

**PROGRAM: Associate in Engineering NC A&T State University Co-Admission Industrial &
Systems Engineering Pathway, AE A10500IE Advising Guide
2025-2026**

FALL SEMESTER I				
8 Weeks Session 1	8 Weeks Session 2	Course	Credit Hours	Program Notes
X		ACA-122 College Transfer Success	1	
X		EGR-150 Intro. To Engineering	2	
X		ENG 111 Writing and Inquiry <i>Pre-req ENG-002 or ENG-025</i>	3	
	X	Humanities/Fine Arts Elective	3	
	X	MAT-271 Calculus I <i>Pre-req C or better in MAT 172 or MAT 175</i>	4	
	X	DFT-170 Engineering Graphics	3	Fall only

SPRING SEMESTER I				
8 Weeks Session 1	8 Weeks Session 2	Course	Credit Hours	Program Notes
X		MAT-272 Calculus II <i>Pre-req C or better in MAT-271</i>	4	
X		ENG-112 Writing and Research in the Disciplines <i>Pre-req C or better in ENG-111</i>	4	
	X	CSC 120 - Computing Fundamentals I <i>Pre-req MAT-003 or MAT-025 or MAT-035 or MAT-121 or MAT-171</i>	3	
	X	PHY-251 General Physics I <i>Pre-req C or better in MAT-271; Co-req MAT-272</i>	4	

OPTIONAL- SUMMER SEMESTER				
8 Weeks		Course	Credit Hours	Program Notes
X		PHY-251 General Physics I <i>Pre-req C or better in MAT-271; Co-req MAT-272</i>	4	*If not taken in Spring I Semester

FALL SEMESTER II				
8 Weeks Session 1	8 Weeks Session 2	Course	Credit Hours	Program Notes
X		EGR-220 Engineering Statics <i>Pre-req PHY 251; Co-req MAT 272</i>	3	Fall only
X		MAT-280 Linear Algebra <i>Pre-req MAT 271</i>	3	Fall only
X		CSC-134 C++ Programming <i>Pre-req CIS 115 or CSC 120</i>	3	Fall only
	X	PHY-252 General Physics II <i>Pre-req C or better in MAT 272 and PHY 251</i>	4	
	X	MAT-273 Calculus III <i>Pre-req C or better in MAT 272</i>	4	

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SPRING SEMESTER II				
8 Weeks Session 1	8 Weeks Session 2	Course	Credit Hours	Program Notes
X		CHM 151 General Chemistry I <i>Pre-req: MAT 003 (P3 Grade) or MAT-035</i>	4	
X		COM-231 Public Speaking	3	
	X	Humanities/Fine Arts Elective	3	
	X	Social/Behavioral Science Elective	3	
	X	ECO-251 Principles of Microeconomics <i>Pre-req ENG 002 (P2 grade) or ENG-025 and MAT 003 (P2 grade) or MAT-025</i>	3	