## CCBC Aviation Academy

## Strategic Master Plan

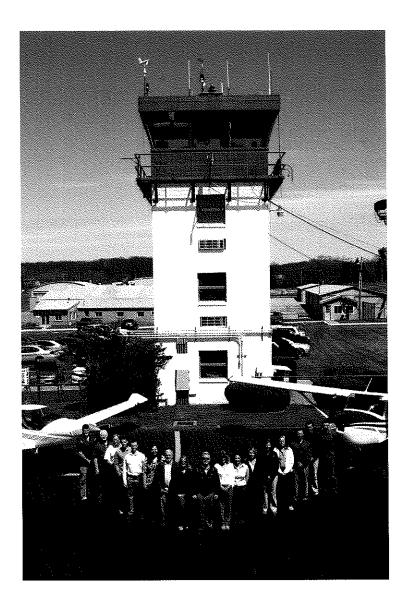




13 Nov 2014

## CCBC Aviation Academy Overview

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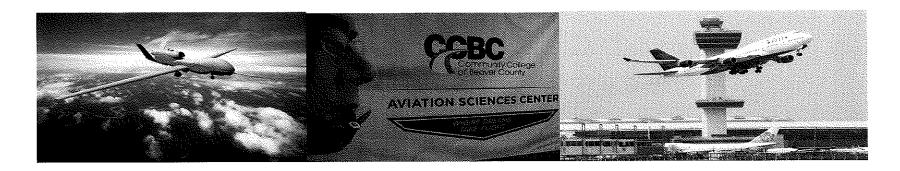


## CCBC Aviation Academy Vision & Mission Statement

### Vision

To establish and maintain a culture of aviation and excellence by providing the <u>opportunity for students</u> to pursue their aspirations within the aerospace industry; we emphasize:

Integrity, Professionalism, & Pursuit of Excellence



### **Mission Statement**

Provide a rigorous educational program with an aviation focus that prepares students for unlimited opportunities, including college achievement, career success, and engaged citizenship

# CCBC Aviation Academy Student Objectives

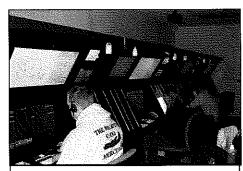
- Experience Hands-On Instruction From Caring and Dedicated Faculty
- Develop Skills In Aviation, Science, Technology, Engineering and Math
- Demonstrate Responsibility and Accountability
- Thrive In An Environment of Higher Behavioral Expectations
- Acquire Skills for Effective Leadership and Life-Long Learning
- Jump Start Exciting College Education
- Prepare for a Dynamic, Life-long Career in the Aviation Field



"STEM education creates critical thinkers, increases science literacy, and enables the next generation of innovators."

Francis Eberle, Ph.D., Executive Director for the National Science Teachers Association

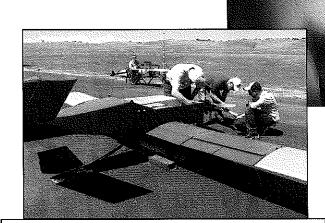
# CCBC Aviation Academy Aviation Programs



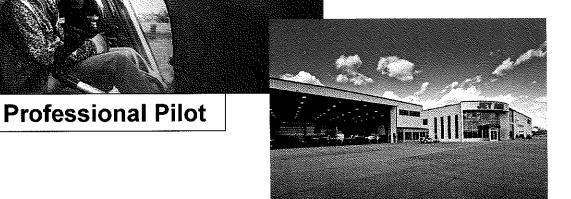
Air Traffic Control Enroute



Air Traffic Control
Terminal



**Unmanned Aerial Vehicles** 



**Aerospace Management** 

Five Dynamic Aviation Programs with Strong Career Paths

## CCBC Aviation Academy Aviation Curriculum (Courses Available)

#### **Aviation Courses**

- AVIP 101 Intro to Aviation
- AVIP 106 Private Pilot
- AVIP 110 Flight Theory
- AVIP 121 Aviation Meteorology
- AVIP 123 Aeronautical Knowledge
- AVIP 136 Theory of Instrument Flight
- AVIP 150 Human Factors in Aviation
- AVIP 232 Instrument Flight
- AVIC 236 ATC Procedures
- AVIP 240 Intro to UAV Pilot

#### **General Courses**

- CIST 100 Intro to Info Technology
- WRIT 101 English Composition
- MATH 130 College Algebra
- LITR 210 Concepts of Literature
- WRIT 103 Writing for Business & Tech
- PHYS 101 College Physics I
- PHYS 105 Physical Science
- ACCT 110 Financial Accounting
- BUSM 112 Principles of Management

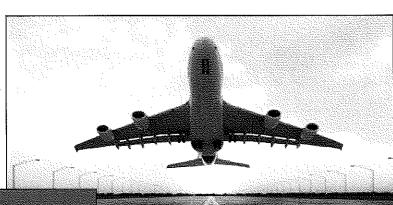
Balanced Aviation & General Education Requirements; Tremendous Flexibility in Course Options

# CCBC Aviation Academy Course Mapping Example

#### 1<sup>st</sup> Year

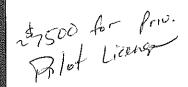
- AVIP 101 Intro to Aviation
- CIST 100 Intro to Info Tech
- AVIP 110 Flight Theory
- AVIP 123 Aero Knowledge

\$918/semester for a convises No cost for books on uniforms 1st year



#### 2<sup>nd</sup> Year

- AVIP 106 Private Pilot
- WRIT 101 English Comp.
- AVIP 236 ATC Procedures
- MATH 130 College Algebra



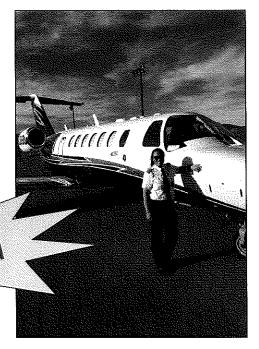


- AVIP 121 Av. Meteorology
- AVIP 136 Theory of Inst. Flight
- AVIP 232 Instrument Flight
- · LITR 210 Concepts of Lit



## Pro Pilot Career Opportunities

- Boeing/FAA, 20 year forecast
  - 533,000 NEW Commercial Pilots needed worldwide
  - ~90,000 in the United States
  - ~4500/year military, collegiate & general aviation cannot meet demand
  - This is <u>JUST</u> Airline requiremen
  - · Corporate, Charter, Military High Demand





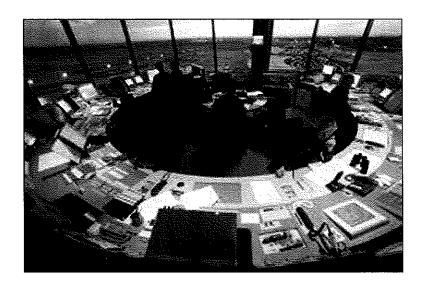
- · 23 Regional Pilot (\$30K)
- 28 Major Airline Pilot (\$60-125K)
- 33 Major Airline Captain (\$150-250K)
- 65 Mandatory Retirement



42 year Career: Pay/Benefits ~\$11,000,000

## ATC Career Opportunities

- Need qualified Applicants/Personnel for the foreseeable future
  - 6600 new, fully qualified controllers over the next 5 years
  - 2 Major suppliers: Collegiate & Military
  - CCBC: Premier program in the US





### **Controller Career Arc**

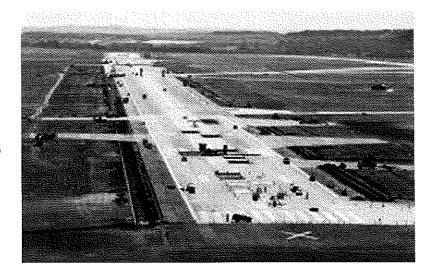
- Starting Pay Trainee (\$40K)
- Upgrading in Field: 3 years (\$55-105K)
- Fully Qualified (\$115-180K)
- · Retirement: immediate pension

**Excellent Pay & Benefits: Constant Demand** 

## Aerospace Management Career Opportunities

### **Aviation touches many fields of study**

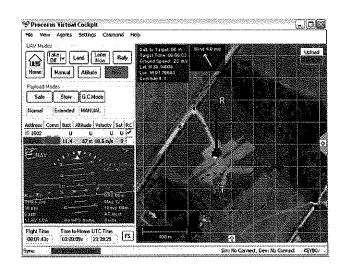
- As Airlines and Commercial Aviation expands so does the need for professional support and staff
  - Engineers All Fields from Civil to Aeronautical
  - Financial Accountants, Managers
  - Lawyers
  - Airport designers and planners
  - Business ownership
  - Construction profession and trades
  - Flight Dispatchers
  - Security

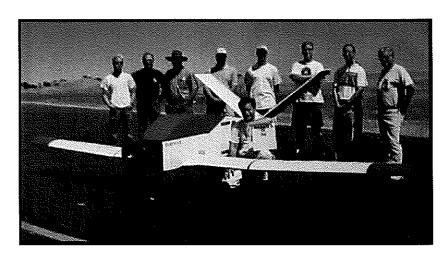


Diverse Aviation-linked Career Pathways

### **UAV Career Opportunities**

- Rapidly expanding industry within the US
  - Estimates currently indicate a strongly growing \$15 Billion/year Industry, and \$80 Billion/year Industry by 2025
  - FAA approval of commercial drones projected to create 70,000 new US jobs within the next five years, and 100,000 new US jobs by the year 2025





### **UAV Pilot Career Arc**

- Starting Pay (\$50K-\$80K)
- Mid-level Experience: (\$90K-120K)
- Senior Experience: (\$125K-200K)
- Excellent Benefit Packages

Federal, State, Corporate career opportunities



## Educational Cost Comparison

### **CCBC Aviation Programs**

- Associate Degree
  - Two year, 62/63 Credits
  - Tuition/Fees: ~\$8900
- SIU Articulation at CCBC
  - · Bachelors Degree
  - 4 year, 120+ Credits
  - Tuition & Fees: ~\$11K/Year
- Flying costs are additional
  - Pro Pilot ~\$29,600 (\*PA)
    - Private Pilot, Instrument, Commercial

### **Private Aviation Programs**

- Bachelors Degree
  - Four year, 120+ Credits
  - Tuition/Fees: ~\$32K/Year
  - Room & Board: ~\$10K/Year

- Flying costs are additional
- Pro Pilot ~\$60K total
  - Private Pilot, Instrument, Commercial

#### **CCBC Total Costs**

- Pro Pilot, 4 Year Degree: ~\$60K
- UAV, 4 Year Degree: ~\$45K
- ATC, 2 Year Degree: ~\$17K
- Aero Mgt, 4 Year Degree: ~\$30K

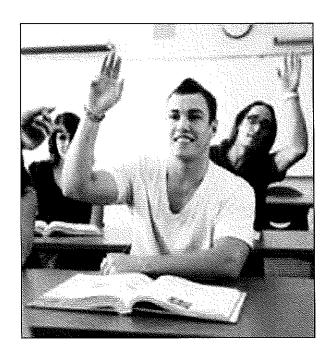
### **Private Total Costs**

- Pro Pilot, 4 Year Degree: <u>~\$230K</u>
- UAV, 4 Year Degree: ~\$200K
- ATC, 4 Year Degree: ~\$168K
- Aero Mgt, 4 Year Degree: ~\$168K

Unmatched Value: ~30% Cost of Private Institution

## CCBC Aviation Academy Advantages

- 1. Jump Start College Experience
- 2. STEM Focus
- 3. Introduce Dynamic Career Pathways
- 4. Cost Effective
- 5. Disciplined Educational Environment
  - a) Simulators
  - b) Flying
  - c) Critical Thinking



Opportunity to Graduate High School with ~37 College Credits; Private Pilots Certification; and Instrument Rating

# CCBC Aviation Academy Important Topics

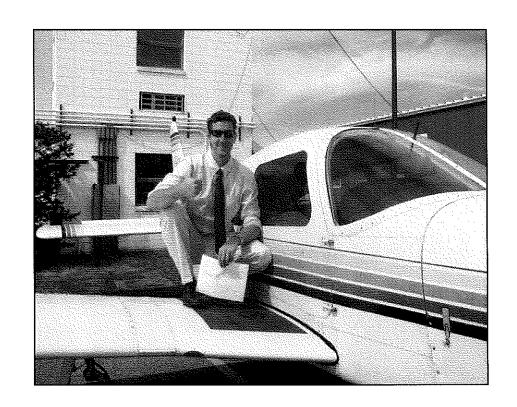
- 1. Academy Start Date
  - a) Spring Semester (20 Jan 15)
  - b) AM / PM Classes
- 2. Student Eligibility
  - a) 3.0 GPA
  - b) Good Attendance & Conduct
- 3. Marketing / Outreach
  - a) Principals/Guidance
  - b) Student Assemblies
  - c) Parents / Students Open House
- 4. Costs / Transportation
  - a) Tuition / Fees / Books
  - b) POVs / Buses
- 5. Student Guidelines



The Next Step

## CCBC Aviation Academy

"We Build Dreams, We Train Professionals"



Discussion