










## 2024 - 2025 Major Map

### Human Systems Engineering, BS

School/College: [Ira A. Fulton Schools of Engineering](#)  
ESHSEBS

Term 1 - A 0 - 7 Credit Hours <b>Critical course signified by</b> 	Hours	Minimum Grade	Notes
 ASU 101-TPS: The ASU Experience	1		<ul style="list-style-type: none"> <li>ASU 101 is required of all first-year 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 (SOBE OR 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 (MATH OR MA)	3	C	<ul style="list-style-type: none"> <li>View ASU Online first-year student registration information <a href="#">here</a>.</li> </ul>
Scientific Thinking in Natural Sciences (SCIT)	4		
Term hours subtotal:	7		
Term 2 - A 14 - 21 Credit Hours <b>Critical course signified by</b> 	Hours	Minimum Grade	Notes
 HSE 230: Statistics for Human Systems Research I (QTRS OR 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			
Elective	1		
Term hours subtotal:	7		
Term 2 - B 21 - 30 Credit Hours <b>Critical course signified by</b> 	Hours	Minimum Grade	Notes
FSE 100: Introduction to Engineering	2		
Humanities, Arts and Design (HUAD)	3		
Scientific Thinking in Natural Sciences (SCIT)	4		
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:	9		
Term 3 - A 30 - 39 Credit Hours <b>Critical course signified by</b> 	Hours	Minimum Grade	Notes
 HSE 290: Experimental Methods for Human Systems Research (QTRS OR 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 informational interviews and mentor with alumni.</li> </ul>
HSE 223: Applied Biology of Human Behavior (SOBE OR SB)	3	C	
Humanities, Arts and Design (HUAD)	3		
Term hours subtotal:	9		

Term 3 - B 39 - 45 Credit Hours <b>Critical course signified by</b> ⚠	Hours	Minimum Grade	Notes
HSE 224: Applied Social Science (SOBE OR SB)	3	C	
Technical Elective	3		
⚠ Complete Mathematics (MATH) requirement.			
Term hours subtotal:	6		
Term 4 - A 45 - 51 Credit Hours <b>Critical course signified by</b> ⚠	Hours	Minimum Grade	Notes
⚠ HSE 225: Human Systems Integration	3	C	
Technical Elective	3		
Term hours subtotal:	6		<ul style="list-style-type: none"> <li>Pursue an <b>undergraduate research experience</b>.</li> <li>Apply for <b>internships</b>.</li> <li>Attend <b>career fairs and events</b>.</li> </ul>
Term 4 - B 51 - 60 Credit Hours	Hours	Minimum Grade	Notes
Technical Elective	3		
American Institutions (AMIT)	3		
Governance and Civic Engagement (CIVI)	3		
Term hours subtotal:	9		
Term 5 - A 60 - 69 Credit Hours <b>Necessary course signified by</b> ★	Hours	Minimum Grade	Notes
★ HSE 324: Applied Cognitive Science (SOBE OR SB)	3	C	
HSE Elective	3		
Sustainability (SUST)	3		
Term hours subtotal:	9		<ul style="list-style-type: none"> <li>Plan for success using the <b>Junior Guide</b>.</li> <li>Network at <b>student organization</b> competitions or professional societies.</li> </ul>
Term 5 - B 69 - 75 Credit Hours	Hours	Minimum Grade	Notes
HSE 390: Qualitative Research Methods (L)	3	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
★ HSE 323: Perceptual Systems (SOBE OR SB)	3	C	
HSE 484: Internship OR Upper Division Human Systems Engineering Elective	3		
Technical Elective	3		
Term hours subtotal:	9		<ul style="list-style-type: none"> <li>Research and prepare for <b>graduate school</b>.</li> <li>Apply for an <b>engineering 4+1 program</b>.</li> <li>Develop a <b>professional profile online</b>.</li> </ul>
Term 6 - B 84 - 90 Credit Hours	Hours	Minimum Grade	Notes
HSE 325: Human-Computer Interaction	3	C	
Upper Division Elective	3		
Term hours subtotal:	6		
Term 7 - A 90 - 99 Credit Hours <b>Necessary course signified by</b> ★	Hours	Minimum Grade	Notes
★ HSE 430: Statistics for Human Systems Research II (QTRS OR CS)	3	C	
Upper Division Human Systems Engineering Elective	3		
Upper Division Technical Elective	3		
Term hours subtotal:	9		<ul style="list-style-type: none"> <li>Plan for success using the <b>Senior Guide</b>.</li> <li>Use <b>Handshake</b> to apply for full-time positions.</li> <li>Complete an in person or virtual <b>practice interview</b>.</li> </ul>

Term 7 - B 99 - 105 Credit Hours	Hours	Minimum Grade	Notes
Upper Division Human Systems Engineering Elective	3		
Upper Division Elective	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 Human Systems Engineering Elective	3		
Global Communities, Societies and Individuals (GCSI)	3		
Term hours subtotal:	9		
Term 8 - B 114 - 120 Credit Hours	Hours	Minimum Grade	Notes
Upper Division Human Systems Engineering Elective	3		
Elective	3		
Term hours subtotal:	6		

- Technical Electives should be chosen from the subjects below. Three credit hours must be upper division.

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

Technical Electives	Human System Engineering 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	

- **Total Hours:** 120
- **Upper Division Hours:** 45 minimum
- **University Undergraduate Graduation Requirements**

#### Notes:

Mathematics Placement Assessment score determines placement in first mathematics course.

General Studies designations listed next to courses on the major map were valid for the 2024 - 2025 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.