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

Institution Submitting Proposal	Capitol Technology University
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Each action below requires a separate proposal and cover sheet.

- | | |
|---|---|
| <input checked="" type="radio"/> New Academic Program | <input type="radio"/> Substantial Change to a Degree Program |
| <input type="radio"/> New Area of Concentration | <input type="radio"/> Substantial Change to an Area of Concentration |
| <input type="radio"/> New Degree Level Approval | <input type="radio"/> Substantial Change to a Certificate Program |
| <input type="radio"/> New Stand-Alone Certificate | <input type="radio"/> Cooperative Degree Program |
| <input type="radio"/> Off Campus Program | <input type="radio"/> Offer Program at Regional Higher Education Center |

Payment Submitted: <input checked="" type="radio"/> Yes	Payment Type: <input type="radio"/> R*STARS #99472	Payment Amount:	Date Submitted: 01/15/26
<input type="radio"/> No	<input checked="" type="radio"/> Check # 99472		

Department Proposing Program	Aviation		
Degree Level and Degree Type	Bachelor of Science (B.S.)		
Title of Proposed Program	Bachelor of Science (B.S.) in Aviation Business Management		
Total Number of Credits	121		
Suggested Codes	HEGIS: 802.00	CIP: 49.0104	
Program Modality	<input type="radio"/> On-campus <input type="radio"/> Distance Education (fully online) <input checked="" type="radio"/> Both		
Program Resources	<input checked="" type="radio"/> Using Existing Resources <input type="radio"/> Requiring New Resources		
Projected Implementation Date (must be 60 days from proposal submission as per COMAR 13B.02.03.03)	<input checked="" type="radio"/> Fall <input type="radio"/> Spring <input type="radio"/> Summer Year: 2026		
Provide Link to Most Recent Academic Catalog	URL: https://catalog.captechu.edu/		

Preferred Contact for this Proposal	Name:	Dr. Mohamed Ghazy
	Title:	Dean of Academics
	Phone:	(340) 965-2473
	Email:	mshehata@captechu.edu

President/Chief Executive	Type Name:	Bradford Sims
	Signature:	Date: 1-15-26
	Date of Approval/Endorsement by Governing Board:	JAN. 15, 2026

Revised 1/2021



January 15, 2026

Dr. Sanjay Rai
Secretary of Maryland Higher Education
Maryland Higher Education Commission
217 E. Redwood Street, Suite 2100
Baltimore, MD 21202

Dear Dr. Rai,

Capitol Technology University is requesting approval to offer a **Bachelor of Science (B.S.) in Aviation Business Management**. The degree curriculum will be delivered using existing university faculty and supported through the integration of established aviation, business, and management coursework.

Capitol Technology University's mission is to provide a practical education in engineering, computer science, information technology, aviation, and business—preparing individuals for professional careers and enabling them to thrive in a dynamic and evolving global environment. A central element of the university's mission is the advancement of applied, workforce-relevant knowledge that is valued by employers and aligned with the university's career-focused academic programs. The university believes that the proposed Bachelor of Science in Aviation Business Management aligns closely with this mission.

Demand for professionals with expertise in aviation operations, air transportation systems, safety and regulatory compliance, and aviation business management continues to grow as the aviation industry expands and becomes increasingly complex. Employers in commercial aviation, airport operations, air traffic services, and aviation support organizations seek graduates who possess a strong foundation in aviation systems combined with business, management, and leadership competencies. The proposed program has been developed in direct response to these workforce needs.

The Bachelor of Science in Aviation Business Management is designed for individuals seeking to develop knowledge and skills applicable to aviation operations, airline and airport management, safety oversight, regulatory environments, and organizational leadership within the aviation sector. The program integrates aviation-specific coursework with business, quantitative, and management studies to prepare graduates for entry-level and early-career professional roles, as well as long-term career advancement in aviation-related industries.

To address these workforce and educational needs, Capitol Technology University respectfully submits for approval the **Bachelor of Science in Aviation Business Management**. Included with this submission is the required letter confirming the adequacy of the university's library resources to support the instructional and research needs of students enrolled in this program.

Respectfully,

Bradford L. Sims, PhD

President



January 15, 2026

Dr. Sanjay Rai
Secretary of Maryland Higher Education
Maryland Higher Education Commission
217 E. Redwood Street, Suite 2100
Baltimore, MD 21202

Dear Dr. Rai,

This letter is submitted in response to the request for confirmation regarding the adequacy of library resources to support the proposed **Bachelor of Science in Aviation Business Management** at Capitol Technology University.

As President of Capitol Technology University, I affirm that the Puente Library—including its physical collections, electronic databases, and professional library staff—is fully adequate to support the instructional and research needs of students and faculty in this program. Existing library holdings provide comprehensive access to academic and professional resources in aviation operations, air transportation systems, aviation safety and law, business and management, economics, accounting, project management, and related interdisciplinary fields.

Capitol Technology University is committed to the ongoing evaluation and enhancement of its library resources. The institution allocates sufficient financial and administrative support to ensure that library collections, electronic databases, and instructional materials are regularly reviewed, updated, and expanded in alignment with curriculum development, enrollment growth, and evolving industry and workforce needs. This commitment ensures that students enrolled in the Bachelor of Science in Aviation Business Management program have access to the scholarly, professional, and applied resources necessary to support academic success and workforce readiness.

Respectfully,

A handwritten signature in blue ink, appearing to read 'B. L. Sims', is written over the typed name.

Bradford L. Sims, PhD

President

PROPOSAL FOR:

- NEW INSTRUCTIONAL PROGRAM
- SUBSTANTIAL EXPANSION/MAJOR MODIFICATION
- COOPERATIVE DEGREE PROGRAM
- WITHIN EXISTING RESOURCES or REQUIRING NEW RESOURCES



Institution Submitting Proposal
 Fall 2026
 Projected Implementation Date

Bachelor of Science
 Award to be Offered

**Bachelor of Science in Aviation
 Business Management**
 Title of Proposed Program

0802
 Suggested HEGIS Code

49.0104
 Suggested CIP Code

Engineering
 Department of Proposed Program

Dr. Mohamed Shehata
 Name of Department Head

Dr. Mohamed Shehata
 Dean of Academic

mshehata@captechu.edu
 Contact E-Mail Address

(240) 965-2473
 Contact Phone Number

[Handwritten Signature] 1-15-26
 Signature and Date

President/Chief Executive Approval

JAN. 15, 2026
 Date

Date Endorsed/Approved by Governing Board

Monday 20, 2025

Bachelor of Science (B.S.) in Aviation Business Management

Capitol Technology University Laurel, Maryland

A. Centrality to mission and planning priorities:

1. Program Description and Alignment with Institutional Mission

The Bachelor of Science (B.S.) in Aviation Business Management at Capitol Technology University is designed to provide students with a comprehensive education in aviation business operations, management, and industry practices, equipping them with the analytical, managerial, and leadership skills needed to succeed in the global aviation sector.

This program integrates core business disciplines, aviation industry knowledge, regulatory frameworks, safety and risk management principles, and strategic decision-making to prepare graduates for careers in airline management, airport operations, aviation logistics, aviation consulting, and related business leadership roles. Students gain expertise in aviation operations, airline and airport management, aviation law, economics, project management, and organizational leadership, ensuring they are well prepared to manage complex aviation enterprises.

The B.S. in Aviation Business Management directly supports the institution's mission of providing STEM-focused, applied, and career-relevant education that prepares students for leadership roles in technology-driven industries. The program emphasizes practical application, industry alignment, and professional readiness, reinforcing Capitol Technology University's commitment to producing graduates who are equipped to meet the evolving demands of the aviation and aerospace industries.

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

Capitol Technology University operates on four strategic goals, and the B.S. in Aviation Business Management program directly supports each of these initiatives:

a. Expand Educational Offerings, Increase Program Completion:

The introduction of the B.S. in Aviation Business Management expands the university's academic portfolio by offering a business-focused aviation degree that complements existing technical and maintenance-oriented aviation programs. By combining business education with aviation industry context, the program broadens access to aviation careers and supports student retention and completion through a clearly structured, career-aligned curriculum.

b. Increase Enrollment and Institutional Awareness:

The aviation industry continues to experience strong demand for professionals with business, management, and operational expertise. This program is expected to attract a diverse population of students interested in aviation careers without a technical maintenance or pilot focus. Targeted outreach, partnerships with aviation employers, and engagement with high school and community college pathways will support enrollment growth and strengthen Capitol Technology University's national reputation in aviation-focused education.

c. Improve the Utilization of University Resources and Institutional Effectiveness While Expanding Revenue:

The program leverages existing business, aviation, and general education courses, maximizing the use of current faculty expertise and instructional resources. Enrollment growth will contribute to tuition revenue and long-term program sustainability. The program's applied nature also supports institutional effectiveness through experiential learning, internships, and industry-driven projects that enhance student outcomes.

d. Increase the Number and Scope of Partnerships:

Capitol Technology University will continue to expand partnerships with airlines, airport authorities, aviation service providers, logistics firms, and government agencies. These partnerships will support internships, capstone projects, guest lectures, and employment pipelines. Industry engagement will also provide ongoing input into curriculum relevance and workforce alignment.

Evidence of Institutional Priority

The B.S. in Aviation Business Management has been identified as an institutional priority due to the following factors:

- a. Industry advisory board members and employer partners have indicated a growing need for professionals with aviation-specific business and management expertise.
- b. The program addresses workforce demand for leadership and operational roles within airlines, airports, and aviation-related businesses, aligning with state and regional economic development priorities
- c. Capitol Technology University has committed faculty resources, curriculum development support, and administrative oversight to ensure the successful implementation of the program.
- d. The program aligns with the university's mission to deliver applied, industry-driven education and strengthens its portfolio of aviation and aerospace-focused degree offerings.

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.)

The B.S. in Aviation Business Management program will be adequately funded for at least the first five years through a combination of institutional support, tuition revenue, industry engagement, and external funding opportunities. Capitol Technology University has developed a financial plan to ensure the program's sustainability while maintaining high academic quality and appropriate faculty and instructional resources. Funding sources include:

- a. Institutional support for program development, faculty staffing, and administrative oversight during the initial implementation period.
- b. Collaboration with aviation and transportation industry partners to support experiential learning opportunities, internships, and industry-supported projects.
- c. Tuition revenue generated through enrollment growth, with the program expected to become self-sustaining within three to five years.

- d. Pursuit of workforce development grants, STEM education funding, and state or private funding opportunities to support instructional resources and student scholarships.
- e. Engagement with alumni, corporate partners, and philanthropic organizations to support long-term program development and student success initiatives.

4. Provide a description of the institution's commitment to:

a) Ongoing administrative, financial, and technical support of the proposed program

Capitol Technology University is committed to providing sustained administrative, financial, and technical support for the B.S. in Aviation Business Management program. The university will allocate qualified faculty, academic advisors, and administrative staff to support program delivery, student advising, and industry engagement. Institutional resources will be dedicated to maintaining instructional quality, updating course content, and supporting experiential learning activities.

The university's information technology and academic support services will ensure access to relevant aviation and business software tools, data resources, and learning platforms. Faculty will be encouraged to engage in ongoing professional development to remain current with industry trends, regulatory changes, and best practices in aviation business management.

b) Continuation of the program for a period of time sufficient to allow enrolled students to complete the program

Capitol Technology University is fully committed to sustaining the B.S. in Aviation Business Management program to allow enrolled students to complete their degrees in a timely manner. The institution maintains policies and procedures to ensure program continuity, including faculty coverage, course scheduling, and academic advising.

In the event of unforeseen circumstances, the university has established teach-out and transition plans to support student completion. Ongoing assessment of enrollment trends, student outcomes, and workforce needs will guide continuous improvement and ensure the long-term viability of the program.

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

The proposed Bachelor of Science (B.S.) in Aviation Business Management at Capitol Technology University is designed to meet a growing statewide and regional workforce need for professionals with business, management, and operational expertise specific to the aviation industry. As Maryland's aviation and aerospace sectors continue to expand, employers increasingly require graduates who understand airline operations, airport management, aviation regulations, logistics, safety, and business strategy.

The program addresses this need by integrating foundational business education with aviation industry knowledge, regulatory awareness, and operational decision-making skills. Graduates will be prepared for roles in airline and airport management, aviation operations, aviation logistics, consulting, and

related leadership positions that support Maryland’s transportation infrastructure and economic development.

a) The need for advancement and evolution of knowledge

The aviation industry is undergoing rapid transformation driven by globalization, digitalization, automation, data analytics, and increasingly complex regulatory and operational environments. In response to these changes, the proposed B.S. in Aviation Business Management at Capitol Technology University incorporates a forward-looking curriculum that emphasizes modern business practices within an aviation context.

The program integrates coursework in aviation operations, airline and airport management, aviation law, safety management, economics, project management, and organizational leadership. Students are exposed to data-driven decision-making, emerging aviation technologies, and industry-partnered capstone projects that address real-world business challenges faced by aviation organizations.

This approach directly supports the Maryland State Plan’s Goal 3: Innovation – “Foster innovation in all aspects of Maryland higher education to improve access and student success.” Specifically, it aligns with:

Priority 8: Promote a culture of risk-taking – “Promote a culture of risk-taking and experimentation that encourages the development of new ideas, pedagogies, pathways, and technologies to improve education delivery and outcomes.”

By integrating applied business education with aviation-specific operational and regulatory content, the program reflects an innovative curricular model that prepares graduates to lead and adapt within a rapidly evolving aviation industry.

b) Societal needs, including expanding educational opportunities and choices for minorities and educationally disadvantaged students at institutions of higher education

The B.S. in Aviation Business Management program expands educational access to high-growth aviation careers for underrepresented populations, including minority, first-generation, female, adult, and veteran students. Unlike technical maintenance or pilot-focused programs, this degree offers a business-oriented pathway into aviation that is accessible to a broader range of students with diverse academic backgrounds.

Capitol Technology University supports this objective through targeted recruitment, scholarships, transfer pathways, and academic support services designed to promote equitable access and student success. These efforts align with:

Goal 1: Student Access – “Ensure equitable access to affordable and high-quality postsecondary education for all Maryland residents.”

and

Priority 4: Analyze systems that impact how specific student populations access affordable and high-quality postsecondary education.

By offering a business-focused aviation degree, the program broadens participation in the aviation sector and helps diversify Maryland's aviation and transportation workforce.

c) The need to strengthen and expand the capacity of historically black institutions to provide high-quality and unique educational programs

Although Capitol Technology University is not a Historically Black Institution (HBI), approximately 51% of its student population identifies as minority, including 34% Black/African American students. The university is committed to expanding access through collaborative partnerships with HBIs and other minority-serving institutions, including articulation agreements and shared academic initiatives.

These efforts support:

Priority 1: Study the affordability of postsecondary education in Maryland, by reducing financial barriers through transfer pathways and scholarships, and

Priority 2: Examine and improve financial literacy programs for students and families, through advising and outreach initiatives that support informed educational planning.

The proposed program is designed to complement, rather than duplicate, existing aviation offerings at Maryland institutions, while expanding business-focused aviation education opportunities for underrepresented populations.

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

The Maryland State Plan for Postsecondary Education articulates three overarching goals:

1. Student Access
2. Student Success
3. Innovation

Goal 1: Student Access

“Ensure equitable access to affordable and quality postsecondary education for all Maryland residents.”

Capitol Technology University is committed to providing equitable access to high-quality, career-focused education in aviation business and management. The B.S. in Aviation Business Management expands access to well-paying and stable careers in the aviation sector by offering an applied, industry-aligned program that does not require prior technical or flight training.

The University's student demographics demonstrate its commitment to access and inclusion:

- a. 51% of students identify as minorities, including 34% Black/African American students.
- b. 22% of students are military veterans who benefit from leadership-oriented and applied business curricula aligned with aviation careers.
- c. The University actively encourages female participation in aviation-related programs, addressing gender disparities in the industry.

To further expand access, Capitol Technology University provides:

- a. Transfer agreements with Maryland community colleges.
- b. Financial aid and scholarship opportunities to reduce economic barriers.
- c. Flexible learning options that support working adults and nontraditional students.

These initiatives align with State Plan Priorities 1, 2, and 4, supporting affordability, financial literacy, and equitable access.

Goal 2: Student Success

“Promote and implement practices and policies that will ensure student success.”

The B.S. in Aviation Business Management program is designed to promote student retention, timely degree completion, and strong employment outcomes. Capitol Technology University supports student success through:

- a. Comprehensive academic advising, tutoring, and career services.
- b. Industry-informed curriculum and applied coursework that align with employer expectations.
- c. Internships, experiential learning opportunities, and industry-partnered capstone projects.

These practices support Priority 5: Maintain the commitment to high-quality postsecondary education in Maryland.

The aviation and transportation sectors continue to show strong demand for management and operations professionals. Business-focused aviation roles offer competitive salaries and long-term career stability, supporting positive return on investment for graduates.

Additional institutional strategies supporting student success include:

- a. Tuition predictability programs.
- b. Veteran and military student support services.
- c. Early Alert and academic intervention systems.

These efforts align with Priority 6: Improve systems that prevent timely completion and Priority 7: Enhance lifelong learning opportunities.

Goal 3: Innovation

“Foster innovation in all aspects of Maryland higher education to improve access and student success.”

Capitol Technology University has a long-standing commitment to innovation in applied STEM and professional education. The proposed B.S. in Aviation Business Management advances this commitment by delivering a modern, interdisciplinary program that integrates business education with aviation industry practice.

Key innovations include:

- a. Integration of aviation-specific business analytics, operations management, and regulatory frameworks.
- b. Applied learning through case studies, simulations, and industry-informed projects.
- c. Capstone experiences that address real-world aviation business challenges.

These elements reflect instructional innovation and support Priority 8: Promote a culture of risk-taking and experimentation in curriculum design and delivery.

Through strategic partnerships with aviation employers, airport authorities, and transportation organizations, the program remains responsive to Maryland's evolving aviation and aerospace economy, including continued growth at major transportation hubs such as BWI Marshall Airport and regional aviation facilities.

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 for Graduates of the Proposed Program

Graduates of the **Bachelor of Science (B.S.) in Aviation Business Management** program will be prepared for employment across a wide range of aviation and transportation-related industries that require business, management, and operational expertise. Demand for aviation business professionals is driven by continued growth in airline operations, airport expansion, global logistics, regulatory complexity, and the increasing need for data-driven management within the aviation sector.

Potential Industries and Employment Opportunities

Graduates of the program may pursue careers in the following sectors:

- a. Commercial Airlines – Positions in airline operations, route planning, scheduling, revenue management, compliance, and corporate management.
- b. Airport Authorities and Airport Management Organizations – Roles in airport operations management, terminal and landside operations, safety and security coordination, and administrative leadership.
- c. Aviation Logistics and Supply Chain Organizations – Managing aviation-related logistics, cargo operations, and supply chain coordination for domestic and international transportation.
- d. Government and Regulatory Agencies – Employment with agencies such as the Federal Aviation Administration (FAA), Department of Transportation (DOT), Department of Defense (DoD), NASA, and state or local aviation authorities in planning, compliance, policy, and operational oversight roles.
- e. Unmanned Aerial Systems (UAS) and Emerging Aviation Enterprises – Business development, operations management, and regulatory coordination roles within the rapidly expanding UAS and advanced air mobility sectors.
- f. Aviation Consulting and Professional Services – Supporting airlines, airports, and aviation organizations with operational analysis, regulatory compliance, safety management, and strategic planning.
- g. Corporate and Private Aviation Organizations – Managing business operations, compliance, and logistical coordination for corporate flight departments and aviation service providers.

Employment Statistics and Salary Expectations in Maryland

According to the U.S. Bureau of Labor Statistics (BLS), aviation-related management and operations roles demonstrate strong wage potential and long-term stability:

- a. Transportation, Storage, and Distribution Managers (which include aviation operations managers) earn a median annual wage of approximately \$99,200 nationally, with higher averages in metropolitan regions such as the Baltimore–Washington corridor.
- b. Logisticians, including those working in aviation and air cargo operations, earn a median annual wage of approximately \$79,400, with Maryland wages exceeding national averages due to regional demand.
- c. Administrative and Operations Managers within air transportation and airport operations earn salaries that commonly range from \$70,000 to over \$100,000, depending on experience and organizational scope.

Regional data indicate that aviation business and management professionals employed in the Baltimore–Washington metropolitan area benefit from strong salary prospects due to the concentration of airports, airlines, defense contractors, and government agencies.

Expected Level of Entry

Graduates of the B.S. in Aviation Business Management program can expect to enter the workforce in entry-level to early mid-level professional roles, including operations coordinator, airline analyst, airport operations specialist, logistics coordinator, or management trainee. With professional experience, internships, and successful completion of capstone projects, graduates may advance into supervisory and management roles within three to five years, supporting long-term career growth and leadership development.

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 B.S. in Aviation Business Management program is designed to address growing demand for professionals with business and operational expertise across the aviation and transportation sectors.

a. National Projections:

According to the U.S. Bureau of Labor Statistics, employment for transportation, storage, and distribution managers is projected to grow by 8% from 2022 to 2032, faster than the average for all occupations. This growth is driven by increasing transportation activity, global trade, and the complexity of logistics and regulatory environments. Nationally, this equates to approximately 19,000 annual job openings, including replacements.

b. Maryland State Projections:

The Maryland Department of Labor projects continued growth in transportation and logistics management occupations, particularly within the Baltimore–Washington region. Employment demand is supported by major aviation hubs such as BWI Marshall Airport, proximity to DCA and IAD, and the presence of defense, aerospace, and logistics employers. State projections indicate hundreds of annual openings in transportation management, logistics, and operations roles relevant to aviation business graduates.

c. Industry Demand and Workforce Initiatives:

The 2024 Maryland Statewide Workforce Development Plan identifies transportation, logistics, and aviation-related services as priority sectors requiring a steady pipeline of management and operational

talent. The plan emphasizes the importance of aligning higher education programs with employer needs to sustain economic growth.

d. Employer Hiring Trends:

The 2024 Annual Report by the Maryland Department of Labor highlights continued employer demand for professionals with business, logistics, and operational management skills across transportation industries, including aviation. Employers anticipate sustained hiring due to retirements, industry expansion, and increased reliance on data-driven management practices.

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 Five Years

Multiple national and regional sources confirm sustained demand for aviation business and management professionals:

- a. Industry Projections – Boeing Commercial Market Outlook:
Boeing projects long-term growth in global air traffic, airline fleet expansion, and aviation services demand. This growth drives increasing need for professionals in airline management, operations planning, logistics, and regulatory compliance.
- b. National Employment Data – U.S. Bureau of Labor Statistics:
BLS projections for transportation and logistics management occupations indicate continued growth through 2033, with tens of thousands of annual openings nationally, including roles directly supporting aviation operations and management.
- c. State-Level Projections – Maryland Department of Labor:
Maryland occupational data confirm steady demand for transportation managers, logisticians, and operations analysts, particularly in regions supporting major airports, defense installations, and aviation service providers.
- d. Current Job Market Indicators – Maryland-Based Openings:
Recent job postings across Maryland consistently reflect demand for airline operations managers, airport operations specialists, logistics coordinators, and aviation compliance analysts, indicating immediate and sustained workforce needs.
- e. Educational and Training Needs – Programmatic Response:
Employers increasingly seek graduates who combine business acumen with aviation industry knowledge. The B.S. in Aviation Business Management directly addresses this need by integrating business fundamentals with aviation operations, regulatory awareness, and applied learning experiences, including capstone projects.

4. Provide Data Showing the Current and Projected Supply of Prospective Graduates

The supply of graduates with aviation-specific business and management education in Maryland remains limited. While the state offers aviation maintenance and pilot-focused programs, there are relatively few bachelor’s-level programs dedicated to aviation business and operations.

Existing associate-level aviation programs and general business degrees provide partial preparation but do not fully address the specialized needs of aviation employers. As a result, many aviation

organizations recruit business graduates without aviation context or aviation specialists without formal business training.

Over the next five years, Maryland is projected to experience thousands of job openings in transportation, logistics, and aviation-related management roles. Without targeted aviation business programs, the supply of qualified graduates will continue to lag behind demand.

The proposed B.S. in Aviation Business Management at Capitol Technology University is designed to help close this gap by producing graduates with integrated business, aviation, and operational expertise. By doing so, the program strengthens Maryland's aviation workforce pipeline and supports long-term economic development within the state's transportation and aerospace sectors.

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.

Several institutions in Maryland and the surrounding region offer programs related to aviation, aviation management, or aviation operations. The following discussion summarizes those offerings and identifies similarities and differences relative to the proposed **B.S. in Aviation Business Management** at Capitol Technology University.

a. University of Maryland Eastern Shore (UMES)

The University of Maryland Eastern Shore (UMES) offers a **Bachelor of Science in Aviation Science** with multiple concentrations, including an **Aviation Management concentration** that combines aviation coursework with business-related content and is designed to prepare students for managerial roles with airports, airlines, flight operations, and the FAA. [University of Maryland Eastern Shore+2](#)

UMES indicates that its Aviation Sciences program is Maryland's only four-year bachelor's degree program in aviation and offers aviation management as a concentration within that degree structure. [University of Maryland Eastern Shore+1](#)

The proposed B.S. in Aviation Business Management at Capitol Technology University differs in program design and emphasis. Capitol's proposed program is structured as a dedicated business-focused aviation degree integrating core business competencies (e.g., accounting, finance, marketing, organizational behavior, project management, and strategic management) with aviation operations, aviation law, safety, and industry practice. This structure is designed to serve students seeking aviation leadership and management pathways without a technical maintenance or pilot training emphasis, and to support career entry into airline and airport management, aviation operations coordination, aviation logistics, and related business functions.

b. Community College of Baltimore County (CCBC)

The Community College of Baltimore County (CCBC) offers aviation-related programs, including an **Aviation Management Certificate**, which prepares students for entry into airline or airport operations and related aviation support functions. [Community College of Baltimore County](#) CCBC's offerings provide valuable workforce preparation and access pathways; however, they are delivered as certificate and associate-level programs rather than a four-year bachelor's degree. The proposed Capitol program differs in credential level and depth, providing a comprehensive

bachelor's curriculum emphasizing business management competencies applied specifically to aviation, and culminating in a two-course senior project sequence that integrates learning outcomes across business and aviation domains.

c. **Regional and Out-of-State Aviation Programs in the Geographic Area**

Students in the broader region may also access aviation-related programs outside Maryland. These offerings may include aviation business or aviation management degrees that combine business coursework and aviation operations topics. While regional options exist, the proposed Capitol program is designed to meet Maryland-specific workforce needs and provide a Maryland-based pathway for students seeking a business-focused aviation degree aligned with regional employers, airports, and government agencies.

2. Provide Justification for the Proposed Program

The proposed B.S. in Aviation Business Management at Capitol Technology University responds to a documented and continuing need for professionals who can manage and lead within aviation organizations where business performance, regulatory compliance, safety culture, and operational efficiency must be integrated. The program is designed to prepare graduates for aviation business and management roles that support airlines, airport authorities, aviation service providers, logistics operations, and government/regulatory environments.

While aviation-related programs exist in Maryland, the proposed program is justified because it provides a distinct academic pathway that emphasizes **aviation-specific business management** as a dedicated bachelor's degree rather than as a concentration embedded within a broader aviation science degree or as a certificate-level credential. UMES offers aviation management as a concentration within its Aviation Science degree, and CCBC offers aviation management credentials at the certificate level. [University of Maryland Eastern Shore+2University of Maryland Eastern Shore+2](#) The proposed Capitol program differs by delivering a business-centered curriculum specifically designed for aviation business functions and leadership preparation, including structured senior projects to ensure integration of knowledge and readiness for professional roles.

a. **Workforce Need for Aviation Business and Management Talent**

Maryland's aviation ecosystem includes major commercial airport operations, air cargo and logistics activity, defense and government aviation stakeholders, and aviation services that require skilled business and operational leadership. As aviation organizations face increasing operational complexity, cost pressures, compliance requirements, and workforce transitions, employers seek graduates who can combine aviation industry knowledge with business decision-making, communication, leadership, and project execution.

b. **Distinct Academic Focus and Program Differentiation**

The proposed program is designed to be clearly distinct from FAA training, aviation maintenance education, and pilot training programs. It emphasizes business and management education within an aviation context and is structured to prepare graduates for operations management, aviation business administration, and aviation-related logistics and planning roles. The program's curriculum includes a capstone/senior project sequence to integrate learning across business disciplines and aviation operational content, ensuring graduates demonstrate readiness for professional practice.

c. **Alignment with State and Regional Workforce and Economic Priorities**

The program supports Maryland's continued emphasis on building a talent pipeline aligned with high-demand sectors, strengthening transportation and infrastructure-related workforce capacity,

and promoting applied, career-oriented education. The program also supports aviation-related employer needs tied to airport operations, airline business functions, aviation services, and public-sector aviation stakeholders.

d. **Competitive Advantage and Industry Collaboration**

Capitol Technology University will leverage industry engagement to ensure curriculum relevance, experiential learning opportunities, and professional readiness. Partnerships with aviation employers, airport authorities, and aviation-related organizations can support internships, applied projects, guest instruction, and advisory input. These collaborations will enhance student employability and ensure that program outcomes remain aligned with evolving aviation business requirements.

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 HBIs

The proposed Bachelor of Science (B.S.) in Aviation Business Management at Capitol Technology University is not expected to negatively impact the implementation or maintenance of high-demand programs at Maryland’s Historically Black Institutions (HBIs). Currently, no HBI in Maryland offers a bachelor’s degree program that is dedicated specifically to aviation business and management, integrating core business education with aviation operations, regulatory frameworks, and industry practices.

For example, the University of Maryland Eastern Shore (UMES) offers a Bachelor of Science in Aviation Science with concentrations such as Aviation Management, Professional Pilot, Aviation Electronics, and Aviation Software. While these offerings provide valuable aviation education, they are structured as concentrations within a broader aviation science degree and are not designed as a stand-alone aviation business management program with an integrated business core. The proposed Capitol program addresses a distinct workforce need by focusing on the preparation of graduates for aviation-related business, management, and operational leadership roles rather than technical maintenance or flight training.

Rather than competing with HBI programs, the proposed B.S. in Aviation Business Management is designed to complement and strengthen existing HBI offerings. Through articulation agreements, transfer pathways, and collaborative outreach initiatives, students who begin their academic careers in aviation, business, or STEM-related programs at HBIs could transfer into Capitol Technology University to complete a specialized aviation business degree. This approach expands educational pathways while preserving the integrity and enrollment of HBI programs.

By offering a complementary, non-duplicative academic pathway, Capitol Technology University’s proposed program enhances access to high-demand aviation careers for underrepresented and minority students. It broadens educational choice without overlapping existing HBI programs and supports statewide goals related to collaboration, workforce development, and equitable access to career-focused higher education. As such, the program strengthens—rather than diminishes—the capacity of HBIs to maintain and grow their high-demand academic offerings.

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

The proposed **Bachelor of Science (B.S.) in Aviation Business Management** at Capitol Technology University is designed with a focused, applied, and workforce-oriented emphasis and is therefore unlikely to interfere with or alter the uniqueness or institutional identities of Maryland’s Historically Black Institutions (HBIs). Each HBI in Maryland maintains a distinct mission centered on educational access, student success, community engagement, and inclusive excellence—missions that the proposed program supports but does not seek to replicate.

For example, Bowie State University emphasizes holistic student development grounded in excellence, diversity, and integrity; Coppin State University focuses on leadership development, civic engagement, and economic empowerment; Morgan State University advances broad access to education reflecting the diversity of Maryland’s population; and the University of Maryland Eastern Shore (UMES) supports workforce and economic development through aviation-related academic offerings. While UMES includes aviation programs, its focus is not a stand-alone bachelor’s degree centered specifically on aviation business and management. None of these institutions offer a dedicated program that integrates core business education with aviation operations, regulatory awareness, and industry-focused management preparation in the manner proposed by Capitol Technology University.

Capitol Technology University’s proposed program is intentionally aligned with the institution’s mission to deliver applied, technology- and industry-driven education that prepares graduates for leadership roles in specialized professional fields. The B.S. in Aviation Business Management is designed to address a distinct niche within the aviation sector—preparing students for business, management, and operational leadership roles—rather than duplicating the broader liberal arts, access-oriented, or community-centered missions that define Maryland’s HBIs.

Moreover, Capitol Technology University recognizes the value of collaboration with HBIs and supports opportunities for partnership. The university is committed to exploring articulation agreements, transfer pathways, and cooperative initiatives that enable students from HBIs to pursue specialized aviation business education at the bachelor’s level. These pathways expand opportunities for students from historically underrepresented communities while reinforcing, rather than undermining, the missions and identities of HBI institutions.

In summary, the proposed B.S. in Aviation Business Management respects and reinforces the unique identities and missions of Maryland’s Historically Black Institutions. The program is structured to complement existing academic offerings, expand educational choice, and contribute positively to the state’s higher education landscape by filling a defined gap in aviation workforce preparation without creating redundancy.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes

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

The Bachelor of Science in Aviation Business Management was developed through a collaborative process involving faculty from Capitol Technology University’s aviation and business programs, the

Office of Academic Affairs, and input from industry partners and advisory board members. The program was created in response to regional and statewide workforce demand for graduates with business, management, and operational readiness applicable to aviation-related industries, including airlines, airports, aviation services, and transportation organizations.

The program builds upon existing institutional strengths in aviation studies, business administration, quantitative foundations, and professional practice. It integrates approved courses already offered by the university and organizes them into a cohesive, interdisciplinary curriculum that emphasizes applied learning, industry awareness, and real-world business decision-making within aviation environments. The curriculum is intentionally designed to serve traditional undergraduate students, transfer students, adult learners, and students seeking a career-focused degree that connects aviation operations with business and management practice.

The program will be overseen by full-time faculty with expertise in aviation operations, air transportation systems, safety and regulatory environments, business management, accounting, finance, economics, and organizational leadership. These faculty members hold advanced degrees and bring a combination of academic and industry experience relevant to aviation business practice. Adjunct faculty with specialized expertise in airline management, aviation law, air traffic systems, and project-based instruction will support selected courses and senior projects as needed.

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

The Bachelor of Science in Aviation Business Management is delivered primarily in an on-campus, face-to-face modality, with selected courses available in hybrid or online formats to support transfer students and working professionals. The curriculum emphasizes applied instruction supported by case studies, analytical assignments, team-based projects, and a two-semester senior project experience.

Educational Objectives:

Graduates of the Aviation Business Management program will:

- a) Be prepared for entry-level and early-career employment in aviation-related business, management, and operations roles.
- b) Apply business and management principles to aviation organizations and operational environments.
- c) Demonstrate professional communication, ethical responsibility, teamwork, and project management skills in aviation business contexts.
- d) Develop an understanding of aviation industry structures, operational systems, safety, and regulatory environments that influence business decision-making.
- e) Engage in lifelong learning, professional development, certification, or continued education in aviation and business-related fields.

Learning Outcomes:

Upon graduation, students will be able to:

- a) Apply foundational business concepts in accounting, finance, marketing, management, and economics to aviation-related organizations.

- b) Analyze aviation industry structures, operational systems, and regulatory environments to support informed business decisions.
- c) Communicate effectively with technical and non-technical audiences through written reports, presentations, and professional documentation.
- d) Recognize ethical, professional, safety, and regulatory responsibilities in aviation business and management settings and make informed decisions.
- e) Function effectively as a member of a professional team by contributing to planning, coordination, and project execution.
- f) Integrate aviation and business knowledge in a culminating senior project addressing a real-world aviation business or operational challenge.

These learning outcomes reflect the rigor and breadth appropriate for a bachelor's-level aviation business management program and emphasize workforce readiness, applied competence, and professional practice.

3. Explain how the institution will:

- a) Provide for assessment of student achievement of learning outcomes in the program

Assessment of student learning outcomes will be conducted using a combination of direct and indirect measures. Each course includes clearly defined learning outcomes mapped to the program-level outcomes. Faculty assess student achievement through exams, analytical assignments, case studies, presentations, applied projects, and team-based activities.

The two-semester senior project sequence serves as the culminating assessment experience, evaluating students' ability to integrate business and aviation knowledge, apply project management practices, analyze aviation-relevant problems, and communicate results effectively. Assessment data are reviewed annually by program faculty and academic leadership, with input from advisory board members to support continuous improvement.

- b) Document student achievement of learning outcomes in the program

Capitol Technology University maintains a centralized process for documenting student learning outcomes and program-level assessment results. Course portfolios include syllabi, assignments, rubrics, and representative student work. Faculty submit annual assessment summaries that document outcome achievement, identify areas for improvement, and recommend curricular adjustments.

These materials are reviewed through internal academic assessment processes and are retained to support institutional effectiveness, accreditation, and regulatory reporting requirements.

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

The Bachelor of Science in Aviation Business Management is a 121-credit undergraduate degree designed to prepare students for immediate employment and long-term career advancement in aviation-related business and management fields. The program integrates general education, quantitative foundations, business and management core coursework, aviation industry coursework, and a two-semester senior project experience that demonstrates integration of knowledge and skills.

The curriculum is structured to provide students with strong business foundations, aviation industry context, applied professional skills, and focused depth through aviation-specific coursework and a culminating senior project experience.

Curriculum Structure and Course Requirements

Course Number & Title	Credits	Prerequisite
I. General Education (27 Credits)		
EN 101 – English Communications I	3	None
EN 102 – English Communications II	3	EN 101
HU 220 – Critical Thinking	3	EN 102
HU 225 – Writing for the Internet	3	EN 101
HU 331 – Arts and Ideas	3	EN 102
SS 351 – Ethics	3	EN 102
Social Science Elective	3	None
Humanities Elective	3	None
BUS 174 – Introduction to Business and Management	3	None
II. Mathematics & Quantitative Foundations (22 Credits)		
MA 112 – Intermediate Algebra	3	MA 005 or placement test score
MA 114 – Algebra and Trigonometry	4	MA 112 or placement
MA 128 – Introduction to Statistics	3	MA 114
BUS 282 – Foundations of Economics	3	BUS 174, EN 101, EN 102
BUS 114 – Advanced Excel	3	None
CS 120 – Introduction to Programming Using Python	3	None
PH 201 – General Physics I	3	MA 114
III. Business & Management Core (27 Credits)		
BUS 200 – Business Communications	3	EN 101
BUS 270 – Financial Accounting I	3	None
BUS 275 – Human Resource Management	3	BUS 174, EN 101, and EN 102
BUS 283 – Managerial Accounting	3	BUS 174, MA 112
BUS 376 – Marketing Principles	3	BUS 174 and EN 102
BUS 301 – Project Management	3	EN 101, BUS 174
BUS 372 – Financial Management	3	BUS 270, MA 112
BUS 410 – Strategic Management	3	BUS 174, EN 101, and EN 102
BUS 386 – Organizational Theory & Behavior	3	BUS 275
IV. Aviation Core (Industry-Specific) (33 Credits)		
AVT 101 – Introduction to Flight & Aviation History	3	None
AVT 251 – Air Transportation	3	None
AVT 141 – Private Pilot Ground School	3	None
AVT 143 – Aviation Weather Services	3	AVT 141
AVT 201 – Air Traffic Control Systems	3	AVT 141
AVT 202 – Air Traffic Control Operations	3	AVT 201
AVT 254 – Airline Management	3	None
AVT 256 – Aviation Safety	3	None
AVT 405 – Aviation Law	3	Senior standing
AVT 457 – Aviation Senior Project I	3	Senior standing
AVT 458 – Aviation Senior Project II	3	AVT 457 should be taken immediately before this course
V. General Electives (12 Credits)		
General Elective 1	3	—
General Elective 2	3	—
General Elective 3	3	—
General Elective 4	3	—

Core Courses and Descriptions

General Education (24 credits)

EN-101 – English Communications I (3 credits): This introductory college-level course focuses on effective oral and written communication skills and the development of analytical abilities through various reading and writing assignments. Students must demonstrate competence in writing mechanics, including grammar, sentence structure, logical content development, and research documentation through 4 essays/research papers. Rhetorical modes may include description, comparison/contrast, narrative, and process analysis. Students are expected to develop effective oral communication skills through speeches. Group projects will develop effective team skills such as decision-making, time management, and cooperation. Prerequisite(s): Acceptance based on placement test scores.

EN-102 – English Communications II (3 credits): This sequel to EN-101 involves more sophisticated reading, writing, speaking, and research assignments. Students must demonstrate competence in writing mechanics, as well as advanced research skills, the ability to handle complex information, and effective team skills. Students write research papers: an information paper, a cause-and-effect paper, an argument paper, and a final research paper. Course includes group work. Presentations are required. Prerequisite(s): EN 1012.

HU 220 – Critical Thinking (3 credits): This course will explore the process of critical thinking and guide students in developing clearer, more insightful, and more effective reasoning skills. Using examples drawn from personal experience and contemporary issues, students will practice analyzing arguments, evaluating evidence, solving problems, and making informed decisions. Readings, structured writing assignments, and guided discussions are used to strengthen analytical and reflective thinking skills applicable to academic, professional, and personal contexts. Prerequisite(s): EN 102

HU 225 – Writing for the Internet (3 credits): This course will introduce students to writing for online platforms to support effective digital communication in formats such as blogs and websites. Emphasis is placed on developing clear, engaging content using an active voice and audience-centered writing strategies. Topics include the workflow and demands of Internet writing and publishing, content development, and audience engagement. Students will learn how to launch and maintain a blog and prepare articles for online publication. The course focuses on written communication and does not include web design. Prerequisite(s): EN 101

HU 331 - Arts and Ideas (3 credits): This course enables students to study and appreciate various forms of art, including painting, sculpture, architecture, music, drama, film, and literature through in-class and on-site experiences. The arts are also surveyed from an historical perspective, focusing primarily on eras in Western civilization. This enables students to sense the parallel development of the arts, of philosophy, and of sociopolitical systems and to recognize various ways of viewing reality. Prerequisite(s): EN 102

SS 351 – Ethics (3 credits): This course is designed to help students improve their ability to make ethical decisions. This is done by providing a framework that enables the student to identify, analyze, and resolve ethical issues that arise when making decisions. Case analysis is a primary tool of this course. Prerequisite(s): EN 102

Social Science Elective (3 Credits): This elective provides students with an opportunity to explore human behavior and social systems through disciplines such as sociology, psychology, political science, or economics. The course emphasizes critical thinking, ethical reasoning, and an understanding of cultural and societal dynamics that influence human interactions in personal, professional, and global contexts. Prerequisite: None (may vary depending on specific course chosen)

Humanities Elective (3 Credits): This elective allows students to engage with the human experience through the study of literature, philosophy, art, religion, or history. The course fosters critical analysis, creative thinking, and appreciation for cultural diversity and human values, encouraging reflection on historical and contemporary issues. Prerequisite: None (may vary depending on specific course chosen)

Mathematics & Quantitative Foundations (22 credits)

MA 112 – Intermediate Algebra (3 credits): Designed for students needing mathematical skills and concepts for MA-114 and MA-261. In this course students are introduced to equations and inequalities and learn the language of algebra and related functions, including polynomial, rational, exponential and logarithmic functions. Other topics include solving equations, inequalities and systems of linear equations; performing operations with real numbers, complex numbers and functions; constructing and analyzing graphs of functions; and using mathematical modeling to solve application problems. Prerequisite(s): MA 005 or placement test score.

MA 114 - Algebra and Trigonometry (4 credits): Designed for students needing mathematical skills and concepts for MA-261. Topics in this course are as follows. Algebra: basic operations on real and complex numbers, fractions, exponents and radicals. Determinates: Solution of linear, fractional, quadratic and system equations. Trigonometry: definition and identities, angular measurements, solving triangles, vectors, graphs and logarithms. Prerequisite(s): MA 112 or placement test score.

MA 128 - Introduction to Statistics (3 credits): This course addresses probability: definitions, theorems, permutations and combinations; binomial, hypergeometric, Poisson and normal distributions; sampling distribution and central limit theorem; and estimation and hypothesis testing. Prerequisite(s): MA 110, MA 111 or MA 112.

BUS 114 – Advanced Excel (3 credits): This course stresses the ten core areas of advanced Excel usage: advanced formula; tables and formatting; conditional formatting; advanced charting; pivot tables and pivot reporting; VBA and macros; using Excel productively; data tables, simulations and solver; Excel integration with other tools; and optimizing Excel. Practice with data sets will allow students to use Excel in realistic simulations. Prerequisite(s): None

CS 120 – Introduction to Python (3 credits): The course will cover basic concepts and elements of computer programming using Python. Topics include variables, constants, operators, expressions, statements, branching, loops, and functions. Additionally, Python specific data structures, built-in functions, library modules and working with external files will be applied in developing working code. Prerequisite(s): None

CH 120 – Chemistry (3 credits): This course teaches metric system and significant figures, stoichiometry, fundamental concepts of atomic structure and its relationship to the periodic table and electron configuration. Bonds and electronegativity, gases, oxidation states and redox, solutions, acids and

bases, changes of state, thermodynamics, and chemical kinetics and equilibrium are also included.

Prerequisite(s): MA 112 or MA 114

PH 201 – General Physics I (3 credits): This is a non-calculus-based physics course intended for credit in engineering technology courses. PH-261 is to be used for electrical, computer, and software engineering courses. PH-201 addresses mechanics, focusing on units, conversion factors, vector diagrams, translational equilibrium, friction, torque and rotational equilibrium, uniformly accelerated motion, projectiles, Newton's Law, work energy and power, kinetic and potential energy, conservation of energy, and impulse and momentum. It also addresses heat, focusing on temperature scales, thermal properties of matter, heat and temperature change, heat and change of phase, physics of heat transfer, and applications. Students completing this course may not enroll in PH-261 for additional credit. Prerequisite(s): MA 114

Business & Management Core (33 credits)

BUS 174 - Introduction to Business and Management (3 credits): This course presents a survey of the general business and management environment. Topics include an introduction to the various forms of business, organizational structure, and their legal implications. Modern management and supervision concepts, history and development of theory and practice, the roles of managers, and the relationship between manager and employee are examined. This is a seminar course with emphasis on class discussion and collaborative learning.

.BUS 282 – Foundations of Economics (3 credits): This course is an Introduction to economic concepts and analysis. It deals with the relationship between government, business, and the overall economy. The key areas focus on gross domestic product, the public sector, unemployment, and aggregate supply and demand. The global economy is covered with discussion of issues such as international trade and protectionism. Prerequisite(s): BUS 174, EN 101, EN 102.

BUS 200 – Business Communications (3 credits): This course includes preparation for various kinds of both written and oral business communication. The course will develop and sharpen the critical thinking and writing skills, including report/proposal preparation and presentation, needed in the workplace. Strategies for effective communication will also be explored. Prerequisite(s): EN 101.

BUS 270 – Financial Accounting I (3 credits): This is an introductory accounting course that will provide students with a strong basic knowledge of accounting terms, concepts, and procedures. Analyzing business transactions as they relate to the General Ledger and the use of special journals will be addressed as well as the various processes and procedures related to the full accounting cycle. The accounting principles described are those endorsed by the Financial Accounting Standards Board. Prerequisite(s): None.

BUS 275 – Human Resource Management (3 credits): This course examines the role of the human resource professional as a strategic partner in managing today's organizations. Key functions such as recruitment, selection, development, appraisal, retention, compensation, and labor relations are examined in the context of government, private, and public sectors. Prerequisite(s): BUS 174, EN 101, and EN 102.

BUS 283 – Managerial Accounting (3 credits): This course focuses on budgeting and planning. Emphasis is on the use of accounting information to plan and redirect allocations to support business decisions. Managerial Accounting is designed to follow Principles of Accounting. The course outlines how accountants create, organize, interpret and communicate information that improves internal processes

and allows organizations to identify and leverage opportunities to create value within the supply chain and with customers. Prerequisite(s): BUS 174, MA 110, MA 111 or MA-112.

BUS 376 – Marketing Principles (3 credits): The role of marketing and the strategies used by marketing managers to solve problems is the content of this course. Emphasis is placed on the relationship among consumers, business, and government in regard to product, promotion, pricing, and distribution strategies. Industry standards and ethical practice are focal points of the course. Prerequisite(s): BUS 174 and EN 102.

BUS 301 – Project Management (3 credits): This course is an introduction to project management. It covers the origins, philosophy, methodology, and involves actual applications and use of tools such as MS Project. The System Development Cycle is used as a framework to discuss project management in a variety of situations. Illustrative cases are used and project leadership and team building are covered as integral aspects of good project management. Prerequisite(s): EN 101, BUS 174.

BUS 372 – Financial Management (3 credits): This course is designed to familiarize the student with the principles that guide a firm's financial resources management. The primary philosophy around which this course is organized is wealth maximization and the decision criterion used to achieve such a state. Topics such as capital management, fixed-asset investment, cost of capital, capital structure, long-term finance, mergers, leasing, and multinational finance are covered. In addition, accounting terminology and concepts relevant to financial analysis and decision making will be presented. Prerequisite(s): BUS 270 and MA 111 or MA 112.

BUS 410 – Strategic Management (3 credits): Designed to provide students with a general overview of systematic and continuous planning processes used by management to gain strategic and competitive advantage. The students are exposed to, and practice, the complex interrelationships between strategy, structure, culture, and management. Strategic and tactical strategies are explored using case studies, projects and discussions. Students develop and assess the role of management in strategy formulation, implementation and evaluation. Prerequisite(s): BUS 174, EN 101, and EN 102.

BUS 386 – Organizational Theory & Behavior (3 credits): This course integrates the study of management principles and practices with the study of human behavior within organizations. The focus will be upon translation of management and organizational behavior theory to practices that result in organizational effectiveness, efficiency, and human resource development. To understand management and organizational behavior, concepts associated with continuous improvement in individual and group processes will be discussed. Specific attention will be given to organizational behaviors, diversity in organization, attitudes and job satisfaction, personality and values, perceptions and individual decision making, motivation concepts, foundations of group behavior, communication, leadership, power and politics, and conflict. Prerequisite(s): BUS 275.

Aviation Core (33 credits)

AVT 101 – Introduction to Flight & Aviation History (3 credits): This course is an introduction to the history of aviation technology from its origins to the present day. It examines selected topics on flight within the Earth's atmosphere from a global perspective with emphasis on events in the United States. Overall, the course stresses the history of flight within the broader context of culture, economics, politics, society, technology, and international conflict through lecture, readings, video, writing assignments, and discussions. Prerequisite(s): Admission to the Program.

AVT 251 – Air Transportation (3 credits): This course provides an overview of the development of air transportation facilities, state and federal regulations, the Department of Transportation, the Federal Aviation Administration, the National Transportation Safety Board, and organization of commercial air transportation to include air carrier management, marketing, and pricing procedures. Prerequisite(s): None.

AVT 141 – Private Pilot Ground School (3 credits): Introduction to basic principles of flight (basic aerodynamics), aircraft systems, performance, weight and balance, aviation physiology, federal air regulations, flight publications, basic meteorology, navigation, and cross-country flight planning. Upon completion of this course, students will be prepared to take the FAA Private Pilot knowledge examination. Prerequisite(s): None.

AVT 143 – Aviation Weather Services (3 credits): This course provides a detailed introduction to the environmental factors that are critical to safe flight operations. Includes the following: thermal patterns, horizontal and vertical motion, moisture clouds, precipitation, air masses, fronts, cyclones, thunderstorms and aviation hazards. Will also include meteorological flight planning, use of weather information systems, and reports and charts used for aviation weather reporting and forecasting. Prerequisite(s): AVT 141.

AVT 201 – Air Traffic Control Systems (3 credits): This course provides an introduction to Air Traffic Control (ATC), the history, development, and structure of the National Airspace System (NAS). The student will explore navigation aids, ATC radar systems, terminal and enroute traffic control, flight service, weather facilities, airspace, and FAA regulations. Prerequisite(s): AVT 141.

AVT 202 – Air Traffic Control Operations (3 credits): This course provides the student with an analysis of Air Traffic Control (ATC) regulatory flight publications including manuals, charts, advisory circulars and procedures. Topics include the Federal Aviation Administration (FAA) regulations, aeronautical information and agreements, Terminal Procedures (TERPS) publications and applicable FAA Orders. Corequisite(s): AVT 201.

AVT 254 – Airline Management (3 credits): This course exposes the student to the management and organizational structure of air carriers to include airline scheduling, fleet planning, airline economics and financing, and air carrier labor relations. Prerequisite(s): None.

AVT 256 – Aviation Safety (3 credits): This course will concentrate primarily on the major aspects of aviation safety and the organizations and processes that govern commercial and general aviation safety in the United States. This course will provide an introduction to aviation safety programs, risk management, and the associated components of pilot psychology, physiology, human factors, and accident review and investigation. It will also include an overview of modern techniques used in accident investigation. Prerequisite(s): None.

AVT 405 – Aviation Law (3 credits): This course provides a detailed study of the regulations and procedures common to the aviation industry as well as a survey of the legal environment and the standards of conduct required of professional pilots. Case studies and discussion methods are used to show application of these statutes. Included is a study of latest legislation passed by the Congress and international conventions. Prerequisite(s): Senior standing.

AVT 457 – Aviation Senior Project I (3 credits): Students/teams select a project area, develop an understanding of the project scope that includes research and documentation of related work, prepare a feasibility study, develop project requirements, propose solutions and multiple designs, analyze proposed

designs, select a final proposed design, and prepare and present a preliminary design review (PDR). Students are expected to apply proper aviation concepts and project management to their work. Additional components may be required in some projects. Students/teams submit a final report at the end of the semester. Prerequisite(s): Senior standing.

AVT 458 – Aviation Senior Project II (3 credits): This is the aviation capstone course designed to challenge students as they work individually or in small teams on an aviation problem requiring technical expertise and aviation acumen. Drawing upon the course in technical report writing, students are required to submit a major report outlining and analyzing an aviation problem and proposing solutions. *Note: Course must be completed with a grade of “C” or higher to meet undergraduate graduation requirements.* Prerequisite(s): AVT 457 should be taken immediately before this course.

General Electives (9 credits)

General Electives (9 credits): General Electives allow students to broaden their academic experience by selecting courses that complement their major or support individual academic and career interests. Elective courses may be chosen from approved offerings across the University, subject to academic advising and prerequisite requirements. Students are encouraged to use electives to enhance professional skills, explore interdisciplinary topics, or pursue areas of personal interest that support their educational and career goals.

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

The Bachelor of Science in Aviation Business Management fully satisfies the general education requirements as defined by the Maryland Higher Education Commission (MHEC) and the standards outlined in COMAR 13B.02.03. General education is intentionally embedded throughout the curriculum to ensure that students develop strong communication skills, critical thinking abilities, ethical reasoning, and an understanding of social, cultural, and civic responsibility relevant to professional practice in aviation and business environments.

The program includes 24 credits of general education coursework, consisting of English composition (EN 101 and EN 102), humanities and critical thinking (HU 220, HU 225, HU 331), and social sciences and ethics (SS 351, Social Science Elective, Humanities Elective). These courses support written and oral communication, analytical reasoning, ethical awareness, and an understanding of human and societal factors that influence organizational and industry decision-making.

Quantitative reasoning and scientific literacy are addressed through required coursework in intermediate algebra, algebra and trigonometry, statistics, chemistry, physics, programming, and applied data tools. Collectively, these requirements ensure that students graduate with a broad intellectual foundation that supports informed business decision-making, professional responsibility, and effective participation in the aviation and transportation industries.

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

The Bachelor of Science in Aviation Business Management is not a licensure-based or certification-mandated program and does not seek specialized programmatic accreditation. The program is intentionally structured as a business- and management-focused aviation degree designed to prepare students for professional roles in aviation organizations rather than pilot licensure or FAA technical certification.

The program adheres to all institutional and state requirements governing undergraduate degree programs and is subject to Capitol Technology University's internal academic review, assessment, and continuous improvement processes. Program quality is maintained through curriculum oversight, qualified faculty, industry advisory input, and alignment with regional and national workforce needs.

While the degree itself does not confer eligibility for professional licensure, coursework within the program may support preparation for industry-recognized credentials related to aviation management, project management, safety management systems (SMS), logistics, or business analytics. Preparation for such credentials is embedded where appropriate within relevant courses but is not required for degree completion.

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

This program does not involve any contractual agreements with another institution or non-collegiate organization. All instruction, curriculum development, academic oversight, and student support services for the Bachelor of Science in Aviation Business Management will be provided directly by Capitol Technology University using its existing faculty, facilities, and administrative resources.

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.

Capitol Technology University affirms that students enrolled in the Bachelor of Science in Aviation Business Management will be provided with clear, complete, and timely information regarding all aspects of the program. This includes curriculum structure, course sequencing, degree requirements, faculty interaction, technology expectations, academic support services, and financial policies.

Information will be communicated through the following mechanisms:

- a. The program curriculum, course descriptions, credit requirements, and degree expectations will be published in the university academic catalog and maintained on the program webpage. These materials are reviewed and updated regularly to ensure accuracy and compliance with institutional and state requirements.
- b. Each student is assigned an academic advisor upon enrollment to support degree planning, prerequisite tracking, and timely progress toward graduation.
- c. Course syllabi clearly outline instructional format, assessment methods, faculty availability, and communication expectations. Faculty-student interaction occurs through classroom instruction, advising sessions, office hours, and senior project mentoring.

- d. Students are informed of assumptions related to computer literacy and required software skills. Any required technical equipment, such as laptops or software applications, is communicated in advance, with minimum hardware and software specifications published by the Office of Information Technology.
- e. Canvas serves as the university's official learning management system and is used to deliver course materials, manage assignments, facilitate communication, and provide feedback. Training and technical support are available to students throughout the program.
- f. Academic support services, including tutoring, library resources, writing assistance, and career development services, are available and described in the student handbook, academic catalog, and university website.
- g. Information regarding tuition, fees, billing procedures, payment plans, and financial aid is provided by the Business Office and Financial Aid Office, including guidance on scholarships, federal aid, military benefits, and institutional funding options.

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

Capitol Technology University affirms that all advertising, recruiting, and admissions materials related to the Bachelor of Science in Aviation Business Management will clearly and accurately represent the program, its curriculum, intended outcomes, and the student services available.

The Office of Marketing and Communications works in collaboration with the Office of Admissions and the academic department to ensure that all promotional and recruitment materials are:

- a. Factually accurate and reflective of the approved curriculum and degree requirements;
- b. Consistent with the university's mission and commitment to academic integrity;
- c. Reviewed and updated regularly to reflect program or policy changes.

Recruitment materials—including the university website, digital and print media, social media content, and admissions presentations—will provide transparent information regarding:

- a. Program objectives and aviation business focus;
- b. Credit requirements, course structure, and instructional modalities;
- c. Technology and equipment expectations;
- d. Opportunities for academic advising, academic support, and career services;
- e. Tuition, fees, and financial aid options.

Admissions counselors and faculty involved in recruitment activities will receive program-specific training to ensure consistent, accurate communication during outreach efforts, recruitment events, and transfer engagement activities.

H. Adequacy of Articulation

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

Capitol Technology University maintains multiple articulation and partnership agreements that support student transfer, degree completion, and program collaboration. These partnerships align closely with

the objectives of the proposed Bachelor of Science in Aviation Business Management, which integrates aviation studies with business, management, economics, safety, and regulatory coursework.

The program is intentionally designed to be transfer-friendly and will leverage existing articulation agreements with Maryland and out-of-state institutions that offer associate degrees or certificates in aviation, transportation, business administration, logistics, and related technical or management fields. These include, but are not limited to, community colleges offering aviation management, aviation operations, or transportation-related programs, as well as institutions serving military-affiliated and adult learners.

As articulation agreements are updated and expanded, the Bachelor of Science in Aviation Business Management will be formally added to Capitol Technology University's portfolio of articulated undergraduate programs. Existing agreements with institutions such as Cecil College, Community College of Baltimore County (CCBC), and other Maryland community colleges provide a foundation for transfer pathways into the program, particularly for students completing associate degrees in aviation maintenance, aviation management, business, or general studies with an aviation or transportation focus.

In addition, Capitol Technology University maintains active outreach and collaboration with secondary education partners and workforce development initiatives, including Project Lead The Way (PLTW) and aviation-focused career and technical education (CTE) programs. These partnerships support early exposure to aviation and business career pathways and facilitate student transitions from secondary education into postsecondary aviation programs.

Articulation agreements for the Aviation Business Management program will be structured to align associate-level coursework in aviation operations, aviation maintenance fundamentals, air transportation, business administration, accounting, economics, and general education with the lower-division requirements of the bachelor's degree. The curriculum is organized to maximize the acceptance of transfer credit while preserving the academic integrity and learning outcomes of the program.

General education requirements and foundational business and aviation courses have been mapped to commonly offered coursework at community colleges, military education providers, and aviation training institutions. This approach allows qualified transfer students—including veterans and working professionals—to enter the program at the junior level and complete the degree in an efficient and timely manner.

Capitol Technology University will continue to pursue additional articulation agreements with Maryland community colleges, aviation training institutions, and partner organizations to broaden access, strengthen transfer pathways, and support statewide and regional workforce development goals in the aviation and transportation sectors. Formal articulation agreements and transfer pathway documentation will be submitted as supporting materials to this proposal as they are finalized.

I. Adequacy of Faculty Resources

1. Provide a brief narrative demonstrating the quality of program faculty.

The Bachelor of Science in Aviation Business Management is supported by a highly qualified and interdisciplinary faculty team consisting of full-time faculty, professors of practice, and adjunct instructors. Collectively, these faculty bring expertise in aviation operations, air transportation systems,

aviation safety and law, business management, economics, accounting, project management, quantitative analysis, and general education. This breadth of expertise ensures that students receive a rigorous, professionally oriented education aligned with workforce expectations in the aviation, transportation, and business sectors.

The program is administered within the School of Engineering and Technology, in collaboration with the School of Business, and benefits from faculty who possess strong academic credentials as well as substantial industry experience. Faculty teaching in the program have professional backgrounds in aviation operations, airline management, regulatory compliance, safety systems, and organizational leadership, providing instruction grounded in both theory and real-world application.

Instruction in foundational business, quantitative, and general education coursework is supported by existing full-time faculty across the university. Upper-division aviation and aviation business courses are delivered by faculty with direct experience in aviation systems, transportation policy, safety oversight, and management, ensuring appropriate depth, continuity, and specialization throughout the curriculum.

Summary of Faculty Qualifications and Teaching Responsibilities

FULL-TIME FACULTY

Dr. Andrew Mehri holds a Ph.D. in Computer Science, with additional degrees in information architecture and electronics engineering. He has held leadership roles in technical and vocational education and teaches courses in quantitative tools, technical systems, and applied analysis that support aviation business decision-making.

Dr. Jeff Chi holds a Ph.D. in Project Management from the University of Maryland and brings extensive professional experience managing large-scale infrastructure, transportation, and capital projects. He teaches project management, business communications, and professional practice courses supporting aviation business operations and organizational leadership.

Dr. Tahani Baabdullah holds a Ph.D. in Computer Science and is an expert in artificial intelligence and machine learning, with research and industry experience in deep learning, cybersecurity, and data analytics. She teaches programming and computational courses that support analytical and technological competencies within the program.

Dr. Nisma M. Omar holds a Ph.D. in Analytical Chemistry and an M.S. in Physical Chemistry. She teaches foundational mathematics, statistics, and social science coursework that supports quantitative reasoning and analytical literacy.

Dr. Charles D. Conner holds a Ph.D. in Electrical Engineering and contributes instruction in algebra, quantitative analysis, and applied technical foundations that support aviation systems understanding and operational decision-making.

Dr. Gregory P. Behrmann holds a Ph.D. in Mechanical Engineering from The Catholic University of America and serves as Clinical Associate Professor. His background includes federally funded research, applied engineering innovation, and STEM education. He teaches physics and applied technical courses supporting systems-level understanding.

Dr. Kellep Charles holds a Ph.D. in Cybersecurity from Capitol Technology University, an M.S. in Telecommunications Management from the University of Maryland University College, and a B.S. in Computer Science from North Carolina A&T State University. He teaches courses in ethics, writing, and applied technology that support professional reasoning and communication.

Mr. Frank E. Turney serves as Chair of the Aviation Department at Capitol Technology University. He holds a Juris Doctor degree from the University of Baltimore and is an FAA-certified commercial pilot, flight instructor, and remote pilot. With extensive experience in flight training, charter operations, and aviation law, he brings both legal and operational expertise to the program.

Prof. Jeff Volosin holds a B.S. in Space Science from the Florida Institute of Technology and serves as Chair of Astronautical and Space Engineering. He brings more than 38 years of industry and NASA experience in systems engineering, mission operations, and autonomous systems, and supports instruction in aviation systems and capstone design.

PROFESSOR OF PRACTICE

Ms. Suzanne Hall holds an M.S. in Degree Administration and served 26 years in the U.S. Air Force as an aircrew member and maintenance officer. Following her military career, she managed a civilian flying club and flight school. She brings nearly 40 years of aviation, flight training, and aircraft operations experience to the program.

Ms. Mary Smikle Peoples is a Professor of Practice of Business and Management with more than 30 years of experience in higher education administration, financial aid leadership, and business operations. She has served as Director of Financial Aid and held professional roles in credit union management, program administration, and property management. She brings extensive applied business expertise and a strong commitment to student success and professional development.

ADJUNCT AND PROFESSORS OF PRACTICE

Ms. Megan Miskovish holds a B.A. in English from Lynchburg College and an M.S. in Education from Walden University. With experience teaching high school and college-level composition, she supports the program's general education curriculum through instruction in writing and communication courses essential for aviation business professionals.

Faculty Teaching Assignments (Aviation Business Management Program)

Faculty Member	Appointment Type	Course Numbers
Mr. Frank Turney	Full-Time	AVT 101, AVT 141, AVT 201, AVT 202, AVT 458
Prof. Jeff Volosin	Full-Time	AVT 143, AVT 457, BUS 301
Ms. Suzanne Hall	Professor of Practice (Part-Time)	AVT 251, AVT 254, AVT 256, AVT 405
Dr. Andrew Mehri	Full-Time	BUS 114, BUS 270, BUS 282, HU 220
Dr. Jeff Chi	Full-Time	BUS 200, BUS 376, BUS 386, BUS 410

Ms. Mary Smikle Peoples	Professor of Practice (Part-Time)	BUS 174, BUS 275, BUS 283, BUS 372
Dr. Tahani Baabdullah	Full-Time	CS 120
Dr. Nisma Omar	Full-Time	CH 120, MA 112, MA 128, SS Elective
Dr. Charles D. Conner	Full-Time	MA 114
Dr. Gregory P. Behrmann	Full-Time	PH 201
Dr. Kellep Charles	Full-Time	HU 225, SS 351
Ms. Megan Miskovish	Adjunct Faculty (Part-Time)	EN 101, EN 102, HU 331, HU Elective

This faculty assignment plan ensures adequate instructional coverage, appropriate faculty specialization, and continuity across lower-division, upper-division, and capstone coursework. Faculty designated as Professors of Practice serve in part-time instructional roles and are appointed based on significant professional and industry experience in their respective disciplines.

2. Demonstrate how the institution will provide ongoing pedagogy training for faculty in evidence-based best practices.

Capitol Technology University is committed to continuous faculty development and instructional excellence. The university's Center for Innovation in Teaching and Learning (CITL) provides structured professional development opportunities focused on evidence-based pedagogical practices, instructional technology, and student success.

a) Pedagogy that meets the needs of students

Faculty participate in regular professional development activities emphasizing student-centered instruction, inclusive teaching practices, formative assessment, and active learning strategies. Particular emphasis is placed on experiential learning, case-based instruction, applied projects, and collaborative assignments aligned with aviation business and management education. These practices are designed to support diverse learners, including transfer students, adult learners, and working professionals.

b) Learning management system

Canvas serves as the university's official learning management system. All faculty receive initial and ongoing training through CITL workshops and individualized support. Training includes course design, assessment tools, rubric development, accessibility standards, and effective communication strategies to support student engagement and academic success.

c) Evidence-based best practices for distance education, if applicable

The Bachelor of Science in Aviation Business Management is delivered primarily in a face-to-face modality, with selected courses available in hybrid or online formats as appropriate. Faculty teaching hybrid or online courses receive additional training in best practices for distance education, including course organization, student engagement, assessment integrity, and effective use of instructional technologies, consistent with institutional policies.

J. Adequacy of Library Resources

1. Describe the library resources available and/or the measures to be taken to ensure resources are adequate to support the proposed program.

Capitol Technology University's Puente Library provides comprehensive support for the academic and research needs of students and faculty in the proposed Bachelor of Science in Aviation Business Management program. The library offers a broad range of physical and digital resources that are regularly evaluated and updated to ensure alignment with program learning objectives, curriculum content, and workforce-oriented educational needs in aviation, transportation, and business management.

Students enrolled in the Aviation Business Management program have access to an extensive collection of aviation, transportation, business, and management-focused journals, eBooks, reference materials, and regulatory publications. Key electronic resources include databases such as ProQuest, JSTOR, EBSCO BusinessSource, ScienceDirect, and SpringerLink, which provide full-text access to scholarly articles, industry reports, case studies, and applied research related to air transportation systems, airline management, aviation safety, economics, logistics, regulatory compliance, and organizational leadership.

The Puente Library also provides access to government and regulatory resources essential to aviation studies, including Federal Aviation Administration (FAA) publications, aviation safety reports, transportation policy documents, and legal and regulatory reference materials. These resources directly support coursework in aviation law, aviation safety, air transportation, airline management, and senior capstone projects.

Textbooks and supplemental instructional materials supporting both lower-division and upper-division coursework are available in print and electronic formats. This ensures flexibility and accessibility for traditional students, transfer students, and working professionals enrolled in the program.

To ensure continued adequacy of library resources, the University's academic leadership collaborates closely with library staff to assess program-specific needs and support targeted acquisitions. Faculty teaching in the Aviation Business Management program may submit requests for new books, journals, case studies, databases, or instructional materials. These requests are reviewed and prioritized based on curriculum development, enrollment growth, accreditation considerations, and evolving industry trends within the aviation and transportation sectors.

Library services further include online research assistance, interlibrary loan, citation management support, and instruction in information literacy. These services ensure that students develop the skills necessary to locate, evaluate, and apply scholarly, regulatory, and industry-based information effectively throughout their academic studies and professional careers in aviation business and management.

Capitol Technology University affirms that the Puente Library's collections, services, and acquisition processes are fully adequate to support the launch and sustained operation of the Bachelor of Science in Aviation Business Management program.

Measures to Ensure Adequate Support

The university will conduct annual reviews of library holdings to ensure resources remain current and aligned with aviation business, transportation management, and regulatory curricula.

Additional textbooks, aviation industry publications, case studies, regulatory manuals, and reference materials related to air transportation, airline operations, aviation safety, economics, and management will be acquired as needed.

Library staff will collaborate with Aviation Business Management faculty to identify and acquire key academic, regulatory, and industry resources that enhance student learning, applied coursework, and senior capstone projects.

The university will continue to expand access to digital databases and online resources to ensure equitable availability for both on-campus and remote learners.

K. Adequacy of Physical Facilities, Infrastructure, and Instructional Equipment

1. Provide an assurance that physical facilities, infrastructure, and instructional 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.

Capitol Technology University affirms that it possesses the physical facilities, infrastructure, and instructional equipment necessary to successfully launch and sustain the proposed Bachelor of Science in Aviation Business Management program. The University maintains modern instructional classrooms designed to support lecture-based, discussion-oriented, and applied learning. These classrooms are equipped with multimedia projection systems, instructional technology, wireless connectivity, and collaborative learning tools that support business, aviation, and management-focused coursework.

The Aviation Business Management program will primarily utilize existing general-purpose classrooms and instructional spaces that support courses in business, management, aviation operations, aviation safety, aviation law, and transportation systems. These facilities are currently used to support related programs in aviation, business, and applied technology and are sufficient to meet the instructional needs of the proposed program without the need for additional capital investment at launch.

Instructional support for aviation-focused coursework is enhanced through access to existing aviation-related resources, including simulation-based instructional tools, aviation regulatory databases, and software applications used in airline management, scheduling, logistics, and operational analysis. These tools support applied learning in areas such as air transportation systems, airline operations, aviation safety management, and regulatory compliance.

Faculty and staff offices are available and adequately equipped to support academic advising, student mentoring, faculty collaboration, curriculum development, and program administration. Office space allocation is reviewed periodically to ensure alignment with enrollment levels, faculty assignments, and program growth.

The University's information technology infrastructure supports instructional delivery, student services, and faculty needs across all modalities. This infrastructure includes campus-wide wireless connectivity, networked computer systems, secure data access, and technical support services that ensure reliable and effective instructional operations.

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:

Capitol Technology University ensures that students and faculty participating in any hybrid or distance education components of the Aviation Business Management program have full access to the digital infrastructure required for effective teaching and learning.

a) An institutional electronic mailing system

All students and faculty are provided with official university email accounts through Microsoft Office 365. These accounts are used for academic communication, advising, course announcements, and administrative notifications, ensuring secure and consistent communication across the institution.

b) A learning management system that provides the necessary technological support for distance education

Canvas serves as the University’s official learning management system. Canvas supports both synchronous and asynchronous instruction and provides tools for course content delivery, assignments, assessments, discussion forums, group collaboration, and multimedia integration. Faculty receive training in the effective use of Canvas, and students are provided with orientation materials and ongoing technical support.

L. Adequacy of Financial Resources with Documentation

1. Complete Table 1: Resources and Narrative Rationale

The Bachelor of Science in Aviation Business Management will be implemented using existing instructional facilities, infrastructure, and academic support resources currently available at Capitol Technology University. The University is well positioned to support the program through existing classrooms, faculty offices, instructional technologies, and aviation- and business-related academic resources. No new capital investment is required for program launch.

TABLE 1: RESOURCES

Resource 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)	\$350,060	\$707,940	\$1,065,072	\$1,449,072	\$1,851,644
a. Number of F/T Students	8	16	24	32	40
b. Annual Tuition/Fee Rate	\$27,808	\$28,503	\$29,216	\$29,946	\$30,695
c. Total F/T Revenue (a × b)	\$222,464	\$465,048	\$701,184	\$958,272	\$1,227,800
d. Number of P/T Students	7	13	19	25	31
e. Credit Hour Rate	\$1,519	\$1,557	\$1,596	\$1,636	\$1,677
f. Annual Credit Hours	12	12	12	12	12
g. Total P/T Revenue (d × e × f)	\$127,596	\$242,892	\$363,888	\$490,800	\$623,844
3. Grants, Contracts and Other External Sources	\$0	\$0	\$0	\$0	\$0

4. Other Sources	\$0	\$0	\$0	\$0	\$0
TOTAL (Add 1–4)	\$350,060	\$707,940	\$1,065,072	\$1,449,072	\$1,851,644

Narrative Rationale for Table 1: Program Resources

a) **Reallocated Funds**

No reallocated funds are required for the Bachelor of Science in Aviation Business Management. The program leverages existing academic infrastructure, instructional spaces, and faculty expertise in aviation, business, and management. No existing programs will be reduced or eliminated to support this initiative.

b) **Tuition and Fee Revenue**

Tuition and fee revenue projections are based on conservative enrollment assumptions, beginning with 8 full-time and 7 part-time students in Year 1 and growing to 40 full-time and 31 part-time students by Year 5. Tuition rates reflect current published rates with an assumed annual increase of approximately 2.5 percent.

Part-time enrollment projections assume an average annual course load of 12 credit hours per student. These assumptions are consistent with enrollment patterns observed in existing aviation and business programs and support sustainable instructional staffing, advising, and academic services.

a) **Grants, Contracts, and External Sources**

No external funding is included in the initial financial model. However, the University may pursue aviation workforce development grants, transportation-sector partnerships, and industry-supported initiatives in later years to enhance internships, experiential learning, and student support.

b) **Other Sources**

No additional funding sources are anticipated at launch. Future opportunities may include philanthropic support, employer-sponsored programs, or state-supported workforce initiatives related to aviation and transportation management.

Complete Table 2: Program Expenditures and Narrative Rationale

TABLE 2: EXPENDITURES

Expenditure Category	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b + c)	\$113,468	\$155,071	\$238,421	\$325,843	\$417,486
a. # FTE	1.5	2	3	4	5
b. Total Salary	\$94,557	\$129,226	\$198,684	\$271,536	\$347,905
c. Total Benefits (20%)	\$18,911	\$25,845	\$39,737	\$54,307	\$69,581
2. Administrative Staff (b + c)	\$5,942	\$6,091	\$6,244	\$6,400	\$6,559
a. # FTE	0.08	0.08	0.08	0.08	0.08

b. Total Salary	\$4,952	\$5,076	\$5,203	\$5,333	\$5,466
c. Total Benefits	\$990	\$1,015	\$1,041	\$1,067	\$1,093
3. Support Staff (b + c)	\$59,885	\$92,076	\$125,837	\$161,230	\$198,313
a. # FTE	1	1.5	2	2.5	3
b. Total Salary	\$49,905	\$76,730	\$104,864	\$134,358	\$165,261
c. Total Benefits	\$9,980	\$15,346	\$20,973	\$26,872	\$33,052
4. Technical Support and Equipment	\$840	\$1,425	\$2,320	\$3,145	\$4,140
5. Library	\$0	\$0	\$0	\$0	\$0
6. New or Renovated Space	\$0	\$0	\$0	\$0	\$0
7. Other Expenses	\$5,850	\$14,210	\$25,370	\$39,330	\$56,090
TOTAL (Add 1–7)	\$185,985	\$268,873	\$398,192	\$535,948	\$682,588

Narrative Rationale for Table 2: Program Expenditures

a) **Faculty**

Faculty costs include salaries and benefits (estimated at 20%) for instructors teaching aviation management, aviation operations, aviation law, safety, air transportation systems, business, and capstone courses. Faculty staffing increases from 1.5 FTE in Year 1 to 5 FTE by Year 5, reflecting enrollment growth and expanded upper-division offerings. Instruction will be delivered through a combination of full-time faculty and qualified adjunct instructors with aviation and industry experience.

b) **Administrative Staff**

A fractional administrative support allocation (0.08 FTE) supports advising coordination, scheduling, enrollment reporting, and student services. Costs reflect standard institutional rates with modest annual adjustments.

c) **Support Staff**

Support staff include academic support personnel, advising coordination, and instructional support required for aviation-focused coursework, experiential learning, and capstone projects. Staffing increases in proportion to enrollment growth.

d) **Technical Support and Equipment**

These costs cover instructional software, aviation-related databases, simulation tools, equipment maintenance, and instructional technology used in aviation business, safety, and operations courses.

e) **Library**

No additional library expenditures are required. Existing electronic and physical resources adequately support aviation, transportation, business, and management curricula.

f) **Facilities**

No new construction or renovation is required. Existing classrooms and instructional spaces are sufficient to support the program.

g) Other Expenses

Other expenses include marketing, faculty development, program assessment, accreditation compliance, and continuous improvement activities. These costs scale with enrollment growth.

M. Adequacy of Provisions for Evaluation of Program

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

Capitol Technology University has established institutional processes for evaluating the quality and effectiveness of all academic programs, including the proposed Bachelor of Science in Aviation Business Management. Courses will be evaluated at the conclusion of each semester through standardized student course evaluations that assess instructional effectiveness, course organization, learning resources, and perceived achievement of course learning outcomes.

Faculty performance is evaluated using multiple measures, including student feedback, peer observations, course portfolio review, and annual performance evaluations conducted by the department chair and the Dean of Academic Affairs. These evaluations emphasize instructional quality, engagement with students, alignment of course content with aviation and business program objectives, and contributions to curriculum development and continuous improvement.

Student learning outcomes (SLOs) are assessed at both the course and program levels. Faculty teaching courses mapped to specific program outcomes collect assessment data using exams, case studies, applied projects, presentations, and aviation-focused assignments. The two-semester Aviation Senior Project (AVT 457 and AVT 458) serves as a primary direct assessment of students' ability to integrate aviation knowledge, business principles, regulatory awareness, and professional skills. Assessment results are reviewed during departmental meetings and scheduled program review cycles to identify strengths, address gaps, and guide curricular and instructional improvements.

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.

The educational effectiveness of the Bachelor of Science in Aviation Business Management will be evaluated using a combination of quantitative and qualitative measures aligned with Capitol Technology University's institutional assessment framework.

a) Assessment of Student Learning Outcomes:

The program will maintain a systematic process for mapping, measuring, and reviewing learning outcomes related to aviation operations, business management, regulatory compliance, safety, communication, teamwork, and ethical decision-making. Data from embedded course assessments, aviation case analyses, applied projects, and the senior capstone sequence will be collected each semester and analyzed annually to inform curriculum refinement and instructional improvement.

b) Student Retention and Graduation Rates:

Program-level retention, progression, and graduation data will be monitored regularly to ensure students advance effectively through the curriculum. Academic advising, early alert systems, and

targeted student support services will be used to address academic or professional challenges and promote student persistence and timely degree completion.

c) **Student and Faculty Satisfaction:**

Student satisfaction will be evaluated through course evaluations, program surveys, and feedback collected during advising and capstone activities. Faculty satisfaction will be assessed through annual reviews and faculty surveys addressing workload, instructional resources, and program support. Feedback from students and faculty will be reviewed by academic leadership to guide program enhancements.

d) **Cost-Effectiveness:**

The Business and Finance Division, in collaboration with the Office of Academic Affairs, will conduct periodic reviews of program enrollment, instructional costs, and resource utilization. These reviews will ensure that the program remains financially sustainable while maintaining instructional quality and adequate student services.

e) **Industry and Advisory Input:**

Input from aviation industry partners and advisory board members will be incorporated into periodic program reviews to ensure continued alignment with workforce needs, evolving aviation business practices, regulatory requirements, and employer expectations.

N. Consistency with the State's Minority Student Achievement Goals

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

The proposed Bachelor of Science in Aviation Business Management aligns closely with Maryland's goals to promote minority student access, achievement, and educational equity, as articulated in COMAR 13B.02.03.05 and the Maryland State Plan for Postsecondary Education. Capitol Technology University maintains a strong institutional commitment to diversity, inclusion, and equitable access to career-oriented education, particularly in STEM- and transportation-related fields where minority participation has historically been limited.

The Aviation Business Management program is intentionally designed to expand access to high-demand aviation and transportation careers for students from underrepresented and historically marginalized populations, including African American, Hispanic/Latino, female, first-generation college students, military veterans, and adult learners. By integrating aviation operations, business management, safety, and regulatory coursework into a single undergraduate degree, the program provides an accessible and workforce-relevant pathway for students who seek leadership and operational roles in aviation without requiring a traditional engineering background.

The Bachelor of Science in Aviation Business Management supports minority student access and success through the following strategies:

- Transfer-friendly pathways, including articulation agreements and structured advising for students transferring from Maryland community colleges, many of which serve large and diverse minority student populations.
- Comprehensive academic advising and mentoring, supported by early alert and intervention systems that identify academic challenges early and connect students with tutoring, advising, and support services.

- Financial access and affordability initiatives, including institutional scholarships, federal and state financial aid, military and veteran education benefits, and flexible enrollment options that reduce barriers for economically disadvantaged and working students.
- Applied and experiential learning opportunities, including case-based instruction, aviation-focused projects, internships, and a two-semester senior capstone experience, which research indicates improve engagement, retention, and completion rates for students from diverse backgrounds.
- Inclusive instructional practices, supported by faculty development initiatives focused on culturally responsive teaching, Universal Design for Learning (UDL), and inclusive classroom strategies that address varied learning styles and student needs.

In addition, Capitol Technology University advances its institutional diversity goals through campus-wide initiatives that include inclusive recruitment practices, multicultural programming, student affinity organizations, veteran support services, and the integration of equity and inclusion principles into institutional planning and academic governance.

Through these combined efforts, the Bachelor of Science in Aviation Business Management directly supports Maryland's minority student achievement priorities by expanding access to high-demand aviation careers (Goal 1: Student Access) and fostering student persistence, completion, and career readiness through structured academic support and inclusive educational practices (Goal 2: Student Success).

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.

The proposed Bachelor of Science in Aviation Business Management is not a direct continuation, replacement, or restructuring of any low-productivity program identified by the Maryland Higher Education Commission. Rather, the program has been developed as part of Capitol Technology University's ongoing academic planning and program development process, informed by workforce demand analysis, enrollment trends, and strategic priorities in aviation, transportation, and applied business education.

The Aviation Business Management program represents a new, workforce-responsive academic offering designed to address growing demand for professionals with combined expertise in aviation operations, business management, safety, and regulatory compliance. It is not dependent on the elimination or downsizing of existing academic programs and does not draw fiscal resources away from currently approved offerings.

While not formally tied to a designated low-productivity program, the Bachelor of Science in Aviation Business Management is structured to optimize the use of existing institutional resources in a fiscally responsible manner. Specifically, the program will:

- Leverage existing faculty expertise in aviation, transportation systems, business, management, law, and safety, including faculty already supporting related programs whose instructional capacity can be efficiently allocated to this interdisciplinary degree.

- Utilize shared instructional facilities, including classrooms and learning spaces currently used for aviation, business, and management programs, thereby avoiding duplication of physical resources or capital investment.
- Rely on existing administrative, advising, and library support services, ensuring that the program operates within established institutional support structures without requiring additional overhead.
- Enhance overall academic productivity by attracting new student populations—including transfer students, adult learners, military-affiliated students, and working professionals—who may not otherwise enroll in narrowly focused aviation or business programs.

Through this approach, the Bachelor of Science in Aviation Business Management contributes positively to institutional efficiency and sustainability by aligning instructional resources with demonstrated student interest and labor market demand. Although the program is not directly associated with a specific low-productivity program identified by the Commission, it reflects a strategic deployment of faculty, facilities, and support services toward a high-demand, interdisciplinary degree that strengthens enrollment, improves productivity, and supports the University’s long-term academic and financial objectives.

P. Adequacy of Distance Education Programs

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

Capitol Technology University is fully authorized by the Maryland Higher Education Commission (MHEC) to offer distance education programs. The university has extensive experience delivering online and hybrid instruction at both the undergraduate and graduate levels in technology, engineering, computing, and business disciplines.

Capitol Technology University is also an approved participant in the National Council for State Authorization Reciprocity Agreements (NC-SARA), which authorizes the institution to offer distance education to students residing in other SARA member states. This authorization ensures that the university meets all applicable state and national requirements for distance education delivery.

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

Capitol Technology University affirms that it complies with the Council of Regional Accrediting Commissions (C-RAC) guidelines for the evaluation and delivery of distance education. Institutional policies, instructional practices, and support services ensure that distance-delivered coursework meets the same academic standards as on-campus instruction.

Specifically, the university ensures that:

- Curriculum quality, academic rigor, and learning outcomes are consistent across on-campus, hybrid, and online delivery formats.
- Regular and substantive faculty–student interaction is maintained through scheduled virtual class sessions, discussion boards, assignment feedback, and direct instructor communication.
- Student identity verification is conducted through secure authentication protocols within the learning management system and assessment platforms, protecting academic integrity.

- Student support services, including academic advising, tutoring, library access, technical support, and career services, are equally available to distance education students.
- Technology infrastructure and support are maintained to ensure reliable access to Canvas, communication tools, and instructional resources.
- Faculty training in online pedagogy and LMS use is required for instructors teaching online or hybrid courses.

The Bachelor of Science in Applied Technology is designed to be delivered primarily in an on-campus format, reflecting its emphasis on hands-on instruction, applied laboratories, and project-based learning. However, selected courses—particularly in general education, computing, management, and selected technical areas—may be offered in online or hybrid formats. All distance-delivered components will adhere fully to institutional policies, C-RAC guidelines, and applicable accreditation standards.