








2024 - 2025 Major Map



Engineering Science (Business), BS

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

Term 1 0 - 13 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 CSE 101: Introduction to Computer Science and Programming for Non-Computer Science Majors (QTRS)	3		<ul style="list-style-type: none"> ASU 101 or college-specific equivalent First-Year Seminar required of all first-year students and should be completed the first semester. If ENG 105 is taken, a three credit hour applicable elective must also be taken prior to graduation. See advisor. Prep for success using the First-Year Student Guide. Join a Fulton community. Explore engineering and technical professions.
ASU 101-ESC: The ASU Experience	1		
ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition	3	C	
FSE 100: Introduction to Engineering	2		
FSE 104: EPICS Gold Feasibility and Planning	1		
Elective	3		
Term hours subtotal:	13		

Term 2 13 - 26 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 FSE 150: Perspectives on Grand Challenges for Engineering (GCSI OR SB)	3		<ul style="list-style-type: none"> Create a Handshake profile. Get involved with EPICS, the Generator Labs, and the Fulton Start-Up Center.
ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition	3	C	
FSE 404: EPICS Gold: EPICS in Action	1		
MAT 170: Precalculus (MATH OR MA)	3		
Humanities, Arts and Design (HUAD)	3		
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:	13		

Term 3 26 - 40 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 ESC 201: Engineering Projects I	4	C	<ul style="list-style-type: none"> Prep for success using the Sophomore Guide.
ECN 221: Business Statistics (QTRS OR CS) OR STP 226: Elements of Statistics (QTRS OR CS)	3		
PHY 111: General Physics (SCIT OR SQ)	3		
PHY 113: General Physics Laboratory (SCIT OR SQ)	1		
Elective	3		
Complete Mathematics (MATH) requirement.	0		
Term hours subtotal:	14		

Term 4 40 - 57 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 ESC 202: Engineering Projects II	4	C	<ul style="list-style-type: none"> Summer internships are required for this program. Please contact Financial Aid
ECN 211: Macroeconomic Principles (SOBE OR SB) OR ECN 212: Microeconomic Principles (SOBE OR SB)	3		

PHY 112: General Physics (SCIT OR SQ)	3
PHY 114: General Physics Laboratory (SCIT OR SQ)	1
Humanities, Arts and Design (HUAD)	3
Elective	3
Term hours subtotal:	17

and Scholarship Services to determine impact.

- Pursue an **undergraduate research experience**.
- Apply for **internships**.
- Attend **career fairs and events**.

Summer 4 57 - 60 Credit Hours	Hours	Minimum Grade	Notes
ESC 484: Internship	3		
Term hours subtotal:	3		

Term 5 60 - 73 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ ESC 301: Advanced Engineering Projects I	4	C	
ACC 382: Accounting and Financial Analysis	3		
MGT 380: Management and Strategy	3		
MSE 301: Materials and Civilization	3		
Term hours subtotal:	13		

- Plan for success using the **Junior Guide**.
- Network at **student organization** competitions or professional societies.

Term 6 73 - 86 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ ESC 302: Advanced Engineering Projects II	4	C	
FSE 301: Entrepreneurship and Value Creation	3		
MGT 400: Cross-Cultural Management (GCSI OR C & G)	3		
MGT 411: Leading Organizations	3		
Term hours subtotal:	13		

- Summer internships are required for this program. Please contact **Financial Aid and Scholarship Services** to determine impact.
- Research and prepare for **graduate school**.
- Apply for an **engineering 4+1 program**.
- Develop a **professional profile online**.

Summer 6 86 - 89 Credit Hours	Hours	Minimum Grade	Notes
ESC 484: Internship	3		
Term hours subtotal:	3		

Term 7 89 - 104 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ ESC 490: Engineering Science Capstone I	4	C	
ENG 301: Writing for the Professions (L)	3		
LES 305: Business Law and Ethics for Managers	3		
Complete 2 courses:	5		
Elective			
Term hours subtotal:	15		

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

Term 8 104 - 120 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ ESC 491: Engineering Science Capstone II	4	C	
MKT 390: Essentials of Marketing	3		
SCM 380: Supply Chain Management Foundations (SUST)	3		
American Institutions (AMIT)	3		
Governance and Civic Engagement (CIVI)	3		
Term hours subtotal:	16		

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

- **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.