective

3

Technical Elective

3

- Research and prepare for **graduate school**.

- Apply for an **engineering 4+1 program**.

- Develop a **professional profile online**.

Term hours subtotal: 9

Term 6 - B 84 - 90 Credit Hours <b>Necessary course signified by</b> ★	Hours	Minimum Grade	Notes
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HSE 325: Human-Computer Interaction

3

C

Upper Division Elective

3

★ Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).

Term hours subtotal: 6

Term 7 - A 90 - 99 Credit Hours <b>Necessary course signified by</b> ★	Hours	Minimum Grade	Notes
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★ HSE 430: Statistics for Human Systems Research II (CS)	3	C
Upper Division HSE Elective	3	
Upper Division Technical Elective	3	
Term hours subtotal:	9	

- Plan for success using the **Senior Guide**.
- Use **Handshake** to apply for full-time positions.
- Complete an in person or virtual **practice interview**.

Term 7 - B 99 - 105 Credit Hours	Hours	Minimum Grade	Notes
Upper Division HSE Elective	3		
Upper Division Elective OR HSE 484: Internship	3		
Term hours subtotal:	6		

Term 8 - A 105 - 114 Credit Hours <b>Necessary course signified by</b> ★	Hours	Minimum Grade	Notes
★ HSE 477: Human Systems Engineering Capstone Experience	3	C	
Upper Division HSE Elective	3		
Elective	3		
Term hours subtotal:	9		

Term 8 - B 114 - 120 Credit Hours	Hours	Minimum Grade	Notes
Upper Division HSE Elective	3		
Elective	3		
Term hours subtotal:	6		

- Technical electives should be chosen from the prefixes below. Three credit hours must be upper-division.

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

Technical Electives	HSE Electives
BIO Elective	HSE 422: Human Factors in Sport
BMI Elective	HSE 423: Human Factors in Transportation
CIS Elective	HSE 424: Human Automation Interaction
CSE Elective	HSE 425: Human Factors in Medical Systems
EEE Elective	HSE 426: Training and Expertise
GIT Elective	HSE 427: Designing for Learning
HSE Elective	HSE 428: Judgment and Decision Making
IEE Elective	HSE 429: Product Design and Evaluation
IFT Elective	HSE 484: Internship
OMT Elective	HSE 494: Special Topics
PSY Elective	HSE 499: Individualized Instruction
SER Elective	
TEM Elective	
TMC Elective	
TWC Elective	

#### 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.