

# AVIATION MAINTENANCE TECHNICIAN PROGRAM



**DUTCHESS**  
COMMUNITY COLLEGE

# GENNA SURACI

*Program Coordinator*  
Aviation Maintenance  
Technician Program

## Experience

### **TWA & Tower Airline**

Airframe & Powerplant (A&P) Technician ► 18 years

### **Aviation High School**

Instructor of Aviation Mechanics ► 9 years

### **Ulster County BOCES Career & Tech School**

Principal ► 21 years

### **Westchester Aviation Mechanics Association**

Member

# DCC & AVIATION

## Two Associate in Science Degrees Currently Offered



### **Pilot, A.S.**

Introduced in 2005

### **Aviation Management, A.S.**

Introduced in 2012



# SUCCESSFUL OUTCOMES



“My years at DCC were instrumental in giving me the tools, knowledge and guidance I needed to chase my dreams.”

**RYAN FINN**

JetBlue pilot

DCC '08

Embry-Riddle Aeronautical University '10

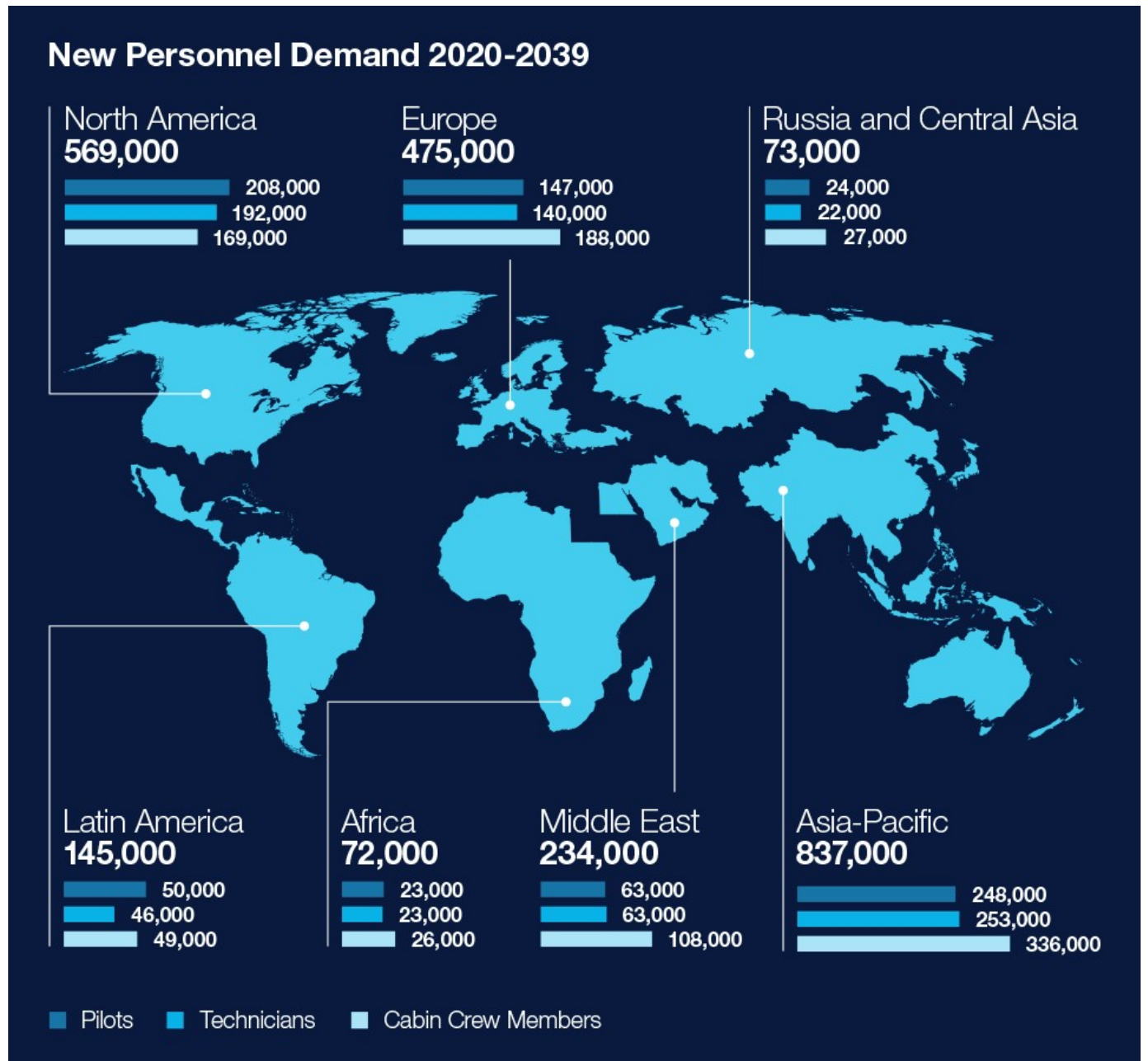


# AIRFRAME MAINTENANCE TECHNICIAN PROGRAM

(Airframe and Powerplant License)

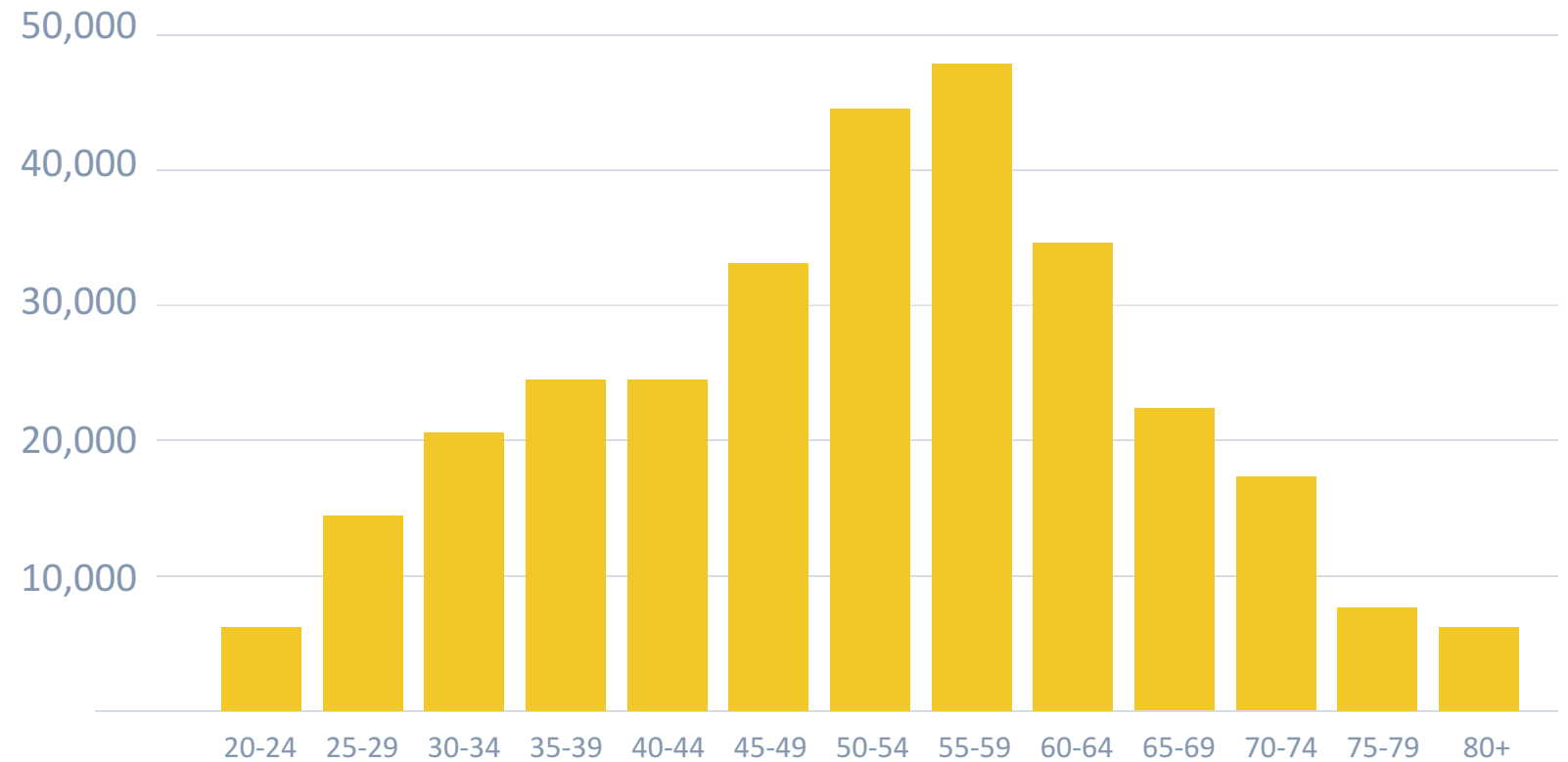


# JOB OUTLOOK 2020-2039



# WORKFORCE DEMOGRAPHICS

## Aviation Mechanic Age Distribution





# ANNUAL SALARY DATA\*

## **Aircraft Mechanic – Jet**

Average: \$83,726

## **Aircraft Mechanic – Non-Jet**

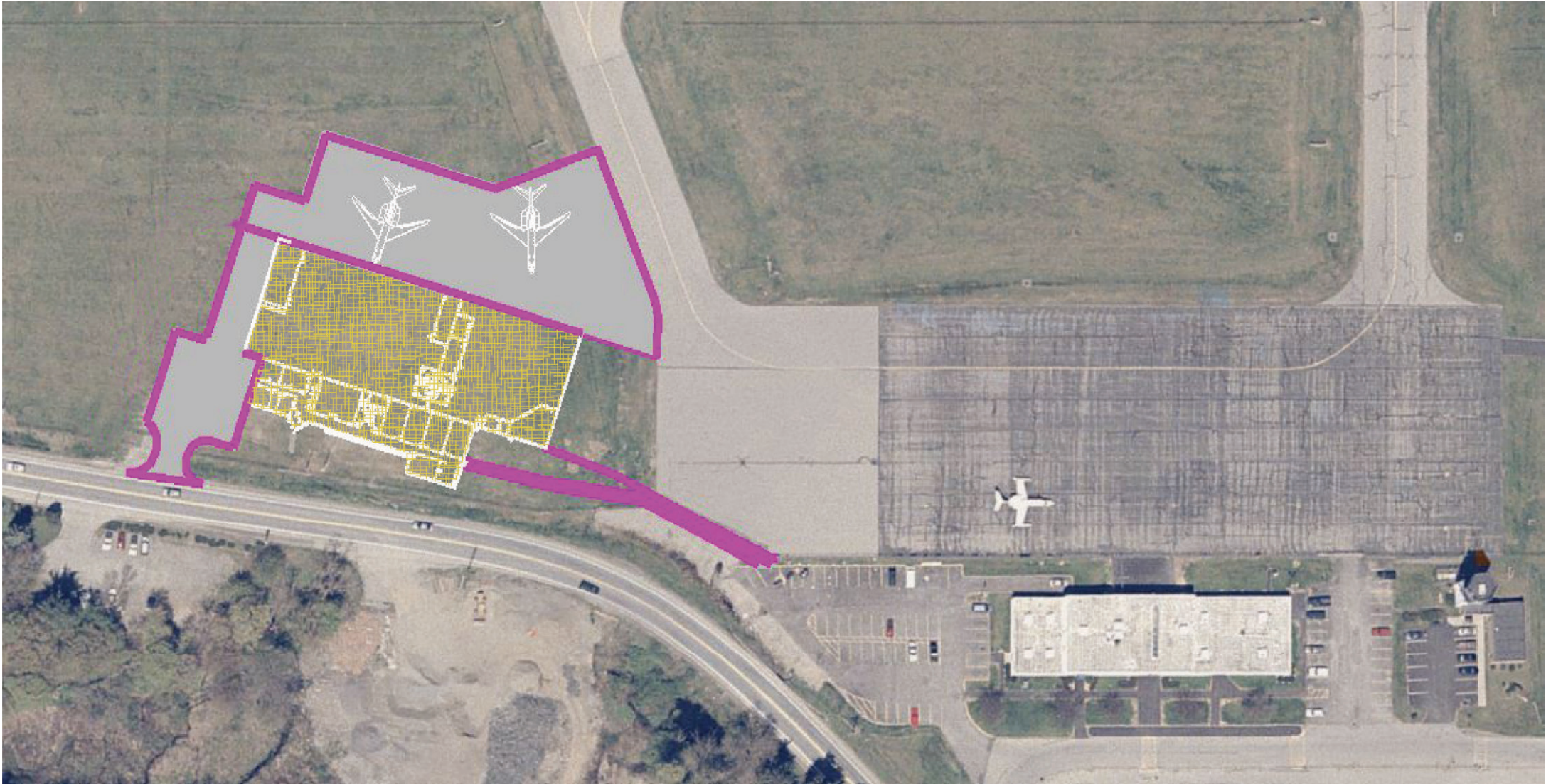
Average: \$66,059

\*Source: Salary.com, data  
updated September 1, 2018

# LAYOUT & RENDERINGS

The background image is a high-speed train, possibly a Shinkansen, traveling on a track. The entire image is tinted with a deep blue color. The train is positioned diagonally, moving from the bottom left towards the top right. The text 'LAYOUT & RENDERINGS' is superimposed over the center of the image. 'LAYOUT' and 'RENDERINGS' are in white, while the ampersand '&' is in a bright yellow color.

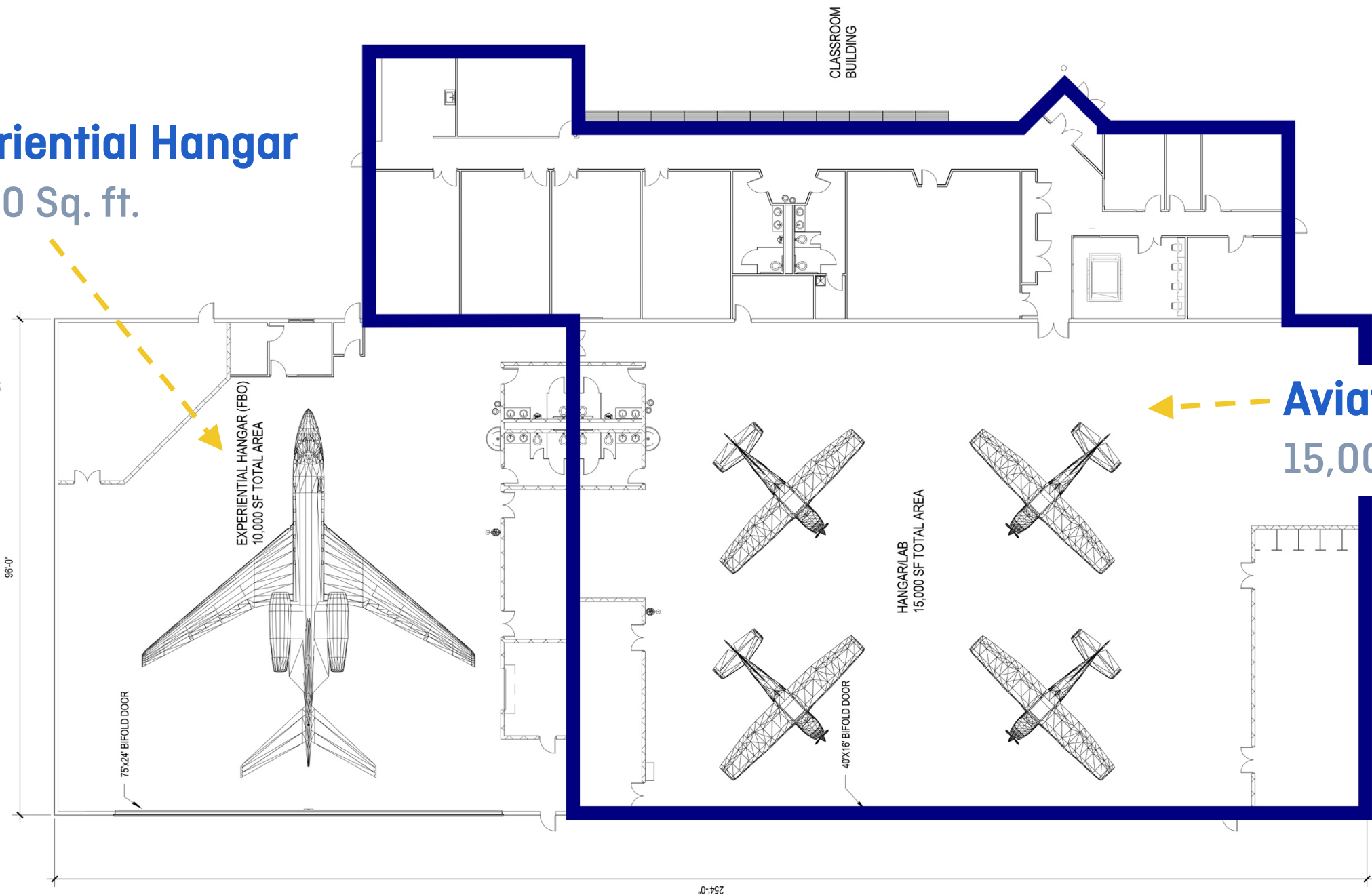
# DCC HANGAR at Hudson Valley Airport





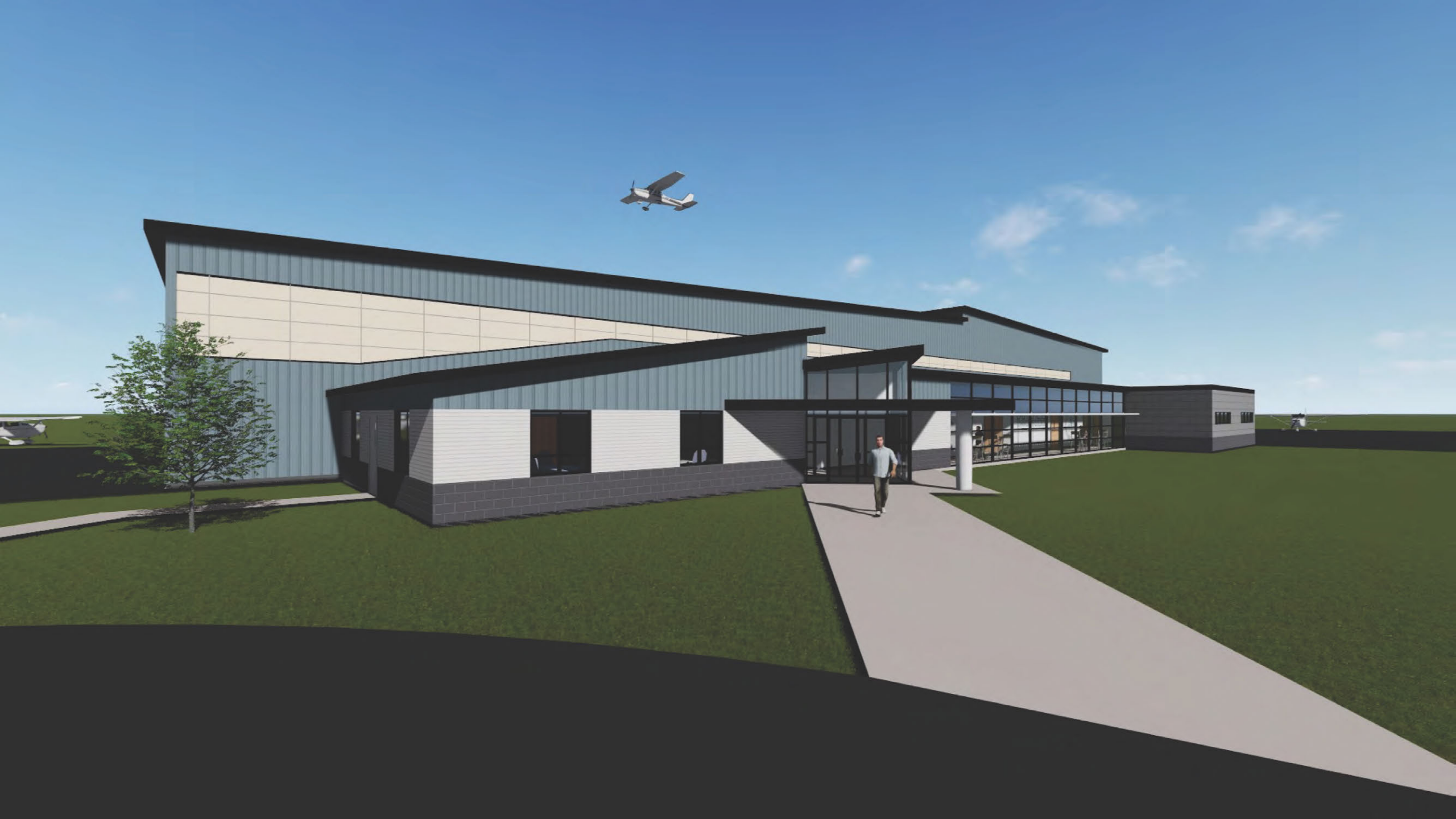
# Experiential Hangar

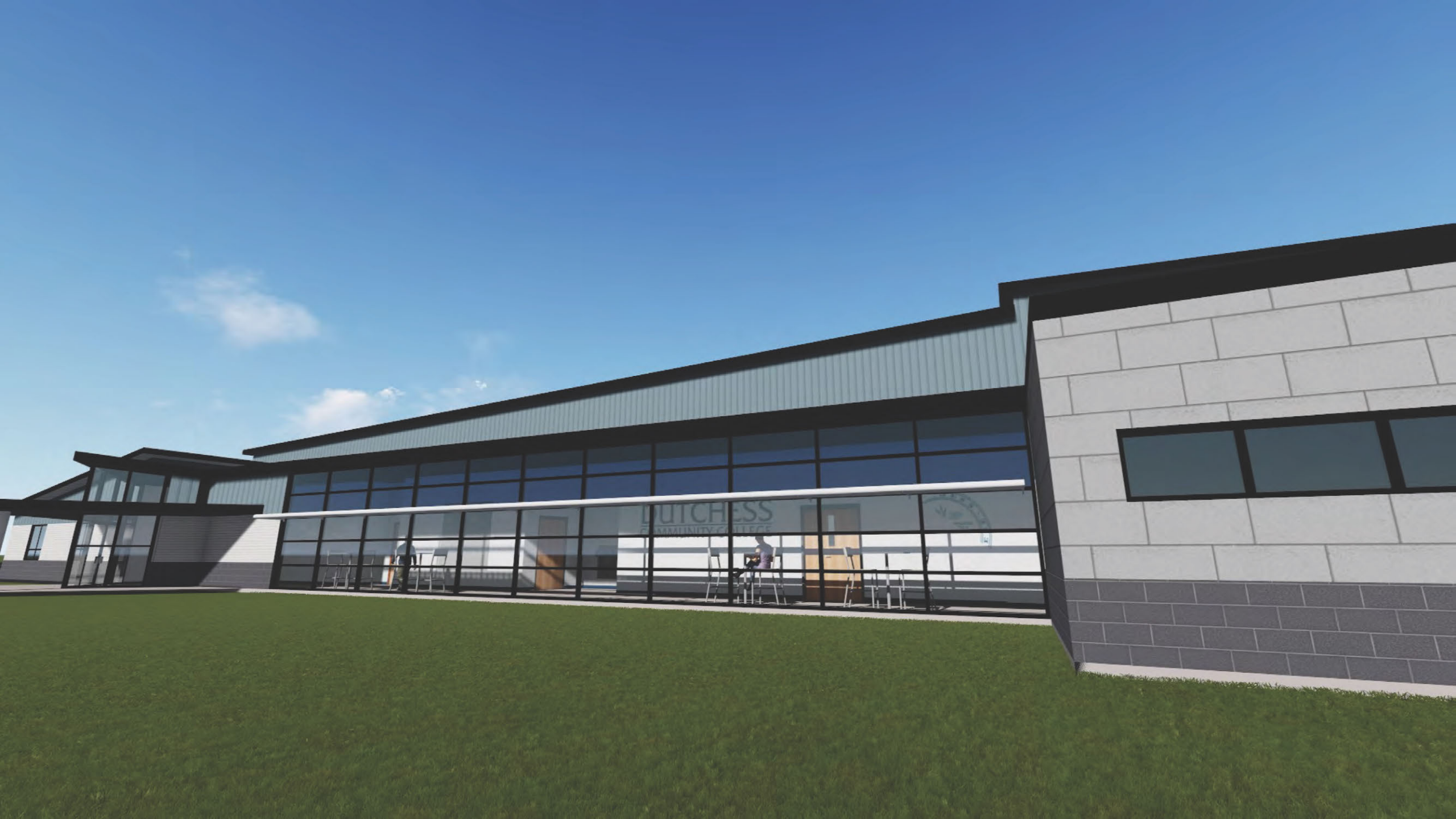
10,000 Sq. ft.



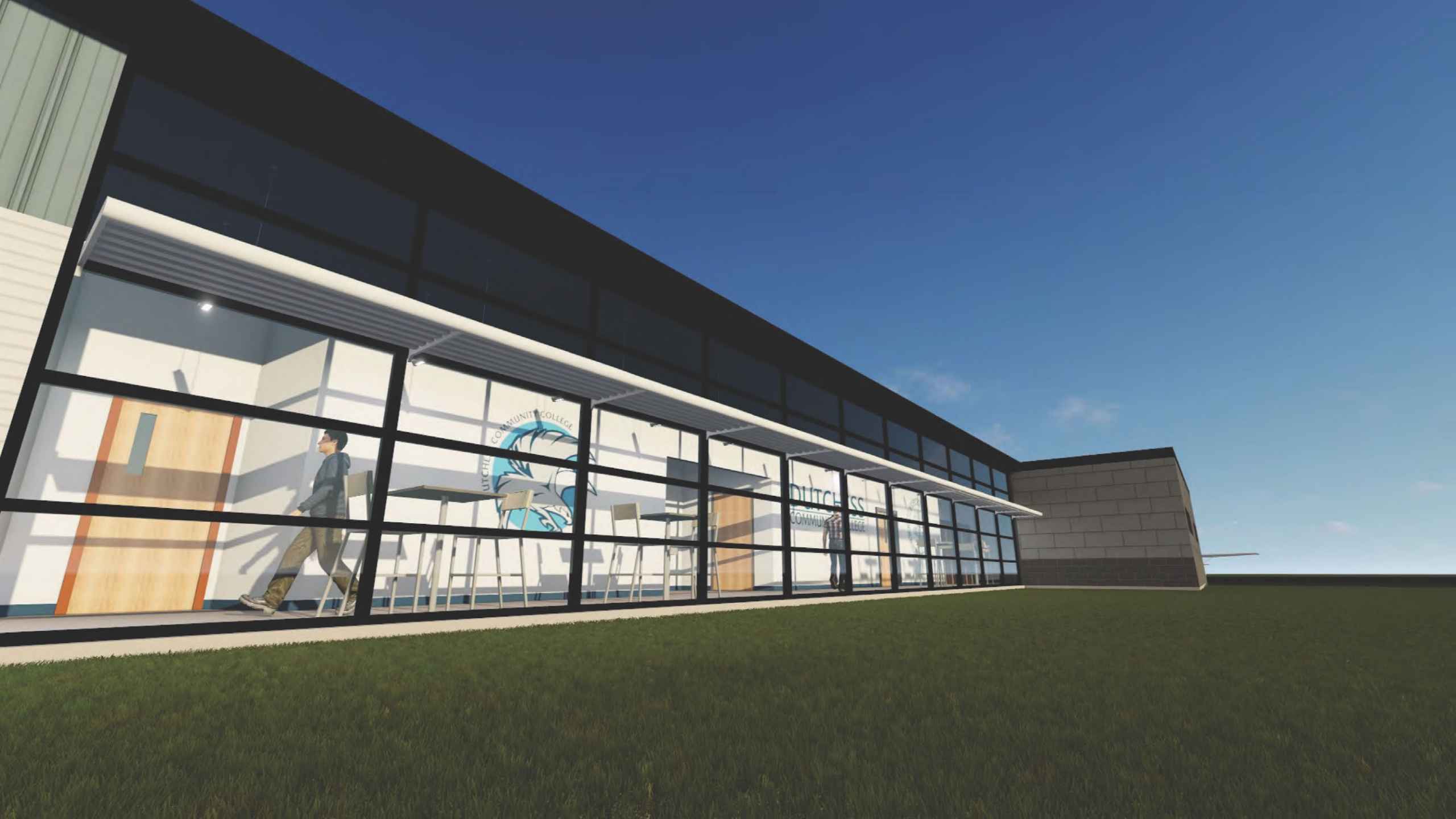
# Aviation Lab

15,000 Sq. ft.





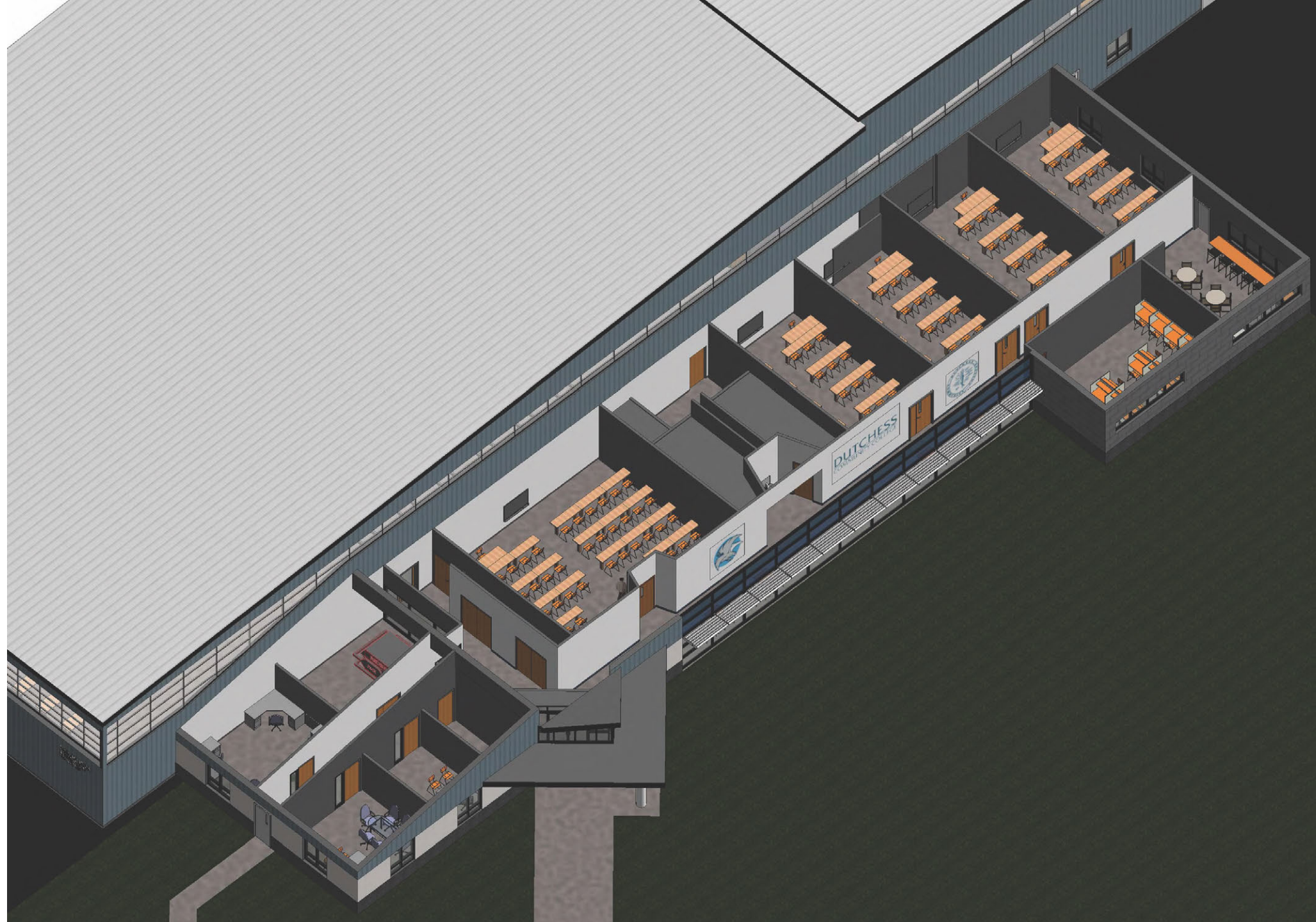




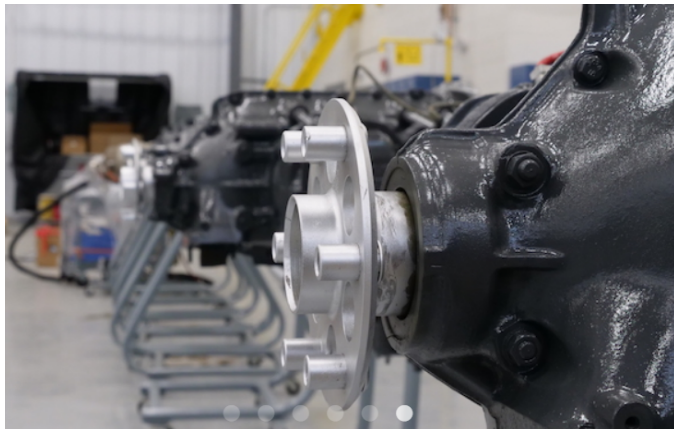














# Program Information

If you have a high degree of mechanical aptitude, the Dutchess Community College's aviation maintenance technician degree or certificate program is for you. In just 12-20 months, you will learn how to keep aircraft operating safely and efficiently, and gain experience in servicing, repairing and testing aircraft and aircraft systems. And in this high-demand field, graduates are well-prepared to apply their skills across the country and around the globe.

Students can take advantage of two programs:

Airframe and Powerplant Technician (APC) certificate program  
(12 months)

Aviation Maintenance Technician (AMT) Associate in Applied  
Science (AAS) degree (20 months)

# Program Information

## Semester 1

AMT 101	General Maintenance Practices
AMT 102	Materials and Processes & Inspection Practices
AMT 103	Basic Electricity
AMT 104	Airframe Systems 1

## Semester 2

AMT 105	Airframe Systems 2
AMT 106	Airframe Structures 1
AMT 107	Airframe Structures 2
AMT 108	Welding & Airframe Inspection
AMT 109	Intro to <u>Powerplant</u> and Reciprocating Engines I



# Program Information

## Semester 3

AMT 110

Reciprocating Engines II

AMT 111

Turbines and Powerplant Systems I

AMT 112

Powerplant Systems II

AMT 113

Electrical Systems, APU's & Engine Inspection

# Program Information

## General, Airframe and Powerplant Curriculum

<b>General Curriculum</b>	<b>Theory Hrs.</b>	<b>Lab Hrs.</b>	<b>Total Hrs.</b>
Mathematics	16	2	18
Aircraft Drawings	10	11	21
Basic Physics	10	2	12
Weight and Balance	20	15	35
Materials and Processes	33	32	65
Cleaning and Corrosion Control	20	15	35
Fluid Lines and Fittings	20	10	30
Basic Electricity	60	25	85
Safety, Ground Operation/Servicing	17	10	27
Maintenance Forms, Records & Publications	14	13	27
Mechanic Privileges and Limitations	15	1	16
Human Factors (taught throughout the curriculum)	10	0	10
General aircraft inspection procedures (Capstone Inspection)	0	20	20
<b>Total Curriculum Hours/General</b>	<b>245</b>	<b>156</b>	<b>401</b>

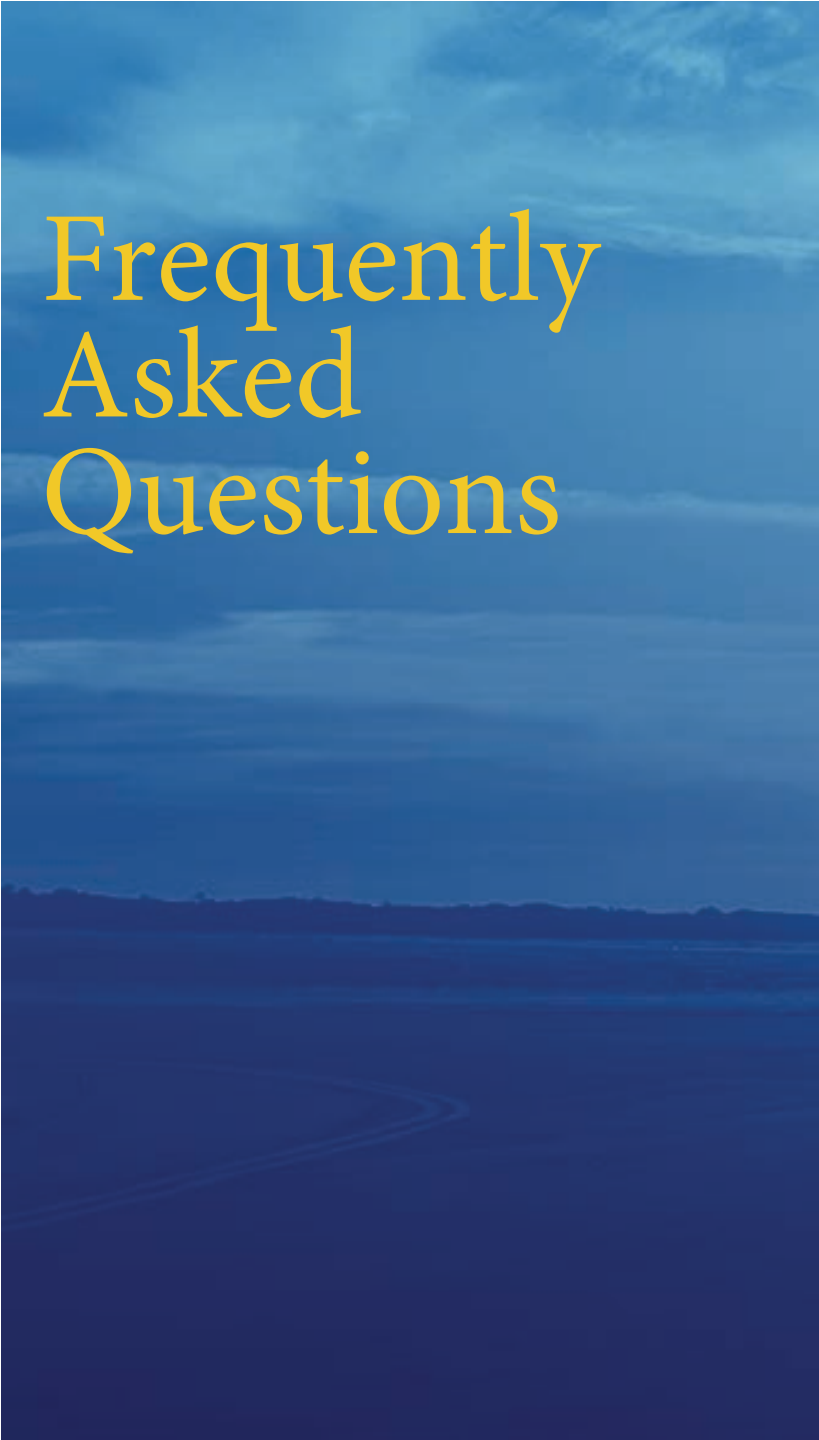
# Program Information

<b>Airframe Curriculum</b>	<b>Theory Hrs.</b>	<b>Lab Hrs.</b>	<b>Total Hrs.</b>
Wood Structures	9	0	9
Aircraft Covering	9	0	9
Aircraft Finishes	10	15	25
Sheet Metal and Nonmetallic Structures	55	130	185
Welding	15	40	55
Assembly and Rigging	20	35	55
Aircraft Landing Gear Systems	20	35	55
Hydraulic and Pneumatic Power Systems	20	30	50
Cabin Atmospheric Control Systems	32	3	35
Aircraft Instrument Systems	20	5	25
Communication and Navigation Systems	29	1	30
Aircraft Fuel Systems	31	9	40
Aircraft Electrical Systems	40	50	90
Position and Warning Systems	10	10	20
Ice and Rain Control Systems	15	5	20
Fire Protection Systems	15	15	30
General airframe inspection procedures (Capstone Inspection)	0	20	20
<b>Total Curriculum Hours/Airframe</b>	<b>350</b>	<b>403</b>	<b>753</b>



# Program Information

<b>Powerplant Curriculum</b>	<b>Theory Hrs.</b>	<b>Lab Hrs.</b>	<b>Total Hrs.</b>
Reciprocating engines	76	103	179
Turbine	54	59	113
Engine Instrument Systems	10	15	25
Engine Fire Protection Systems	5	10	15
Engine Electrical Systems	20	30	50
Lubrication Systems	30	35	65
Ignition and Starting Systems	25	35	60
Fuel Metering Systems	32	21	53
Engine Fuel Systems	8	10	18
Induction Engine Airflow Systems	8	12	20
Engine Cooling Systems	5	10	15
Engine Exhaust and Reverser Systems	8	12	20
Propellers	30	60	90
Unducted Fans	3	0	3
Turbine Powered Auxiliary Units	4	0	4
General <u>powerplant</u> inspection procedures (Capstone Inspection)	0	20	20
<b>Total Curriculum Hours/Powerplant</b>	<b>318</b>	<b>432</b>	<b>750</b>

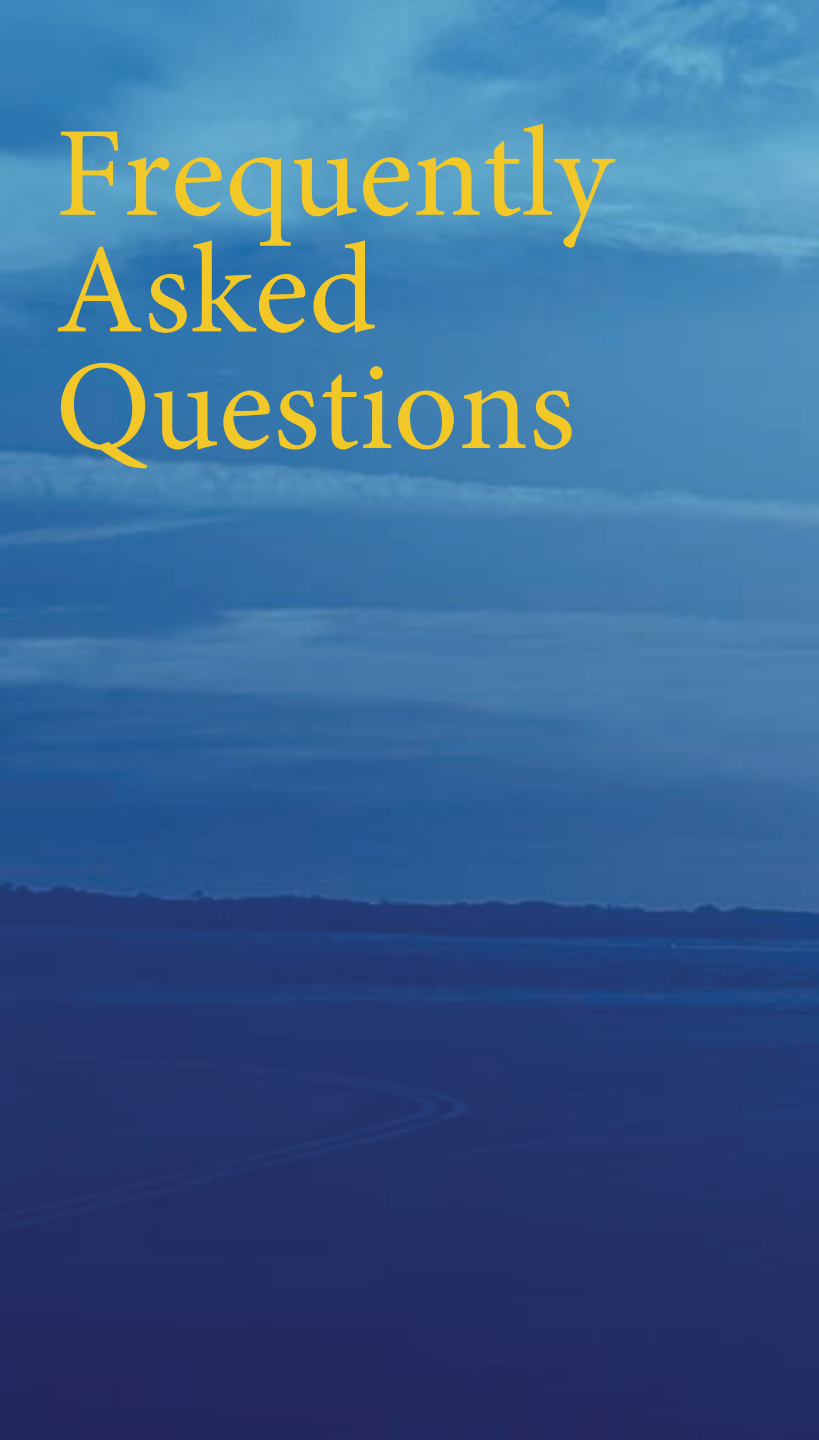


# Frequently Asked Questions

## **What do I have to do to enroll in the Airframe and Powerplant Technician Certificate?**

DCC admits only 25 students into each cohort of the program. Cohorts are scheduled to start in August, January and April of each year. Registration is first-come-first-served, so it's essential to register early.

Your first step is to apply to DCC and select the Airframe and Powerplant Technician Certificate program. You will get an acceptance letter, an ID number and instructions to complete a required program orientation. Once accepted, you will need to meet with your academic coach to review your degree plan and register for your courses.



# Frequently Asked Questions

**When will the program start and what will my academic calendar/schedule be like?**

The Airframe and Powerplant Technician Certificate has 3 consecutive terms. The terms for this program do not start/end like the regular semesters for all other programs. This program is designed to be completed as quickly as possible. Students will have a 40-hour/week schedule (8 hours of instruction/day) with some Saturdays required.

**How long is this program?**

Students enrolled can complete this certificate program in 3 terms, as little as 1 year.



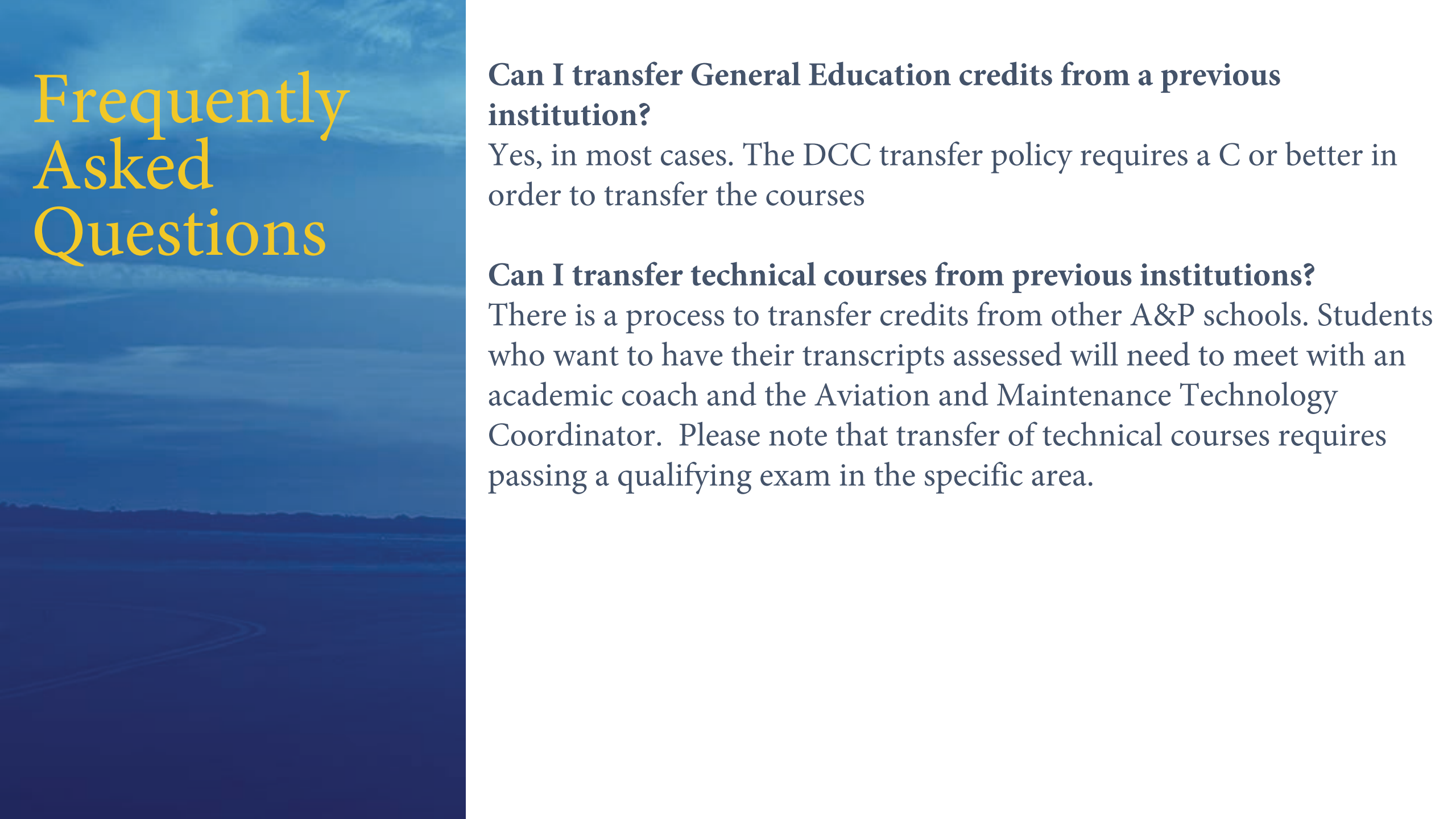


# Frequently Asked Questions

## **What are the main degree requirements?**

There are 13 technical classes that students will take in sequence across 3 terms. The Airframe and Powerplant Technician Certificate is designed so that students take one technical course at a time, completing 4-5 technical courses each term. Completion of the Certificate also requires completion of two academic courses in the first and third terms.

Students must earn a 70% or higher in each technical course in order to proceed to the next technical course in the sequence. Students cannot fail more than one course in the program.



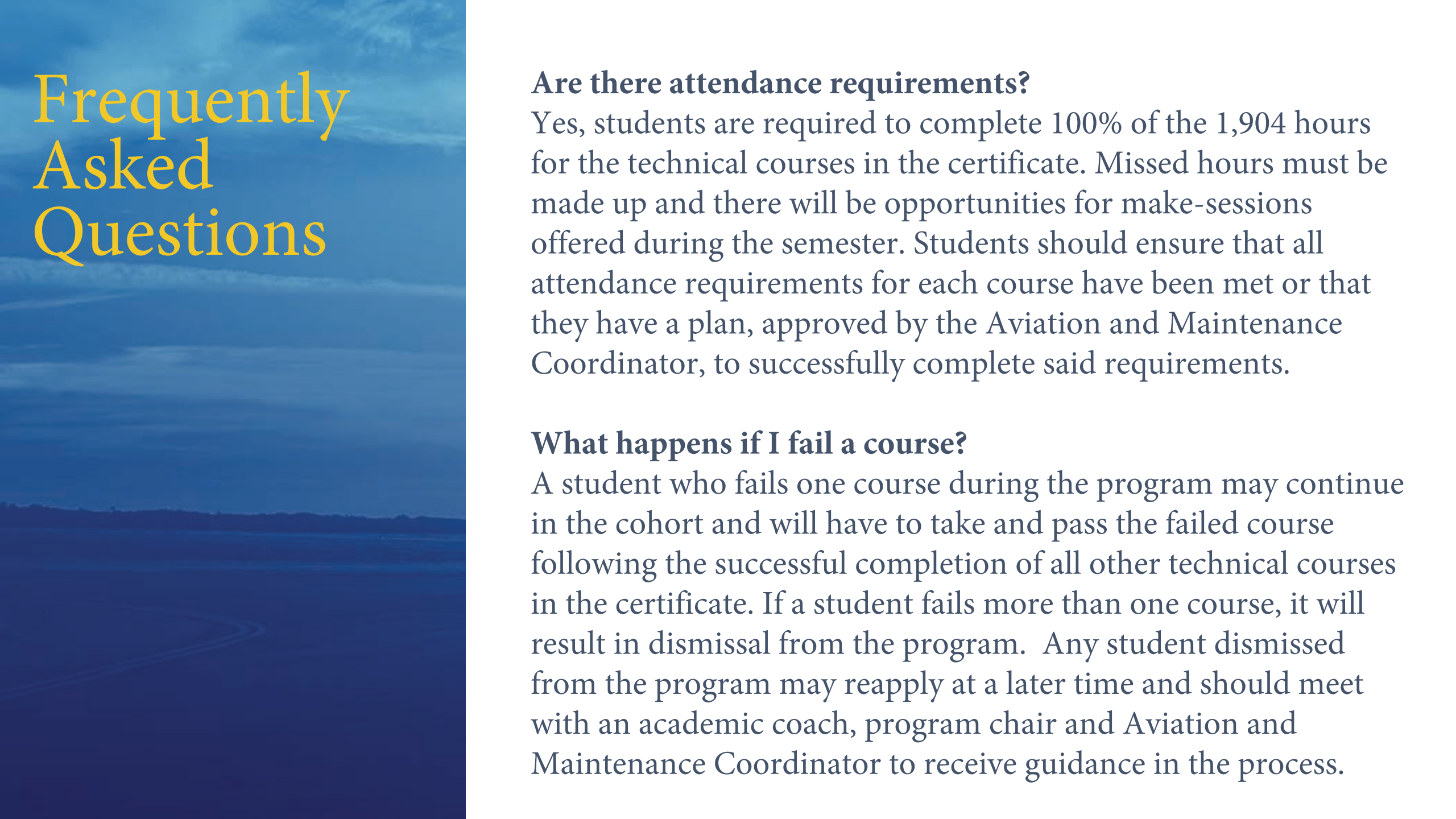
# Frequently Asked Questions

**Can I transfer General Education credits from a previous institution?**

Yes, in most cases. The DCC transfer policy requires a C or better in order to transfer the courses

**Can I transfer technical courses from previous institutions?**

There is a process to transfer credits from other A&P schools. Students who want to have their transcripts assessed will need to meet with an academic coach and the Aviation and Maintenance Technology Coordinator. Please note that transfer of technical courses requires passing a qualifying exam in the specific area.



# Frequently Asked Questions

## **Are there attendance requirements?**

Yes, students are required to complete 100% of the 1,904 hours for the technical courses in the certificate. Missed hours must be made up and there will be opportunities for make-sessions offered during the semester. Students should ensure that all attendance requirements for each course have been met or that they have a plan, approved by the Aviation and Maintenance Coordinator, to successfully complete said requirements.

## **What happens if I fail a course?**

A student who fails one course during the program may continue in the cohort and will have to take and pass the failed course following the successful completion of all other technical courses in the certificate. If a student fails more than one course, it will result in dismissal from the program. Any student dismissed from the program may reapply at a later time and should meet with an academic coach, program chair and Aviation and Maintenance Coordinator to receive guidance in the process.



# FINANCIAL OVERVIEW

## Aviation Technician Program Fees

Students seeking financial aid or scholarships should complete the Free Application for Federal Student Aid (FAFSA) to determine eligibility. Visit the [Financial Aid and Scholarship webpages](#) for information about different types of financial aid, scholarship opportunities and payment plans.

### Airframe and Powerplant Technician (APC) Fees

	Semester 1	Semester 2	Semester 3	Totals
Tuition	\$2,175.00	\$2,175.00	\$2,175.00	\$6,525.00
A & P Lab Fee	\$3,456.00	\$4,320.00	\$3,456.00	\$11,232.00
Student Fees	\$306.00	\$270.00	\$306.00	\$882.00
Tools	\$2,000.00			\$2,000.00
Books & Supplies	\$504.00		\$180.00	\$684.00
Totals	\$8,441.00	\$6,765.00	\$6,117.00	\$21,323.00

\* Tuition reflects New York State residency. Tuition and fees subject to change.

# QUESTIONS

**DUTCHESS**  
COMMUNITY COLLEGE