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Community College
of Baltimore County

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Dr. James D. Fielder, Jr.
Secretary
Maryland Higher Education Commission
6 North Liberty Street
Baltimore, Maryland 21201

December 5, 2019

Dear Secretary Fielder,

The Community College of Baltimore County is proposing substantive program changes for the A.A.S. degrees in Professional Pilot-Airplane, Professional Pilot-Helicopter, and Professional Pilot-Unmanned Aircraft Systems. These changes will provide a more efficient process for student accomplishment of Federal Aviation Administration (FAA) pilot certifications and ratings while earning a degree.

Aviation Technology has been offered at The Community College of Baltimore County (CCBC) since 1974. Graduates of this program successfully find employment in the local economy, as there is a very large concentration of aviation activity in the metropolitan areas across the mid-Atlantic region. The Professional Pilot programs directly support CCBC's mission by encouraging students to value lifelong learning, personal development, active citizenship, and educational and professional advancement.

The Professional Pilot-degree programs prepare students for employment as FAA-certificated commercial pilots with specialized training in airplane, helicopter, or Unmanned Aircraft Systems. Maryland has one of the highest concentrations of aviation activity in the nation with four major airport hubs and eight busy helicopter bases located in the Baltimore-Washington-Philadelphia region.

With submission of this proposal, CCBC seeks approval of substantial modifications to the Professional Pilot programs. The appropriate fee has been forwarded. Thank you for your consideration of this request. Feel free to contact me with any questions.

Sincerely,

Jack McLaughlin
Interim Vice President of Instruction

cc: Melissa Hopp
Jennifer Kilbourne
Doug Kendzeirski
Doug Williams

Office Use Only: PP#

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Cover Sheet for In-State Institutions
New Program or Substantial Modification to Existing Program

Institution Submitting Proposal	Community College of Baltimore County

Each action below requires a separate proposal and cover sheet.

- ○ New Academic Program
- ○ New Area of Concentration
- ○ New Degree Level Approval
- ○ New Stand-Alone Certificate
- ○ Off Campus Program
- ◉ Substantial Change to a Degree Program
- ○ Substantial Change to an Area of Concentration
- ○ Substantial Change to a Certificate Program
- ○ Cooperative Degree Program
- ○ Offer Program at Regional Higher Education Center

Payment Submitted: ◉ Yes ○ No | Payment Type: ○ R*STARS ◉ Check | Payment Amount: $250 | Date Submitted: 12/18/19

Department Proposing Program	Aviation Technology	
Degree Level and Degree Type	Associate of Applied Science	
Title of Proposed Program	Professional Pilot-Airplane	
Total Number of Credits	67	
Suggested Codes	HEGIS: 5302.04	CIP: 49.0102
Program Modality	◉ On-campus	○ Distance Education (*fully online*)
Program Resources	◉ Using Existing Resources	○ Requiring New Resources
Projected Implementation Date	◉ Fall ○ Spring ○ Summer	Year: 2020
Provide Link to Most Recent Academic Catalog	URL: http://catalog.ccbcmd.edu/preview_program.php?catoid=34&poid=19146&returnto=2772	
Preferred Contact for this Proposal	Name: Jennifer M. Kilbourne	
	Title: Dean, Curriculum and Assessment	
	Phone: (443) 840-1246	
	Email: jkilbourne@ccbcmd.edu	
President/Chief Executive	Type Name: Sandra Kurtinitis, Ph.D.	
	Signature: Sandra Kurtinitis	Date: 12/18/2019
	Date of Approval/Endorsement by Governing Board:	12/04/2019

Revised 3/2019

Professional Pilot-Airplane
Substantial Modifications to an Existing Program

A. Centrality to Institutional Mission and Planning Priorities:

1. Provide a description of the program, including each area of concentration (if applicable), and how it relates to the institution's approved mission.

   "The Community College of Baltimore County transforms lives by providing accessible, affordable, and high-quality education that prepares students for transfer and career success, strengthens the regional workforce, and enriches our community."(https://www.ccbcmd.edu/~/media/CCBC/About%20CCBC/Administrative%20Offices/PRE/strategic_plan.ashx) Aviation Technology has been offered at The Community College of Baltimore County (CCBC) since 1974. Graduates of this program successfully find employment in the local economy as there is a very large concentration of aviation activity in the metropolitan areas across the mid-Atlantic region. The Professional Pilot-Airplane program directly supports CCBC's mission by encouraging students to value lifelong learning, personal development, active citizenship, and educational and professional advancement.

   This proposal outlines substantial modifications to the Professional Pilot-Airplane program. Curricular changes will provide a more efficient process for student accomplishment of Federal Aviation Administration (F.A.A.) pilot certifications and ratings while earning an Associate of Applied Science (A.A.S.) degree. Flight training courses have been modified to ensure students are able to make appropriate academic progress within a given semester, working toward flight credentials. Breaking larger credit courses into smaller credit offerings will enable students to attain appropriate flight hours in a reasonable period of time.

2. Explain how the proposed program supports the institution's strategic goals and provide evidence that affirms it is an institutional priority.

   The Professional Pilot-Airplane program directly supports CCBC's strategic priority of Transformational Academics. CCBC will provide "the highest quality instruction and student services to improve students learning, reduce barriers that interfere with successful learning, and help students reach their educational goals. We will offer cutting-edge, market viable academic programing that prepares students for employment, transfer and mastering techniques of lifelong learning".

   Graduates of the Professional Pilot-Airplane training program complete all academic training required for the Federal Aviation Administration (F.A.A.) Commercial Pilot and Flight Instructor certificates. Pilots with these certificates may find employment with regional and major airlines, corporate flight departments, charter or cargo operators, agricultural flying, flight training centers, or with a government agency or military service. Non-flying positions are also available with the FAA or other federal, state and local aviation agencies.

3. Provide a brief narrative of how the proposed program will be adequately funded for at least the first five years of program implementation. (Additional related information is required in section L).

   CCBC currently offers the Professional Pilot-Airplane Associate of Applied Science (A.A.S.) degree program. It is adequately funded, within existing resources. The Aviation Technology program has four (4) full-time faculty, nine (9) on-campus adjunct instructors and seventy-five (75) part-time flight instructors assigned to instructing the Professional Pilot Airplane program.

4. Provide a description of the institution's a commitment to:
   a) ongoing administrative, financial, and technical support of the proposed program
   b) continuation of the program for a period of time sufficient to allow enrolled students to complete the program.

   The Professional Pilot-Airplane program was approved by CCBC's College Senate, President and Board of Trustees in 2014, thus appropriate funding has been in place for the last five years of program implementation. The College continues to financially support the Professional Pilot-Airplane program, allowing ample time for student completion.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan:

1. Demonstrate demand and need for the program in terms of meeting present and future needs of the region and the State in general based on one or more of the following:
   a) The need for the advancement and evolution of knowledge
   b) Societal needs, including expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education
   c) The need to strengthen and expand the capacity of historically black institutions to provide high quality and unique educational programs

   Provide evidence that the perceived need is consistent with the Maryland State Plan for Postsecondary Education.

   Professional Pilot-Airplane program will promote Strategy 5 of the Maryland State Plan for Postsecondary Education: "Ensure that statutes, regulations, policies, and practices that support students and encourage their success are designed to serve the respective needs of both traditional and non-traditional students." Students, both traditional and non-traditional, in the Professional Pilot-Airplane program bring valuable experience to the program and can utilize that experience in their movement toward degree completion and entrance into the aviation field in the State of Maryland. In addition, Strategy 8, "Develop new partnerships between colleges and businesses to support workforce development and improve workforce readiness", is addressed by the Professional Pilot-Airplane program by providing a pipeline of skilled and F.A.A. certificated graduates prepared to enter the growing aviation workforce in the Baltimore-Washington Region.

   The Professional Pilot-Airplane degree offering in this proposal will continue to meet the statewide and regional need for trained aviation professionals. The CCBC Aviation Program is the only two-year collegiate aviation program in the state of Maryland and is the largest in a four-state region.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State:

1. Describe potential industry or industries, employment opportunities, and expected level of entry (*ex: mid-level management*) for graduates of the proposed program.

   Professional pilots are highly trained professionals who are not only responsible for the safety of their passengers and cargo, but also for the operation of sophisticated and expensive equipment. Pilots must meet F.A.A. medical standards.

   Graduates of the Professional Pilot Airplane degree program complete all academic training required for the airplane commercial pilot and flight instructor certificates and are immediately employable in the aviation industry. Pilots with a commercial pilot certificate and instructor credentials may find employment with regional and major airlines, corporate flight departments, charter or cargo operators, agricultural flying, flight schools, or with a government agency or military service. Non-flying positions are also available with the F.A.A. or other federal, state and local aviation agencies.

2. Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program.

   The F.A.A.'s ***Aerospace Forecast FY 2019-2039*** predicts that commercial air travel and cargo operations will increase by 36% in the next two decades with commercial aircraft fleets increasing by 15,590 airplanes. Assuming typical crew ratios and forecast airline pilot retirements, 175,000 new pilots will be required. The commercial airlines and corporate operators primarily hire pilots who have been trained by collegiate aviation programs or the military. Maryland has one of the highest concentrations of aviation activity in the nation with four major airport hubs located in the Baltimore-Washington-Philadelphia region.

3. Discuss and provide evidence of market surveys that clearly provide **quantifiable** and reliable data on the educational and training needs and the anticipated number of vacancies expected over the next 5 years.

   Table 1 below demonstrates Maryland's potential demand for graduates in the Professional Pilot-Airplane program. The evidence provided is based upon the program's proposed Classification of Program (CIP) code of 49.0102 and cross referenced with the Bureau of Labor Statistics Standard Occupational Classifications (SOC) that classify and indicate the professions and occupations of graduates of programs with this CIP code are likely to pursue.

Table 1: Department of Labor, Licensing and Regulations, Maryland Labor Projections 2016-2026 for the Professional Pilot-Airplane Program

SOC	Occupation Title	Employment			Openings	
		2016	2026	Change	Growth Openings	Total
53-2012	Commercial Pilot	426	485	59	405	464

This data evidences the potential for 464 new and additional positions in occupations that the Professional Pilot-Airplane program prepares graduates for over ten years, or approximately 46 positions per year.

4. Provide data showing the current and projected supply of prospective graduates.

   There are no other programs in the State of Maryland that share this CIP code (49-0102-Airline Commercial/Professional Pilot and Flight Crew). In the last three years, there have been 34 graduates in CCBC's Professional Pilot-Airplane degree program.

D. Reasonableness of Program Duplication:

1. Identify similar programs in the State and/or same geographical area. Discuss similarities and differences between the proposed program and others in the same degree to be awarded.

   The Professional Pilot-Airplane A.A.S. degree program is not offered at any other community college in the State of Maryland.

2. Provide justification for the proposed program.

   A flight training Bachelor's degree program exists at the University of Maryland, Eastern Shore. No other collegiate flight training programs exist within a 200-mile radius of CCBC. CCBC's proximity to the Baltimore Washington International Thurgood Marshall Airport provides essential flight training to the Baltimore-metropolitan region.

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs)

1. Discuss the program's potential impact on the implementation or maintenance of high-demand programs at HBI's.

   Students who graduate with the Professional Pilot-Airplane A.A.S. degree program are well-poised to transfer to the University of Maryland-Eastern Shore to continue with their bachelor's degree.

F. Relevance to the identity of Historically Black Institutions (HBIs)

1. Discuss the program's potential impact on the uniqueness and institutional identities and missions of HBIs.

   CCBC students successfully transfer to the University of Maryland-Eastern Shore (UMES) aviation program. An articulation agreement is being considered which will incorporate all six CCBC Aviation Technology programs into a Bachelor of Science degree.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes (as outlined in COMAR 13B.02.03.10):

1. Describe how the proposed program was established, and also describe the faculty who will oversee the program.

   Program proposals at CCBC are reviewed and approved according to the process developed through college governance, which includes approval by the Curriculum and Instruction Committee and the full College Senate. In addition, this degree proposal was carefully reviewed by the President and her Senior Staff prior to submission to the CCBC Board of Trustees for their endorsement. The President has affirmed that the program is being implemented within existing institutional resources. Dr. Douglas Williams serves as the coordinator of CCBC's Aviation program and oversees the Professional Pilot-Airplane degree.

2. Describe educational objectives and learning outcomes appropriate to the rigor, breadth, and (modality) of the program.

   Professional Pilot-Airplane Educational Outcomes: Upon completion of this program, graduate will:

   1. achieve Commercial Pilot and Flight Instructor certificates;
   2. find employment with regional and major airlines, corporate flight departments, charter or cargo operators, agricultural flying, training centers, or with a government agency or military service; and
   3. find employment with non-flying positions available with the Federal Aviation Administration or other federal, state and local aviation agencies.

   Professional Pilot-Airplane Learning Outcomes: Upon successful completion of this degree program, students will be able to:

   1. demonstrate leadership, teamwork, managerial, and organizational skills within the aviation industry;
   2. analyze and assess airline and airport operations, government regulations, and safety and environmental concerns to plan and implement appropriate strategic and tactical business methodologies;
   3. demonstrate flight proficiency, safety, and procedural skills to obtain F.A.A. licensure required to secure a position as a commercial pilot or flight instructor; and
   4. speak and communicate clearly and decisively using standard industry pilot-controller phraseology.

3. Explain how the institution will:
    a) provide for assessment of student achievement of learning outcomes in the program

CCBC has a noteworthy student learning outcomes assessment program that received a Commendation and an Exemplary Practice award as part of the College's most recent Middle States decennial review. The course level assessment process utilizes externally-validated assessments that directly measure student learning at the course objective level. All assessment projects begin with the development of a Request for Proposal (RFP) and flow through the five stages as follows:

Stage 1: Designing and Proposing a Learning Outcomes Assessment Project
Stage 2: Implementing the Design and Collecting and Analyzing the Data
Stage 3: Redesigning the Course to Improve Student Learning
Stage 4: Implementing Course Revisions and Reassessing Student Learning
Stage 5: Final Analysis and Reporting Results

In addition, all general education courses undergo general education assessment that utilize common graded assignments. Learning outcomes assessment in both discipline and general education courses provide a mechanism for continuous improvement.

    b) document student achievement of learning outcomes in the program

Program outcomes assessment is a primary focus for CCBC. Career programs are evaluated through a committee-driven program review process in a five-year cycle. Program review includes curriculum assessment as well as market feasibility analyses. In addition, the Professional Pilot-Airplane program has an established Advisory Board. The Advisory Board is comprised of faculty, student and alumni representatives, professionals in the field and workforce advocates. This group meets biannually to review the program outcomes and to provide guidance for future directions of the program.

4. Provide a list of courses with title, semester credit hours and course descriptions, along with a description of program requirements.

Table 2: Professional Pilot-Airplane A.A.S. Proposed Curriculum Changes

Current Professional Pilot-Airplane A.A.S.			**Proposed Professional Pilot-Airplane A.A.S.**		
Program Requirements			**Program Requirements**		
AVMT 101	Aviation History and Development	3	AVMT 101	Aviation History and Development	3
AVMT 141	Private Pilot Ground School	3	AVMT 131	Private Pilot Ground School	3
AVMT 142	Private Pilot Certification Airplane	3	AVMT 132	Private Pilot Certification – Airplane I	2
AVMT 211	Air Transportation	3	AVMT 133	Private Pilot Certification – Airplane II	2
AVMT 216	Aviation Safety	3	AVMT 211	Air Transportation	3

AVMT 221	The Air Traffic Control System	3	AVMT 216	Aviation Safety	3
AVMT 226	Air Traffic Control Operations I	3	AVMT 221	The Air Traffic Control System	3
AVMT 221	The Air Traffic Control System	3	AVMT 226	Air Traffic Control Operations I	3
AVMT 226	Air Traffic Control Operations I	3	AVMT 231	Instrument Pilot Ground School	4
AVMT 241	Instrument Pilot Ground School	4	AVMT 232	Instrument Pilot Rating-Airplane I	2
AVMT 242	Instrument Pilot Rating-Airplane	3	AVMT 233	Instrument Pilot Rating-Airplane II	2
AVMT 246	Commercial Pilot Ground School	4	AVMT 236	Commercial Pilot Ground School	3
AVMT 247	Commercial Pilot Certification-Airplane	3	AVMT 237	Commercial Pilot Certification-Airplane I	2
			AVMT 238	Commercial Pilot Certification-Airplane II	2
			AVMT 257	Commercial Pilot Certification-Airplane ME	2
			AVMT 260	Fundamentals of Instructing	1
			AVMT 261	Certificated Flight Instructor-Airplane	2
Total:		35			42
Program Electives: Choose 12 credits from the following:			**Program Electives: Choose 6 credits from the following:**		
AVMT 251	Airport Management	3	AVMT 251	Airport Management	3
AVMT 256	Airline Management	3	AVMT 256	Airline Management	3
AVMT 261	Certificated Flight Instructor Airplane	3	AVMT 258	Aircraft Dispatcher	3
AVMT 263	Certificated Flight Instructor Instrument Airplane	3	AVMT 263	Certificated Flight Instructor Instrument Airplane	2
AVMT 265	Certificated Flight Instructor Multi-Engine Airplane	3	AVMT 265	Certificated Flight Instructor Multi-Engine Airplane	2
ENGL 102 ENGL 239 MNGT 239	English Composition II **OR** Business Communications **OR** (Cross listed at ENGL 239 and MNGT 239)	3			
Total:		12			6
General Education Requirements:			**General Education Requirements:**		
CMNS 101	Fundamentals of Communication (Arts and	3	CMNS 101	Fundamentals of Communication (Arts and	3

ENGL 101	College Composition I	3	ENGL 101	College Composition I	3
ERSC 131	Meteorology	4	ERSC 131	Meteorology	4
Elective	Information Technology (Any GE designated course)	3	Elective	Information Technology (Any GE designated course)	3
Elective	Mathematics (Any GE designated course)	3-4	MATH 125	Finite Mathematics and Modeling	3
	Social and Behavioral Science (Any GE designated course)	3	Elective	Social and Behavioral Science (Any GE designated course)	3
Total:		19-20			19
Program Total:		66-67			67

AVMT 101 - Aviation History and Development: 3 Credit(s).
Explores the evolution of aviation, focusing on the rapid growth of the aviation industry and its influence on economic, military, and political advancement; discusses developments in aircraft design, aerodynamics, power plants, government agencies, and the national airspace system. Note: This course is a globally intensive course that promotes intercultural competency and global awareness. Successful completion of this course contributes toward the 15 credits of globally intensive curriculum needed to earn the certificate of Global Distinction. NOTE: Course offered fall, spring, and may be offered during additional sessions. **Prerequisite(s):** ESOL 052 and ESOL 054 or ACLT 052 or ACLT 053 or equivalent placement test scores

AVMT 131 – Private Pilot Ground School: 3 Credits(s).
provides all required ground instruction for the Federal Aviation Administration (FAA) Private Pilot Certificate. This course addresses both airplane and helicopter topics including aerodynamics, aircraft systems, aircraft control and operation, communications, airspace, navigation, weight and balance, aircraft performance, meteorology, regulations, and Crew Resource Management (CRM). **Co-requisites:** ACLT 052 and MATH 082

AVMT 132 – Private Pilot Certification Airplane I: 2 Credits(s).
Provides the initial phase of flight and simulator training toward the completion of a Federal Aviation Administration (FAA) Private Pilot certificate, Airplane category. Topics include preflight procedures, flight controls, aircraft systems, takeoffs, landings, slow flight, stalls, ground reference maneuvers, and emergency procedures. Valid FAA Second Class Medical Certificate required. This course has additional lab fees. **Co-requisites:** AVMT 131 or with Aviation Program Director approval

AVMT 133 – Private Pilot Certification Airplane II: 2 Credits(s)
Provides the final phase of flight and simulator training toward the completion of a Federal Aviation Administration (FAA) Private Pilot certificate, Airplane category. Topics include single pilot resource management, cross country flying, unusual flight attitudes, night flying, basic instrument flying, short and soft field takeoffs and landings, and FAA Airman Certification Standards. Valid FAA

Second Class Medical Certificate required. This course has additional lab fees. **Pre-requisite:** AVMT 132 or with Aviation Program Director approval

AVMT 211 – Air Transportation: 3 Credits(s).
Discusses the impact of transportation on the United States economy, contrasting the different modes of transportation, government regulation, development, and transportation policies; highlights advancements in air transportation and focuses on the facets of general aviation and future challenges facing the air transportation industry. **Pre-requisites:** AVMT 101 and AVMT 131 or Aviation Program Director approval.

AVMT 216 – Aviation Safety: 3 Credits(s).
Explores the causes of aircraft accidents including an overview of the NTSB accident investigation process, the development of accident prevention programs, airborne and ground based safety sytems, regulations and safety management systems; discusses aviation safety planning, safety awareness, and human factors leading to aircraft-related accidents. **Pre-requisites:** AVMT 101 and AVMT 131 or with Aviation Program Director approval

AVMT 221 - The Air Traffic Control System: 3 Credit(s).
Provides an analysis of Air Traffic Control (ATC) functions and studies the history, development, and structure of the National Airspace System; explores navigation aids, ATC radar systems, terminal and en route control, flight service and weather facilities, instrument flight rules, airspace, and FAA regulations. NOTE: Course offered fall, spring, and may be offered during additional sessions. **Prerequisite(s):** AVMT 101 and AVMT 131

AVMT 226 - Air Traffic Control Operations I: 3 Credit(s).
Presents a comprehensive analysis of Air Traffic Control (ATC) regulatory flight publications including manuals, charts, advisory circulars and procedures. Topics: Federal Aviation Administration (FAA) regulations, Aeronautical Information Manual, Letters of Agreement, Terminal Procedures (TERPS) publications and applicable FAA Orders. Aircraft Recognition and Performance will also be studied and applied. These lessons will be correlated and reinforced with simulation exercises where students will be challenged to use proper pilot-controller phraseology and decision making skills. NOTE: Course offered fall, spring, and may be offered during additional sessions. **Corequisite(s):** AVMT 221

AVMT 231 – Instrument Pilot Ground School: 4 Credits(s).
Provides all required ground instruction for the Instrument Rating. This course addresses both airplane and helicopter topics including flight by reference to instruments, navigation systems, instrument flight rules, weather, departures and arrivals, approach procedures, flight planning, safety, communications, and flight physiology. **Pre-requisites:** AVMT 131 or with Aviation Program Director approval

AVMT 232 – Instrument Pilot Rating Airplane I: 2 Credits(s).
Provides the initial phase of flight and simulator training toward the completion of a Federal Aviation Administration (FAA) Instrument Pilot Rating, Airplane category. Topics include preflight preparation, air traffic control communication, flight by reference to instruments, navigation systems, instrument maneuvers, partial panel flying, and emergency procedures. Valid FAA Medical Certificate required. This course has additional lab fees. **Pre-requisites:** AVMT 133; **Co-requisites:** AVMT 231 or with Aviation Program Director approval

AVMT 233 – Instrument Pilot Rating Airplane II: 2 Credit(s).
Provides the final phase of flight and simulator training toward the completion of a Federal Aviation Administration (FAA) Instrument Pilot Rating, Airplane category. Topics include instrument approach procedures, instrument cross county flying, air traffic control clearances, departure and arrival procedures, holding, lost communication procedures, and single pilot resource management. Valid FAA Medical Certificate required. This course has additional lab fees. **Pre-requisites:** AVMT 232 or with Aviation Program Director approval.

AVMT 236 – Commercial Pilot Ground School: 3 Credit(s).
Provides all required ground instruction for the Commercial Pilot certificate. This course addresses both airplane and helicopter topics, including advanced aerodynamics, high performance aircraft, advanced aircraft systems, regulations, human factors, high altitude flight operations, turbine propulsion systems, safety, and crew resource management (CRM). **Pre-requisites:** AVMT 231 or with Aviation Program Director approval

AVMT 237 – Commercial Pilot Certification I – Airplane: 2 Credit(s).
Provides the initial phase of flight and simulator training towards completion of the Federal Aviation Administration (FAA) Commercial Pilot certificate, Airplane category, Single Engine (SE) class. Topics include pre-flight planning, specialty takeoffs and landings, commercial pilot maneuvers, cross country flight operations, night flying, emergency procedures, safety, and post-flight procedures. Valid FAA Medical Certificate required. This course has additional lab fees.
Pre-requisites: AVMT 233 or with Aviation Program Director approval
Co-requisites: AVMT 236 or with Aviation Program Director approval

AVMT 238 – Commercial Pilot Certification II – Airplane: 2 Credit(s).
Provides the final phase of flight and simulator training required for the Federal Aviation Administration (FAA) Commercial Pilot certificate, Airplane category, Single Engine (SE) class. Refining the skills acquired in AVMT 237, students advance their skills in specialty takeoffs and landings, commercial pilot maneuvers, navigation, slow flight, stalls, spin awareness, emergency procedures, and safety. A valid FAA Medical Certificate is required. This course has additional lab fees. **Pre-requisites:** AVMT 237 and approval of the Aviation Program Director

AVMT 257 – Commercial Pilot Certification – Airplane Multi Engine: 3 Credit(s)
Provides academic, flight and simulator training required for the Federal Aviation Administration (FAA) Commercial Pilot certificate, Airplane category, Multi- Engine (ME) class. Topics include pre-flight planning, specialty takeoffs and landings, commercial pilot multi-engine operations, maneuvers, instrument procedures, advanced navigation, slow flight, emergency procedures, safety, and post-flight procedures. Valid FAA Medical Certificate required. This course has additional lab fees. **Pre-requisites:** AVMT 238 or with Aviation Program Director approval

AVMT 258 - Aircraft Dispatcher provides the practical skills and knowledge required for the Federal Aviation Administration (FAA) Aircraft Dispatcher certificate. Topics include FAA regulations, flight planning, aircraft scheduling, aircraft systems, flight tracking and control, meteorology, aircraft performance computations, weight and balance, and emergency procedures.
Pre-requisites: AVMT 231 or approval of the Aviation Program Director

AVMT 260 – Fundamentals of Instructing: 1 Credit.
Provides an overview of human behavior and learning processes as they relate to flight training. Topics include effective communication, the teaching process, critique and evaluation, instructor

professionalism and responsibilities, and the role of the flight instructor in promoting a positive safety culture. **Pre-requisites:** AVMT 236 and AVMT 237 or AVMT 239
Co-requisites: AVMT 238 or AVMT 240 or with Aviation Program Director approval

AVMT 251 – Airport Management: 3 Credit(s)
Introduces the historical development of modern airports; discusses business and operational factors, airport regulations and government agencies, labor and personnel relations, security, safety, facility maintenance, airport tenants, funding, airport design and expansion planning, marketing, and public relations. **Pre-requisites:** AVMT 101 and AVMT 131 or with Aviation Program Director approval

AVMT 256 – Airline Management: 3 Credit(s)
Provides an in-depth study of airline operations; includes determination of airline fleet composition, scheduling, demand forecasting, pricing structure, facilities planning, marketing, financing, analyzing labor requirements, operational costs, and profit/loss reporting. **Pre-requisites:** AVMT 101 and AVMT 131 or with Aviation Program Director approval

AVMT 261 – Certificated Flight Instructor – Airplane Single Engine: 2 Credit(s).
Provides academic, flight, and simulator training required for the Federal Aviation Administration (FAA) Certificated Flight Instructor (CFI) Airplane rating. Topics include best practices in aeronautical instruction, professionalism, and FAA regulations relating to student flight training. This course has additional lab fees. **Pre-requisites:** AVMT 233 and AVMT 238 or with Aviation Program Director approval **Co-requisites:** AVMT 260 or with Aviation Program Director approval

AVMT 263 – Certificated Flight Instructor Instrument – Airplane: 2 Credit(s)
Provides academic, flight, and simulator training required for the Federal Aviation Administration (FAA) Certificated Flight Instructor Instrument (CFII) Airplane rating. Topics include the fundamentals of student instruction, flight by reference to instruments, navigation systems, en route operations, instrument approaches, emergency procedures, and safety. This course has additional lab fees. **Pre-requisites:** AVMT 233 and AVMT 238 or with Aviation Program Director approval **Co-requisites:** AVMT 260 or with Aviation Program Director approval

AVMT 265 – Certificated Flight Instructor – Airplane Multi-Engine: 2 Credit(s).
Presents academic, flight, and simulator training required for the Federal Aviation Administration (FAA) Certificated Flight Instructor, Multi-Engine (MEI) Airplane rating. Topics include fundamentals of student instruction, pre-flight preparation, multi-engine airplane operations, complex aircraft systems, emergency procedures, safety, and post-flight procedures. Valid FAA Medical Certificate required. This course has additional lab fees. **Pre-requisites:** AVMT 233 and AVMT 257 or with Aviation Program Director approval **Co-requisites:** AVMT 260 or with Aviation Program Director approval

5. **Discuss** how general education requirements will be met, if applicable.

   General Education requirements are met in conjunction according to COMAR and CCBC policy. At least one CCBC designated diversity General Education course must be completed. A semester-by-semester sequence is available in the college catalog.

6. Identify any specialized accreditation or graduate certification requirements for this program and its students.

   This professional pilot flight training program is certified by the Federal Aviation Administration under Federal Aviation Regulations Part 141 and is approved as an F.A.A. Restricted Airline Transport Pilot program.

7. If contracting with another institution or non-collegiate organization, provide a copy of the written contract.

   Contracts for this program were submitted to the Maryland Higher Education Commission with this proposal.

8. Provide assurance and any appropriate evidence that the proposed program will provide students with clear, complete and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies.

   CCBC provides clear, complete and accurate information regarding curriculum, course and degree requirements on the CCBC website as accessed through our online catalog: http://catalog.ccbcmd.edu/index.php . Faculty hold regularly scheduled office hours (face to face or online, per college policy). These office hours are available to students outside class meeting times and are posted on the course syllabus. CCBC uses Quality Matters standards in online learning as their measure of online course design quality. These standards specifically require the following to be addressed within each course: minimum technical requirements of the course, minimum technology expectations, learning management system basic requirements and instructions, links and instructions for all student support services including disability support services, financial aid, etc. The same information can be found on the CCBC Online website: http://www.ccbcmd.edu/Programs-and-Courses/CCBC-Online.aspx . Course sections (face to face, blended and online) utilize a learning management system course shell and instructors are required, at a minimum, to post the course syllabus, progress grades and final grades online. Links to academic support services are available at: http://www.ccbcmd.edu/resources-for-students. Information on financial aid and the cost of attending CCBC and its payment policies can be accessed here: http://www.ccbcmd.edu/costs-and-paying-for-college .

9. Provide assurance and any appropriate evidence that advertising, recruiting and admissions materials will clearly and accurately represent the proposed program and services available.

   Recruitment and admissions materials are revised each year when the CCBC catalog is finalized. Accurate admission information can be found at this site:

   http://www.ccbcmd.edu/get-started . The college catalog is updated yearly and all program and course information is current. The college catalog can be accessed at this link: http://catalog.ccbcmd.edu/index.php .

H. Adequacy of Articulation

1. If applicable, discuss how the program supports articulation with programs at partner institutions. Provide all relevant articulation agreements.

   Due to similarity in curricula and common F.A.A. licensure, CCBC students successfully transfer to most four-year collegiate aviation programs. CCBC does not have any formal articulation agreements as the two-year degree and its associated training represents a terminal degree for employment purposes in the airline industry.

I. Adequacy of Faculty Resources (as outlined in COMAR 13B.02.03.11).

1. Provide a brief narrative demonstrating the quality of program faculty. Include a summary list of faculty with appointment type, terminal degree title and field, academic title/rank, status (full-time, part-time, adjunct) and the course(s) each faulty member will teach (in this program).

   CCBC's Professional Pilot-Airplane program is supported by four (4) full-time faculty members, eight (8) on-campus adjunct instructors and seventy-five (75) part-time flight-instructors. (See next page)

Table 3: Aviation Technology Faculty

Faculty Member Name	**Terminal Degree**	**Aviation Experience**	**Full-time, Adjunct or Part-time**	**Courses**
Douglas Williams	Ph.D. Education	-F.A.A. licensed Airline Transport Pilot – Airplane -F.A.A. licensed Remote Pilot (drone) -F.A.A. Certificated Flight Instructor Certified Flight Instructor Basic (CFI), Certified Flight Instructor Instrument (CFII), Certified Flight Instructor and Multi Engine (MEI) with a minimum of 300 flight hours -Current F.A.A. Third Class Medical Certificate. -Retired US Air Force Aircrew, Veteran	FT	AVMT 101, 131, 132, 133. 134, 135, 161, 162, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 258, 261, 262, 263, 264, 265
Christopher Komsa	M.S. Aviation Safety Systems	-F.A.A .Licensed Commercial Pilot - Airplane -F.A.A. Certificated Flight Instructor (CFI, CFII, MEI) with a minimum of 300 flight hours -Current F.A.A. Third Class Medical Certificate.	FT	AVMT 131, 211, 216, 231, 251, 256

Joe Eichelberger	M.S. Distance Education & E-Learning	-Retired United States Military Air Traffic Controller, Veteran -F.A.A. Ground Instructor -F.A.A. Licensed Remote Pilot (drone) -F.A.A. Licensed Private Pilot Airplane	FT	AVMT 221, 226, 227, 228, 229, 230
Peter Waters	M.S. Electrical and Computer Engineering	-F.A.A. Licensed Commercial Pilot, Airplane & Helicopter -F.A.A. Certificated Flight Instructor (CFI) with a minimum of 300 flight hours -Current F.A.A. Third Class Medical Certificate. -Retired US Navy Flight Officer, Veteran	FT	AVMT 101, 221, 261, 263, 265
Aaron Kirzner	A.A.S. Professional Pilot Airplane, Unmanned Aircraft Systems	-F.A.A. Licensed Private Pilot – Airplane -F.A.A. Licensed Remote Pilot (drone)	PT	AVMT 162
Mike Low	B.S. Aeronautical Science	-F.A.A. Licensed Airline Transport Pilot – Airplane -Docent, Smithsonian Air & Space Museum	Adjunct	AVMT 101, AVMT 216, AVMT 258

		-Retired Airline Pilot, Boeing 737, Airbus A-320 -Retired US Navy Aircrew, Veteran		
Roger Cox	M.S. Aviation Safety	-F.A.A. Licensed Airline Transport Pilot – Airplane -Retired Airline Pilot, Boeing 737, 757 -Aircraft Crash Investigator, National Transportation Safety Board	Adjunct	AVMT 216
Bruce Hollen	B.S. Airway Science	-F.A.A. Licensed Commercial Pilot - Airplane -F.A.A. Certificated Flight Instructor (CFI, CFII, MEI) with a minimum of 300 flight hours -Current F.A.A. Third Class Medical Certificate. -F.A.A. Chief Pilot, Part 141	Adjunct	AVMT 131, AVMT 231
Shawn Ames	B.S. Aviation Science	-Airport Operations Manager -Airports & Planning Division– Maryland Aviation Administration	Adjunct	AVMT 211, 251
Jeffrey Miller	B.S. Aviation Management	Airport Operations Manager, BWI	Adjunct	AVMT 251
Vince Corsaro	M.S. Aviation Safety	Airline Support Services – Signature	Adjunct	AVMT 256

		US Department of Transportation – Safety Officer		
Susan Donovan	B.S. Transportation Science	-Airline Manager and Dispatcher, United Airlines (12 years) -Airline Manager, Southern Airways (4 years)	Adjunct	AVMT 256
Frank Watson	B.S. Professional Aeronautics	-F.A.A. Licensed Commercial Pilot - Airplane -F.A.A. Certificated Flight Instructor (CFI, CFII) with a minimum of 300 flight hours -Current FAA Third Class Medical Certificate.	Adjunct	AVMT 231

More than 50% of all AMVT courses are taught by full-time instructors. Please refer to Appendix A for a list of part-time flight instructors that support the CCBC Professional Pilot-Airplane program. Part-time flight instructors are responsible for air-instruction, a portion of courses with flight training.

2. Demonstrate how the institution will provide ongoing pedagogy training for faculty in evidenced-based best practices, including training in:

   a) Pedagogy that meets the needs of the students

   b) The learning management system

   c) Evidenced-based best practices for distance education, if distance education is offered.

   The Center for Excellence in Teaching and Learning (CETL) provides ongoing professional development opportunities for faculty and staff throughout the academic year: http://www.ccbcmd.edu/About-CCBC/Administrative Offices/Instruction/Center-for-Excellence-in-Teaching-and-Learning.aspx . Additional professional development is provided at yearly Fall Focus, Teaching Learning Fair, and Professional Development Day events. In addition, faculty are provided funding, on a regular basis, to present at regional and national conferences that relate to pedagogy and discipline areas of interest. CCBC recognizes that up-to-date pedagogy is essential in student success initiatives, as the college serves primarily in a teaching role.

   CCBC expects that faculty teaching an online course complete training called the "Teaching Online Course". This is a five-week/twenty hour online course that provides training on how to facilitate an established online course. The institution also requires faculty to complete an eighty hour training in online course pedagogy and course design prior to the development of any new online course. Prerequisites for this training include Quality Matters training as well as Learning Management System (LMS) workshops through CETL and our LMS trainers. CCBC also has multiple online learning policies designed to foster best practices in online learning. These include policies include, but are not limited to a thirty percent (30%) authenticated assessment requirement, online office hours and a consistent LMS menu template.

J. Adequacy of Library Resources (as outlined in COMAR 13B.02.03.12)**.**

1. Describe the library resources available and/or the measures to be taken to ensure resources are adequate to support the proposed program. **If the program is to be implemented within existing institutional resources**, include a supportive statement by the President for library resources to meet the program's needs.

   Current library resources are sufficient and appropriate for the Professional Pilot-Airplane program. The College also subscribes to several online databases that would be helpful to students in this program. The CCBC Libraries' collection includes over 60,000 e-books and access to over 44,000 different journals and periodicals. Students

can access these resources anytime from any computer or mobile device on or off-campus.

Beyond the resources provided through CCBC, the CCBC Library has a reciprocal use and borrowing agreement with the University of Maryland, Baltimore County, Albin 0. Kuhn Library and the University of Baltimore, Langsdale Library that entitles CCBC students to on-site access and use of the facilities and resources of these libraries as well as the opportunity to check out books. The College also provides InterLibrary Loan service, https://library.ccbcmd.edu/screens/borrowingfromotherlibs.html. In addition, to make library services more accessible to students, the CCBC Library participates in a 24/7 online reference service through the AskUsNow Maryland statewide program.

This degree proposal was carefully reviewed by the President and her Senior Staff prior to submission to the CCBC Board of Trustees for their endorsement. The President has affirmed that the program is being implemented within existing institutional resources.

K. Adequacy of Physical Facilities, Infrastructure and Instructional Equipment (as outlined in COMAR 13B.02.03.13)

1. Provide an assurance that physical facilities, infrastructure and instruction equipment are adequate to initiate the program, particularly as related to spaces for classrooms, staff and faculty offices, and laboratories for studies in the technologies and sciences. If the program is to be implemented within existing institutional resources, include a supportive statement by the President for adequate equipment and facilities to meet the program's needs.

   The Professional Pilot-Airplane program is being implemented within existing institutional resources. No additional physical facilities, infrastructure or instructional equipment are needed.

2. Provide assurance and any appropriate evidence that the institution will ensure students enrolled in and faculty teaching in distance education will have adequate access to:

   a) An institutional electronic mailing system, and
   b) A learning management system that provides the necessary technological support for distance education

   CCBC provides all students with a Microsoft Office email address at the time of application and has a single sign on (SSO) login process for all technologies. CCBC uses Blackboard Learn 9.1 as its LMS. Help Desk support for all technology and distance education questions can be accessed both online and via a technical hotline: http://www.ccbcmd.edu/resources-for-students/technology-support .

L. Adequacy of Financial Resources with Documentation (as outlined in COMAR 13B.02.03.14)

1. Complete **Table 1: Resources and Narrative Rationale**. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each resource category. If resources

have been or will be reallocated to support the proposed program, briefly discuss the sources of those funds.

TABLE 4: RESOURCES Adequacy of financial resources for the Professional Pilot-Airplane Program (as outlined in COMAR 13B.02.03.14)

The following breakdown of costs is based on in-county tuition rates and having one student complete 15 credits total during the fall and spring semesters over a one-year period.

Tuition ($122 x 30)	$3,660.00
General Services Fee ($21 per credit hour)	630.00
Registration Fee ($55 per semester)	110.00
Capital Fee ($20 per semester)	40.00
Technology Fee ($15 per billable hour)	450.00
Activity Fee ($48 maximum per semester)	72.00
Total	$4,962.00
Graduation fee	$ 75.00
Additional Lab Fees	$ 45,700 per year (average)*

(Aviation Technology Fee and Lab Fees: AVMT 132, 133, 232, 233, 237, 238, 257, 261, 263, 265)

* This average figure is based on total lab fees of $ 91,400 over two years.

Resources:

Resources Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Reallocated Funds	0	0	0	0	0
2. Tuition/Fee Revenue (c+g below)	$4,896,230	$4,896,230	$4,896,230	$4,896,230	$4,896,230
a. # F.T. Students	65	65	65	65	65
b. Annual Tuition/ Fee Rate	$50,662	$50,662	$50,662	$50,662	$50,662
c. Annual Full Time Revenue (a x b)	$3,293,030	$3,293,030	$3,293,030	$3,293,030	$3,293,030
d. # Part Time Students	65	65	65	65	65

e. Credit Hour Rate	$122 (15)+ $22,850 (fees)= $24,680	$122 (15)+ $22,850 (fees)= $24,680	$122 (15)+ $22,850 (fees)= $24,680	$122 (15)+ $22,850 (fees)= $24,680	$122 (15)+ $22,850 (fees)= $24,680
f. Annual Credit Hours	15	15	15	15	15
g. Total Part Time **Revenue (d x e x f)**	$1,604,200	$1,604,200	$1,604,200	$1,604,200	$1,604,200
3. Grants, Contracts, & Other External Sources	0	0	0	0	0
4. Other Sources	0	0	0	0	0
TOTAL (Add 1-4)	$4,896,230	$4,896,230	$4,896,230	$4,896,230	$4,896,230

2. Complete **Table 2: Program Expenditures and Narrative Rationale**. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each expenditure category.

TABLE 5: EXPENDITURES for the Professional Pilot-Airplane Program					
Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b+c below)	0	0	0	0	0
a. # FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0
c. Total Benefits	0	0	0	0	0
2. Admin. Staff (b+c below)	0	0	0	0	0
a. # FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0

c. Total Benefits	0	0	0	0	0
3. Support Staff (b+c below)	0	0	0	0	0
a. # FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0
c. Total Benefits	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Library	0	0	0	0	0
6. New or Renovated Space	0	0	0	0	0
7. Other Expenses	0	0	0	0	0
8. TOTAL (Add 1 – 7)	$0	$0	$0	$0	$0

The Professional Pilot-Airplane degree program is currently offered and operates under existing resources. No additional expenditures are needed to implement substantial modifications.

M. Adequacy of Provisions for Evaluation of Program (as outlined in COMAR 13B.02.03.15).

1. Discuss procedures for evaluating courses, faculty and student learning outcomes.

To promote quality in instruction, online student evaluations are administered via SmartEvals on a regular rotation. In addition, faculty performance is evaluated each year through the Annual Professional Summary Evaluation process. Changes to course requirements and content are approved through the Curriculum and Instruction Committee and College Senate. Additionally, online and blended courses are assessed by the Quality Matters rubric for course design elements.

CCBC has a noteworthy student learning outcomes assessment program that received a Commendation and an Exemplary Practice award as part of the College's most recent Middle States decennial review. The course level assessment process utilizes externally-validated assessments that directly measure student learning at the course objective level. All assessment projects begin with the development of a Request for Proposal (RFP) and flow through the five stages as follows:

Stage 1: Designing and Proposing a Learning Outcomes Assessment Project
Stage 2: Implementing the Design and Collecting and Analyzing the Data
Stage 3: Redesigning the Course to Improve Student Learning
Stage 4: Implementing Course Revisions and Reassessing Student Learning
Stage 5: Final Analysis and Reporting Results

In addition, all general education courses undergo general education assessment that utilize common graded assignments. Learning outcomes assessment in both discipline and general education courses provide a mechanism for continuous improvement.

CCBC's Office of Planning, Research and Evaluation (PRE) maintains information on student retention in academic programs. This data is provided as part of the program review process for analysis and program improvement. Academic programs are reviewed on a five-year cycle. Part of this process includes curriculum mapping to program objectives.

2. Explain how the institution will evaluate the proposed program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost-effectiveness.

Full-time faculty prepare an Annual Professional Summary every year to document their achievements in the categories of Professional Assignment, College and Community Service, and Professional Development. Supervisors use this information to complete annual evaluation of faculty performance. Students can also complete course evaluations on a regular basis. Courses are evaluated by anonymous comments/feedback offered by students through evaluation tools.

Assessment and documentation of student achievement will occur as part of CCBC's learning outcomes assessment and program review processes. Learning outcomes assessment occurs in discipline courses through a continuous improvement model outlined above. General Education courses are assessed for general education skills every three years. Academic programs are reviewed on a five-year cycle. Program review includes curriculum assessment as well as market feasibility analyses. As part of the program review, the Professional Pilot-Airplane program will participate in program outcome assessment projects. Program coordinators must document how student-learning outcomes were developed and validate how the outcomes relate to the College's mission. It is noteworthy that CCBC's student learning assessment program received a Commendation and an Exemplary Practice award as part of the College's most recent Middle States decennial review.

N. Consistency with the State's Minority Student Achievement Goals (as outlined in COMAR 13B.02.03.05).

1. Discuss how the proposed program addresses minority student access & success, and the institution's cultural diversity goals and initiatives.

CCBC does not discriminate based on race, sex, age, religion, national origin, marital status, sexual orientation, or disabilities. CCBC is devoted to providing an environment where cultural diversity thrives. CCBC has a dedicated Intercultural Engagement office and offers a host of programs designed to enhance minority student success including guest speakers, study programs, clubs, and academic counseling.

To promote minority student success, one of the hallmarks of CCBC's strategic plan is the value of inclusiveness. That is, we honor the diversity of people, cultures, ideas, and viewpoints. To help faculty appreciate and to maximize the potential of a diverse student population in their classrooms, CCBC has a Culturally Responsive Teaching and Learning

(CRT-L) training program. The CRT-L program is a multi-faceted initiative that engages faculty, staff, administrators, and students in the recursive process of self-reflection, dialogue, change, and growth regarding cultural understanding and cooperation. This program has helped the college to close achievement gaps and thereby improve student success. It is noteworthy that CCBC received the Leah Meyer Austin Award at the Achieving the Dream Conference in 2015, and the CRT-L program was an important component to enable CCBC to improve student achievement and to meet equity goals.

Since its inception in 2004, the CRT-L Program has led 500+ faculty and staff and thousands of students to actively address individual and collective self-awareness, attitudes and beliefs, knowledge of others, and the skills needed to implement new understandings through best practices of cultural competence.

O. Relationship to Low Productivity Programs Identified by the Commission

1. If the proposed program is directly related to an identified low productivity program, discuss how the fiscal resources (including faculty, administration, library resources and general operating expenses) may be redistributed to this program.

   This program has not been identified as a low productivity program.

P. Adequacy of Distance Education Programs (as outlined in COMAR 13B.02.03.22)

1. Provide affirmation and any appropriate evidence that the institution is eligible to provide Distance Education.

   CCBC is approved to offer distance education per COMAR 13B.02.03.22 as the institution was previously approved to offer a distance education program prior to January 1, 2018 and is eligible to offer distance education through our regional accreditor, the Middle States Commission on Higher Education. CCBC was approved as a NC-SARA partner on July 1, 2019.

2. Provide assurance and any appropriate evidence that the institution complies with the C-RAC guidelines, particularly as it relates to the proposed program.

   CCBC's mission is to provide students accessible, affordable, and high quality education. Its current strategic plan places an increased emphasis on online learning (distance education). Sustaining and growing online learning is interwoven into the academic schools' plans as well as the Department of Online Learning's (DOL) goals and objectives. The Instructional Technology budget supports technologies related to online learning. The DOL also has a budget, which provides resources for faculty training, technology as well as the promotion of a quality assurance process.

   CCBC has a dedicated, public facing webpage for online learning, which displays programs offered in an online format. It also provides both potential and current students with links to all of the services they might need. Potential students are provided with a questionnaire to help determine if online learning is right for them. Students also have access to technical requirements for online coursework and online class policies which they may need to know prior to admission. Academic requirements for online programs do not differ from

traditional face-to-face programs. Potential and current students have access to links to all relevant students services, such as disability support services, financial aid, etc. In addition, each online course clearly identifies links to these same services for students.

CCBC is a Quality Matters (QM) institution, and as such uses the QM rubric as its basis for design, faculty training and quality assurance of all online course offerings. Faculty, as subject matter experts, are the principal course developers, while the DOL oversees the overall process and schedule of online course creation. Additionally, DOL provides the faculty mandatory training for course facilitation and course development. Online course development incorporates sound online learning pedagogy to provide students with the most appropriate experiences in the discipline. Additionally, the DOL has its own internal website pages dedicated to providing faculty with policy, training and best practice resources. CCBC has developed its own internal quality assurance process, now in its 5th year of reviews, using the Quality Matters as its backbone. This process leverages the content knowledge as well as the course design knowledge of the faculty, providing a high quality, fiscally responsible manner to increase the quality of the college's online learning courses.

Many of online learning policies have been vetted and approved by the CCBC College Senate. DOL is responsible for implementation of those polices. Additionally, shared governance is an integral part of the college's standard curriculum approval and review process for all of its courses, regardless of the mode of delivery. Curricular expectations of online course do not differ from those in the traditional format. CCBC faculty and staff understand the challenges that online learning students face. Online course class sizes maximums are limited to 25. CCBC tracks success rates of online classes and compares that data to its face-to-face counterpart. CCBC uses Quality Matters standards, online faculty observations and student evaluations to monitor the effectiveness of the faculty member and the course design. Online courses are also subject to the college's standard evaluations, with the Common Course Outline reviewed on a regular basis. The institution also assesses general education outcomes for all General Education (Core) coursework on a three-year cycle and course-level objectives are assessed through learning outcomes assessment projects.

CCBC uses single-sign-on access for student email and college identification. The intuition also has an authenticated assessment policy, to ensure integrity in the proctoring of major assessments. Faculty have access to the college's testing centers as well as a remote proctoring tool, vetted by faculty and staff, to ensure students have access to options for authenticated proctoring. CCBC's academic integrity policies and procedures are not just part of the college's catalog, but are incorporated into each faculty member's course and CCBC's student portal (MyCCBC)

Appendix A: Part-Time Flight Instructors in Aviation Technology*

NAME	DEGREE	DISCIPLINE/Aviation Experience
Acton, Gregory	MA	FAA Certified Flight Instructor (CFI)
Adkins, Todd	MS	Communications Technology FAA Certified Flight Instructor (CFI)
Aiuto, Allegra	BS	Info Systems and Operations Management FAA Certified Flight Instructor (CFI)
Alberico, Michael	BA	Computer Art FAA Certified Flight Instructor (CFI)
Ashman, Marianne	BS	Business Marketing FAA Certified Flight Instructor (CFI)
Ayers, Joshua	BS	Criminal Justice/Psychology FAA Certified Flight Instructor (CFI)
Baptiste, Irvin	BS	Civil Engineering FAA Certified Flight Instructor (CFI)
Bangert, Michael	MS	Aerospace Engineering FAA Certified Flight Instructor (CFI)
Bell, Scott	BS	Emergency Services Management FAA Certified Flight Instructor (CFI)
Bejarno, Oscar	BS	FAA Certified Flight Instructor (CFI)
Benjamin, Matthew	AAS	Professional Pilot-Helicopter FAA Certified Flight Instructor (CFI)
Bernoni Enrico	BS	Computer Science FAA Certified Flight Instructor Instrument (CFII)
Bevan, Vicki	BA	Communications FAA Certified Flight Instructor (CFI)
Beyer, David	HS	FAA Certified Flight Instructor (CFI) FAA Certified Flight Instructor Instrument (CFII)
Brennan, Mark	HS	FAA Certified Flight Instructor (CFI)
Bryant, Daun	BA	English Literature/International Trade FAA Certified Flight Instructor (CFI)
Burrs, Kenneth	BS	Occupational Safety & Health FAA Certified Flight Instructor (CFI)
Campbell, Rachel	BA	Commercial/Corporate Aviation FAA Certified Flight Instructor (CFI)
Chow, Matthew	BS	Professional Flight Technology FAA Certified Flight Instructor (CFI)
Cobb, Jason	BS	Aeroscience FAA Certified Flight Instructor (CFI)
Crowley, John	BA	Intelligence Studies FAA Certified Flight Instructor (CFI)
Dawood, David	MS	Electrical Engineering FAA Certified Flight Instructor (CFI)
D'Onofrio, Gregory	HS	FAA Certified Flight Instructor (CFI)
Deitch, Edward	Doctorate	Human Development FAA Certified Flight Instructor (CFI)

DeVinney, Kyle	BA	FAA Certified Flight Instructor (CFI)
Falk, Tyler	HS	FAA Certified Flight Instructor (CFI) FAA Certified Flight Instructor Instrument (CFI-I) FAA Certified Flight Instructor Multiengine (ME1)
Fasano, Michael	MBA	Business Administration FAA Certified Flight Instructor Instrument (CFI-I)
Flores, Christino	AA	FAA Certified Flight Instructor (CFI)
Fitzmaurice, Andrew	AAS	Aviation Management Air Traffic Control FAA Certified Flight Instructor (CFI)
Fitzwilliam, Marlon	AAS	Professional Pilot Aircraft Dispatcher/Maintenance Certificate FAA Certified Flight Instructor (CFI)
Guy, Joseph	BA	FAA Certified Flight Instructor (CFI) Commercial Pilot Certificate
Haq, Moiz	BS	Electrical Engineering and Technology FAA Certified Flight Instructor (CFI)
Hollen, Robert Bruce	HS	FAA Certified Flight Instructor (CFI)
Jackson, Jon	BS	FAA Certified Flight Instructor (CFI) FAA Certified Flight Instructor Instrument (CFI-I) FAA Certified Flight Instructor Multi Engine (ME1) Basic Ground Instructor Commercial Pilot-Single Engine and Multi Engine Land
Jacobson, Bradley	BS	Economics FAA Certified Flight Instructor (CFI)
Johnson, James	HS	FAA Certified Flight Instructor (CFI) FAA Certified Flight Instructor Instrument (CFI-I)
Johnson, Sheila	BS	Professional Aeronautics FAA Certified Flight Instructor (CFI) FAA Certified Flight Instructor Instrument (CFI-I)
Johnson, Todd	Technical College Certificate	Control Tower Operator Certificate FAA Certified Flight Instructor (CFI)
Johnykutty Jones, Rene	BS	Internal Medicine Private Pilot License FAA Certified Flight Instructor (CFI)
Kashuba, Joseph	HS	FAA Certified Flight Instructor (CFI) FAA Certified Flight Instructor Instrument (CFI-I)
Kasler, Taylor	BA	Recreation Parks & Tourism Resources FAA Certified Flight Instructor (CFI)
Kaufman, Menachen	HS	FAA Certified Flight Instructor (CFI) Commercial Pilot Certificate
Kennedy, Frank	BA	FAA Certified Flight Instructor (CFI) FAA Certified Flight Instructor Instrument (CFI-I) FAA Certified Flight Instructor Multi Engine (ME1) Airline Transport Pilot (ATP)
Kotkas, Erik	AA	General Studies Private Pilot

		Commercial Pilot FAA Certified Flight Instructor (CFI)
Le Quang, Christopher	BS	Naval Architecture & Marine Engineering FAA Certified Flight Instructor (CFI)
Lozinak, Matt	AAS	Professional Pilot Program-Airplane FAA Certified Flight Instructor (CFI)
Mansfield, Michael	BS	Exercise & Sport Science/Business Administration FAA Certified Flight Instructor (CFI)
McCarl, Taylor	BS	Aviation Maintenance Management FAA Certified Flight Instructor (CFI)
Mclean, Chelsea	BS	Aeronautical Sciences FAA Certified Flight Instructor (CFI)
Messer, Michael	MS	Operations Research FAA Certified Flight Instructor (CFI)
Miller, Bradley	BA	FAA Certified Flight Instructor (CFI)
Miller, Brandon	BS	Engineering FAA Certified Flight Instructor (CFI)
Morris, Jonathan	AAS	Professional Pilot FAA Certified Flight Instructor (CFI)
Neal, Brian	HS	FAA Certified Flight Instructor (CFI) Commercial Pilot
Pardue, Roy	HS	FAA Certified Flight Instructor (CFI)
Pinko, Gilad	BS	Geographical Sciences FAA Certified Flight Instructor (CFI)
Porter, Ethan	BA	FAA Certified Flight Instructor (CFI) FAA Certified Flight Instructor Instrument (CFI-I)
Prasek, David	MS	Forensic Science FAA Certified Flight Instructor Instrument (CFI-I)
Repass, Lucas	HS	FAA Certified Flight Instructor (CFI) FAA Certified Flight Instructor Instrument (CFI-I)
Rosemond, Julian	MS	FAA Certified Flight Instructor (CFI) FAA Certified Flight Instructor Instrument (CFI-I)
Sakkal. Nadia	BA	FAA Certified Flight Instructor (CFI) FAA Certified Flight Instructor Instrument (CFI-I)
Saunders, Louis	AAS	Professional Pilot FAA Certified Flight Instructor (CFI)
Scarzello, Daniel	HS	FAA Certified Flight Instructor (CFI) FAA Certified Flight Instructor Instrument (CFI-I) FAA Certified Flight Instructor Multi Engine (ME1)
Schulz, Charles	MS	Strategic Studies FAA Certified Flight Instructor Instrument (CFI-I)
Schultz, John	MS	Aeronautical Engineering FAA Certified Flight Instructor Instrument (CFI-I)
Selim, Yousseff	HS	FAA Certified Flight Instructor (CFI) Commercial Pilot
Schapner, Robert	JD	Law FAA Certified Flight Instructor (CFI) FAA Certified Flight Instructor Instrument (CFI-I)

		FAA Certified Flight Instructor Multi Engine Land (MEL) Commercial Pilot
Shambeau, Susan	MA	Special Education FAA Certified Flight Instructor Instrument (CFI-I)
Simon, Gev	HS	FAA Certified Flight Instructor (CFI) FAA Certified Flight Instructor Instrument (CFI-I)
Song, Erik	MA	Organization Management FAA Certified Flight Instructor (CFI)
Souza, Rodrigo	HS	FAA Certified Flight Instructor (CFI) Commercial Pilot
Stewart, David	BS	Computer Info Systems FAA Certified Flight Instructor (CFI)
Stinchcomb, Joseph	BS	Aviation Science FAA Certified Flight Instructor (CFI) FAA Certified Flight Instructor Instrument (CFI-I) FAA Certified Flight Instructor Multi Engine (ME1)
Teesdale, Donald	BA	Music & Human Services FAA Certified Flight Instructor (CFI)
Thanos, Konstantinos	AAS	Professional Pilot Airplane Single Engine Land FAA Certified Flight Instructor (CFI) FAA Certified Flight Instructor Instrument (CFI-I)

*Aviation Technology part-time flight instructors may teach as part of the Professional Pilot-Airplane, Professional Pilot-Helicopter and/or Professional Pilot-Unmanned Aircraft Systems degree programs.

**All part-time flight instructors must carry the following F.A.A. and Education qualifications:

Federal Aviation Administration (FAA) Flight Instructor requirements:
FAA Certificated Flight Instructor (CFI) with a minimum of 300 flight hours.
Current FAA Third Class Medical Certificate.
CFI-Instrument (CFII) preferred, CFI-Multi-Engine desirable.

Education requirements:
Associate's Degree preferred; experience as a US military or Airline Flight Instructor a plus.