

**Guilford Technical Community College
to
Elizabeth City State University**

**Curriculum Guide – Major and Elective Requirements
for**

Aviation Science

Specialization/Concentration: *Avionics Concentration*

ASSOCIATE OF APPLIED SCIENCE DEGREE: *Aviation Electronics (Avionics) Technology, GTCC*

BACHELOR OF SCIENCE DEGREE: *Aviation Science – Aviation Electronics, ECSU*

ECSU Course	Title	Sem. Hrs.	GTCC Equivalent Course	Sem. Hrs.
Major Core Requirements 37 Hrs.				
AVI 100	Introduction to Aviation	3	AER 113 History of Aviation and AER 211 ATC	2 1
AVI 122	Orientation Seminar for Aviation Science	1		
AVI 220	Air Transportation	3	AER 217 Air Transportation	3
AVI 230	Aviation Management	3		
AVI 250	Basic Aerodynamics	3	AER 210 Flight Dynamics	3
AVI 260	Aviation Human Factors & Safety	3	AER 218 Human Factors in Aviation and AER 211 ATC	2 1
AVI 270	ATC and the NAS	3	AER 110 Air Navigation	3
AVI 314	Aviation Meteorology	3	AER 111 Aviation Meteorology	3
AVI 315	Aviation Legislation& Ethics	3	AER 112 Aviation Laws and FARs and AER 220 Airport Management	2 1
FLT 110	Private Pilot Ground	3	AER 150 Private Pilot Flight Theory	3
AVI 411	Transition to the Aviation Industry	3		
AVI 370	Aviation Research Methods and Stats	3		
AVI 460	Aviation Internship			
	<u>OR</u>	3		
AVI 465	Aviation Capstone			
Avionics Concentration 30 Hrs.				
AVNC 100	Basic Avionics	3	AET 126 Electronics/Instruments and AET 214Aviation Navigation Systems	2 1
ENGT 100	Intro to Engineering Technology	3		
ENGT 105	CAD I	3		
AVNC 240 or ENGT 340	Flight Communication System OR Analog & Digital Communications	3	AET 220 Flight Management and AET 222 Aviation System Interconnect	2 1

AVNC 360 OR ENGT	Advanced Avionics OR Any 300 or above Electronics Course	3	AET 212 Aviation Communications Systems and AET 214 Aviation Navigation Systems	2 1
AVNC 380 Or ENGT 360	Flight Control System Or Control Systems	3		
ENGT 205/L	Circuit Analysis	4	AET 122 Airframe Electrical and AET Aviation Engine Electrical	2 2
ENGT 235/L	Analog & Digital Circuits I with Lab	4		
ENGT 335/L	Analog & Digital Circuits II with Lab	4		
Electives (Technical Restrictive 6*) 18 Hrs.			**	
			AET Aviation Engine Electrical	2
			AET 224 Advanced Wire/Troubleshooting	4
			AET 226 Flight Line Testing	2

General Education Core..... 35 Hrs.
Major Core Requirements..... 37 Hrs.
Avionics Concentration..... 30 Hrs.
Electives..... 18 Hrs.
Total Hours Required for Degree.... 120 Hrs.

** Technical Restrictive Electives include any department courses not specifically included in the student's selected concentration.
Total Transfer Credit: 42 Credit Hours of the 78 required of the AVI Major/Flight Education Concentration. Depending on amount of GE transfer, students will be required to take a minimum of 36 credit hours for a B.S. in Aviation Science.