CAPITOL
Technology University

Bradford L. Sims, PhD
President

December 14, 2020

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

Dear Dr. Fielder,

Capitol Technology University is requesting approval to offer a **Bachelor of Science (B.S.) in Esports Management**. The degree curriculum will be taught using the existing faculty at our university and supported by the development of new courses. The mission of Capitol Technology University is to provide a practical education in engineering, computer science, information technology, and business that prepares individuals for professional careers and affords the opportunity to thrive in a dynamic world. A central focus of the university's mission is to advance practical working knowledge in areas of interest to students and prospective employers within the context of Capitol Tech's degree programs. The university believes a **B.S. in Esports Management** is consistent with its mission.

The growing requirement for entry-level personnel in Esports Management exists now in a field that is expanding at an exponential rate. This program is in response to that need.

We respectfully submit for approval a Bachelor of Science (B.S.) in Esports Management. The required degree proposal and letter from me, as university president, confirming the university library's adequacy to support this degree, is attached.

Respectfully,

Bradford L. Sims, PhD

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Technology University

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President

December 14, 2020

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

Dear Dr. Fielder,

This letter is in response to the need to confirm the adequacy of the library of Capitol Technology University to support the proposed **Bachelor of Science (B.S.) in Esports Management**. As president of the university, I confirm that the library resources, including support staff, are more than adequate to support the proposed **B.S. in Esports Management**. In addition, the university is dedicated to, and has budgeted for, continuous improvement of its library resources.

Respectfully,

Bradford L. Sims, PhD

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

Institution Submitting Proposal	Capitol Technology University

Each action below requires a separate proposal and cover sheet.

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

Department Proposing Program	Department of Business and Aviation	
Degree Level and Degree Type	Bachelor of Science (B.S.)	
Title of Proposed Program	B.S. in Esports Management	
Total Number of Credits	121	
Suggested Codes	HEGIS: 506	CIP: 59
Program Modality	( ) On-campus ( ) Distance Education (*fully online*) (●) Both	
Program Resources	(●) Using Existing Resources ( ) Requiring New Resources	
Projected Implementation Date	(●) Fall ( ) Spring ( ) Summer Year: 2021	
Provide Link to Most Recent Academic Catalog	URL: https://www.captechu.edu/current-students/academic-resources	
Preferred Contact for this Proposal	Name: Professor Soren Ashmall	
	Title: Director, Assessment and Accreditation	
	Phone: (571) 332-4344	
	Email: spashmall@captechu.edu	
President/Chief Executive	Type Name: Dr. Bradford Sims	
	Signature: [signature]	Date: 12-14-2020
Approval/Endorsement by Governing Board	Type Name: Dr. Bradford Sims	
	Signature: [signature]	Date: DEC. 14, 2020

Revised 5/15/18

PROPOSAL FOR:

__X__NEW INSTRUCTIONAL PROGRAM

_____ SUBSTANTIAL EXPANSION/MAJOR MODIFICATION

_____ COOPERATIVE DEGREE PROGRAM

__X__WITHIN EXISTING RESOURCES or____REQUIRING NEW RESOURCES

CAPITOL Technology University

Institution Submitting Proposal

Fall 2021
Projected Implementation Date

Bachelor of Science (B.S.)
Award to be Offered

Bachelor of Science in Esports Management
Title of Proposed Program

0506
Suggested H.E.G.I.S. Code

59.0908
Suggested C.I.P. Code

Business and Aviation
Department of Proposed Program

Prof. Joseph Hendron
Name of Department Head

Dr. Soren Ashmall
Director, Assessment and Accreditation

spashmall@captechu.edu
Contact E-Mail Address

571-332-4344
Contact Phone Number

12-14-2020
Signature and Date

President/Chief Executive Approval

DEC. 14, 2020
Date

Date Endorsed/Approved by Governing Board

Proposed Bachelor of Science in Esports Management
Department of Business and Aviation
Capitol Technology University
Laurel, Maryland

A. Centrality to Institutional Mission and Planning Priorities:

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

   Bachelor of Science in Esports Management Program Description:

   The Bachelor of Science (B.S.) in Esports Management program is designed to meet the rapidly growing needs of the Esports industry--the fastest going field in the entertainment world. Esports is expected to be a $1.8 billion industry by 2022 and continue to grow at a rate of at least 40% a year. **The B.S. in Esports Management** provides a first-rate, cutting-edge education in Esports operations. Students will learn how to apply core management fundamentals tailored to the Esports industry and create a go-to-market digital distribution strategy. Students will understand the nuances and complexities associated with managing Esports teams, events, and leagues. Students will also use those skills in real-world events before graduation. **The B.S. degree in Esports Management** will prepare students for entry-level positions throughout the exciting Esports industry.

   Relationship to Institutional Approved Mission:

   The proposed **B.S. in Esports Management** degree is consistent with the University's mission to educate individuals for professional opportunities in engineering, computer science, information technology, and business. The University provides relevant learning experiences that lead to success in the evolving global community. The proposed **B.S. in Esports Management** degree supports that philosophy. The proposed **B.S. in Esports Management** degree also complements the University's existing degree programs.

   The **B.S. in Esports Management** degree will be offered on-campus in a traditional classroom environment and online using the Canvas Learning Management System and Zoom. The result is the convenience required by the 21st Century learner and provides the interaction with faculty and fellow students that is critical to the high-level learning experience. The curriculum provides the student with the necessary learning tools that the University believes critical to be successful in the Esports Management field. The degree is also consistent with the interdisciplinary nature of the University.

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:

   1. **Expand Educational Offerings, Increase Program Completion:** *Capitol Technology University is an institution that offers career-relevant curricula with quality learning*

outcomes. The strategy includes continuing to expand educational offerings, increasing program completion, and raising learner qualifications and outcomes.

2. **Increase Enrollment and Institutional Awareness:** *Capitol will accelerate its goal pursuit to become more globally renowned and locally active through student, faculty and staff activities. Enrollment will grow to 650 undergraduates, 350 masters' students and 250 doctoral candidates.*

3. **Improve the Utilization of University Resources and Institutional Effectiveness While Expanding Revenue**: *Capitol will likely continue to be 80% financially dependent on student tuition and fees. We plan to enhance our resources by expanding the range and amount of funding from other streams and aligning costs with strategic initiatives.*

4. **Increase the Number and Scope of Partnerships**: *Capitol's service to our constituents and sources of financial viability both depend upon participation with continuing and new partner corporations, agencies, and schools.*

The proposed **B.S. in Esports Management** program supports all the University's four strategic goals. The proposed degree builds upon the existing areas of degrees at the undergraduate level: B.S. in Astronautical Engineering, B.S. in Aviation Professional Pilot, B.S. in Computer Engineering, B.S. in Computer Engineering Technology, B.S. in Computer Science, B.S. in Construction Information Technology and Cybersecurity, B.S. in Construction Management and Critical Infrastructure, B.S. in Construction Safety, B.S. in Counterterrorism, B.S. in Cyber Analytics, B.S. in Cybersecurity, B.S. in Data Science, B.S. in Electrical Engineering, B.S. in Electrical Engineering Technology, B.S. in Engineering Technology, B.S. in Facilities Management and Critical Infrastructure, B.S. in Information Technology, B.S in Management of Cyber and Information Technology, B.S. in Mechatronics Engineering, B.S. in Mechatronics and Robotics Engineering Technology, B.S. in Mobile Computing, B.S. in Professional Trades Administration, B.S. in Software Engineering, and B.S. in Technology and Business Management, B.S in Unmanned and Autonomous Systems, and B.S. in Web Development.

The proposed degree also supports the existing areas of degrees of graduate study, including the Master of Business Administration (M.B.A.), Master of Science (M.S.) in Astronautical Engineering, M.S. in Aviation, M.S. in Aviation Cybersecurity, M.S. in Computer Science, M.S. in Construction Cybersecurity, M.S. in Construction Safety, M.S. in Critical Infrastructure, M.S. in Cyber Analytics, M.S. in Cybersecurity, M.S. in Information Systems Management, M.S. in Engineering Technology, M.S. in Internet Engineering, M.S. in Product Management, M.S. in Unmanned and Autonomous Systems Policy and Risk Management, Technical Master of Business Administration (T.M.B.A.) in Business Analytics and Data Science, and T.M.B.A. in Cybersecurity, Doctor of Science (D.Sc.) in Cybersecurity, Doctor of Philosophy (Ph.D.) in Artificial Intelligence, Ph.D. in Aviation, Ph.D. in Business Analytics and Data Sciences, Ph.D. in Construction Science, Ph.D. in Counterterrorism, Ph.D. in Critical Infrastructure, Ph.D. in Cybersecurity Leadership, Ph.D. in Emergency and Protective Services, Ph.D. in Human Factors, Ph.D. in Manufacturing, Ph.D. in Occupational Health and Safety, Ph.D. in Operational Technology, Ph.D. in Product Management, Ph.D. in Quantum Computing, Ph.D. in Technology, Ph.D. in Technology/M.S. Research Methods Combination Program, and Ph.D. in Unmanned Systems Applications.

The University's programs have been preparing professionals for the rapid advances in information technology, intense global competition, and increasingly sophisticated technological environments for decades. The **B.S. in Esports Management** follows that tradition.

The proposed **B.S. in Esports Management** is fully supported by the University's Vision 2025 and Strategic Plan 2017-2025. Funding to support the **B.S. in Esports Management** is already available within the existing budget.

If approved, the new **B.S. in Esports Management** will use the Capitol Technology University's Information Literacy Path in the same manner as all of the other degrees at the institution. Information Literacy is infused into the University's curriculum and the undergraduate experience. Capitol Technology University's Information Literacy Path begins during Orientation and Freshman Seminar. The experience continues every semester through the university's Writing Across the Curriculum program where there are writing assignments in all courses -- some of which require significant research. During the Freshman year, students are required to take English Communications I (EN-101) and English Communications II (EN-102). Both courses have a series of writing assignments that begin during Week 1 and continue to Week 16 of the semester. In addition to examining literature, EN-102 requires a team project in global research. There are two other courses that are required by every degree at the University: Ethics (SS-351) and Arts and Ideas (HU-331). Both courses are focused on research and experiential learning. All students also have access to informative videos on the University's portal that support Information Literacy through the University Library. All students at the University will experience all the markers in the Information Literacy Path regardless of learning modality (i.e., online, on-campus, and hybrid).

The University has active partnerships in the private and public areas (e.g., Parson Corporation, Leidos, Patton Electronics, Lockheed Martin, Northrup Grumman, Cyber Security Forum Initiative, Internal Revenue Service, and National Cryptologic School). The **B.S. in Esports Management** degree will provide new opportunities for partnerships. The increase in alliances and the placement of our graduates in our partner institutions will serve to expand the University's enrollment and reputation. While additional students will increase financial resources, new partnerships and grants in the Esports Management field will diversify and increase financial resources.

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.)**

   Capitol Technology University will support the proposed program through the same process and level of support as the University's existing programs. The University has also budgeted funds to support program and course development, online support, office materials, travel, professional development, and initial marketing. There is no substantial impact to the institution due to the advanced budgeting of these funds. If approved, the program will be self-sustaining going forward.

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

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

The proposed degree is an integral part of the University's Strategic Plan for FY 2017-2025 and forward. The institutional and departmental budgets for FY 2021-2022, as well as the forecasted budgets going forward, include funding for the administrative, financial, and technical support of the new degree.

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 continuing the proposed **B.S. in Esports Management** degree program for a sufficient period to allow enrolled students to complete 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 based on one or more of the following:

a. The need for advancement and evolution of knowledge.

Higher education institutions have not kept pace with the rampant growth in the Esports Management industry. According to research firm Newzoo, the global Esports industry is growing at a rate of 40% a year. It is expected to exceed $1.8 billion in revenue in 2022 and capture a global audience of over 580 million. (Source: https://newzoo.com/insights /trend-reports/newzoo-global-esports-market-report-2020-light version/#:~:text=Highlights %3A,from%20media%20rights%20and %20sponsorship) So far, academia is not engaged fully and does not facilitate the advancement and evolution of management knowledge in the new economic subsector of Esports fully.

According to Hitmarker, a leading employment marketplace for Esports jobs, between 2018 and 2019, the number of jobs in esports nearly doubled - growing a staggering 85%. In addition, there is a wide range of business jobs in the gaming industry, including roles in distribution, research, sales, and marketing. The explosive growth in Esports – and the attendant growth within the gaming industry that it has fueled – has created a demand for well-trained business professionals with a solid understanding of this unique industry's nuances. (Source: https://s3.hitmarkerjobs.com/esports-jobs-q1-q2-2018-v-2019.jpg)

According to Emsi, there are currently less than 10 Esports Management bachelor's degrees in the United States. At the same time, there is a meteoric increase in the number of universities and colleges across the country that have Esports teams.

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

Capitol Technology University is a diverse multiethnic and multiracial institution with a long history of serving minority populations. The University has a 51% minority student population, with 7% undisclosed. The Black/African American population is 34%. The university has a military/veteran population of 22%. The University also has a 22% female population – a significant percentage given its status as a technology institution. If approved,

the proposed **B.S. in Esports Management** will expand the field of opportunities for minorities and disadvantaged students.

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

While Capitol Technology University is not a historically black institution, it is a diverse multiethnic and multiracial institution with a long history of serving minority populations. The University has a 51% minority student population, with 7% undisclosed. The Black/African American population is 34%. The University has a military/veteran population of 22%. The university also has a 22% female population – a significant percentage given its status as a technology institution. If approved, the proposed **B.S. in Esports Management** will expand the field of opportunities for minorities and disadvantaged students. Given the substantial minority population of Capitol Technology University, it is also reasonable to assert that the **B.S. in Esports Management** program will add to the base of minority participation in the Esports Management field.

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

The 2017-2021 Maryland State Plan for Postsecondary Education articulates three goals for postsecondary education:

1. Access
2. Success
3. Innovation

Goal 1: Access

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

Capitol Technology University is committed to ensuring equitable access to affordable post-secondary education for all Maryland residents. The University meets its commitment in this arena through its diverse campus environment, admissions policies, and academic rigor.

The Capitol Technology University community is committed to creating and maintaining a mutually respectful environment that recognizes and celebrates diversity among all students, faculty, and staff. The University values human differences as an asset and works to sustain a culture that reflects the interests, contributions, and perspectives of members of diverse groups. The University delivers educational programming to meet the needs of diverse audiences. We also seek to instill those values, understanding, and skills to encourage leadership and service in a global multicultural society.

The composition of the University's student body reflects the institution's commitment to diversity. Capitol Technology University has a 51% minority student population, with 7% undisclosed. The Black/African American population is 34%. The University has a military/veteran population of 22%. The University also has a 22% female population – a significant percentage given its status as a technology university.

Achievement gaps: The University provides leveling courses in support of individuals attempting a career change to a field of study not necessarily consistent with their current skills. There are situations where undergraduate courses best serve student needs in subject areas. The University makes those courses available.

The University engages in diversity training for its institutional population, including students. Diversity and inclusiveness are built into the curriculum allowing graduates to operate effectively in a global environment. The University supports multiple diversity enhancing actions, including team projects and grants across degrees. This has proven effective at supporting numerous aspects of diversity.

Capitol Technology University does not discriminate on the basis of race, color, national origin, sex, age, sexual orientation, or handicap in admission, employment, programs, or activities.

Through its academic programs, Capitol Technology University seeks to prepare all of its graduates to demonstrate four primary characteristics:

- **Employability:** The ability to enter and advance in technical and managerial careers, appropriate to their level and area of study, immediately upon graduation.
- **Communications:** Mastery of traditional and technological techniques of communicating ideas effectively and persuasively.
- **Preparation of the Mind:** The broad intellectual grounding in technical and general subjects required to embrace future technical and managerial opportunities with success.
- **Professionalism:** Commitment to life-long learning, ethical practice, and participation in professions and communities.

The proposed **B.S. in Esports Management** program and University Financial Aid will be available to all Maryland residents who qualify academically for admission. The University has successfully managed to support Financial Aid for its students since its founding in 1927.

The **B.S. in Esports Management** program, with its academic rigor, will produce highly qualified Esports Management leaders with cutting-edge skills and abilities. The University has a proven record of rigorous high-quality education in all of its degrees. The University is fully accredited by five accrediting organizations. The University receives its regional accreditation from the Middle States Commission on Higher Education (MSCHE). The University also has specialized accreditation from the International Accreditation Council of Business Education (IACBE), Accreditation Board for Engineering and Technology (ABET), National Security Agency (NSA), and Department of Homeland Security (DHS). The **B.S. in Esports Management** program is consistent with the MSCHE criteria for regional accreditation of the delivery of high-quality higher education.

Goal 2: Success

"Promote and implement practices and policies that will ensure student success."

The courses for the **B.S. in Esports Management** degree will be offered on-campus in a traditional classroom setting and online using the Canvas Learning Management System and Zoom. The University provides a tuition structure that is competitive with its competitors. The University tuition structure does not differentiate between in-state and out-of-state students. The

University's Student Services provide advising, tutoring, virtual job fair attendance, and other activities supporting student completion and employment for both on-ground and online students.

Students receive information throughout the admissions process regarding the cost to attend the University. The information is also publicly available on the University website. The University's Admissions Office and Office of Financial Aid identify potential grants and scholarships for each student. The Office of Financial Aid also provides plans for each student to reduce potential student debt. The net cost versus gross costs is identified clearly for the student. Students receive financial advising from Financial Aid Advisors before enrolling in classes for the first time. Admissions personnel, Student Services Counselors, and Departmental Chairs advise students of the need for academic readiness and the degree requirements. Academic Advisors also develop a specific success pathway for each student.

The University's tuition increases have not exceeded 3%. The University also has a tuition guarantee for undergraduates, which means full-time tuition is guaranteed not to increase more than 1% per year above the rate at the time of initial enrollment. The tuition remains at this rate if the student remains enrolled full-time without a break in attendance.

The University provides services and learning tools to guide students to successful degree completion. Programs such as Early Alert give the University's faculty and staff opportunities for early student intervention on the pathway to graduation. This program applies to all students regardless of the mode of course delivery or degree program. Capitol Technology University is also a transfer-friendly institution and participates in multiple programs for government and military credit transfer. Capitol Technology University participates in the Articulation System for Maryland Colleges and Universities (ARTSYS) and has numerous transfer agreements with local institutions at all degree levels.

The University has in place services, tutoring, and other tools to help ensure student graduation and successful job placement. The University hosts a career (job) fair twice a year. The University has an online career center available to all students covering such topics as career exploration, resume writing, job search techniques, social media management, mock interviews, and assistance interpreting job descriptions, offers, and employment packages.

The University also works with its advisory boards, alumni, partners, and faculty to help ensure the degrees offered at the University are compatible with long-term career opportunities in support of the state's knowledge-based economy.

Goal 3: Innovation

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

Capitol Technology University's past, present, and future are inextricably intertwined with innovation. The University has a long tradition of serving as a platform for the use of new and transformative approaches to delivering higher education. New technology and cutting-edge techniques are blended with proven strategies to enable student success in all classroom modalities as well as in a successful career after graduation. As a small institution, Capitol Technology University has the agility to rapidly integrate new technologies into the curriculum to better prepare students for the work environment. The University designs curriculum in alliance with its accreditation and regulating organizations and agencies.

The University also employs online virtual simulations in a game-like environment to teach the application of knowledge in a practical hands-on manner. The University engages with a partner creating high-level virtual reality environments for use by students pursuing this degree. This use of current technology occurs in parallel with traditional, proven learning strategies. These elements of the University's online learning environment are purposeful and intended to improve the learning environment for both the student and faculty member. The approach is intentionally designed to increase engagement, improve outcomes, and improve retention and graduation rates. The University believes that innovation is the key to successful student and faculty engagement.

Example: The University engages its students in fusion projects that allow students to contribute their skills in interdisciplinary projects such as those in our Astronautical Engineering and Cyber Labs. In those labs, students become designers, builders, and project managers (e.g., to send a CubeSat on a NASA rocket) and data analysts (e.g., to analyze rainforest data for NASA). The University's students recently launched their latest satellite aboard a NASA rocket from a location in Norway at the beginning of the 2019 Fall Semester. The University's students also have another satellite scheduled for launch in late December 2020. The University is also recruiting additional partners for the proposed **B.S. in Esports Management** to provide students with real-world learning opportunities in the Esports Management field.

The University also supports prior learning assessment. Portfolio analysis is available. The University accepts professional certifications for credit for specific courses. The University also allows students to take a competency exam for credit for required courses up to the current state limits.

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

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

Graduates with a **B.S. in Esports Management** degree will be expected to fill entry-level positions in commercial companies with a variety of titles such as:

- Esports Business Development Manager
- Esports Business Development Associate
- Esports Business Channel Finance Manager
- Esports Revenue Strategist
- Esports Monetization Director
- Esports Community Manager
- Esports Social Media and Communications Manager
- Esports Marketing Creative Director

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 U.S. Bureau of Labor Statistics (BLS) does not specifically track employment in the Esports industry. The field is relatively new and growing at an explosive rate. As a result, there are no concise government statistics for this sector of the economy.

Esports trade publications estimate the number of jobs in Esports nearly doubled between 2018 and 2019, and almost 90% of these jobs are being filled by employees under the age of 34.

The Esports growth is underscored by a variety of metrics in a recent Business Insider report:

- "The number of investments in esports doubled in 2018, going from 34 in 2017 to 68 in 2018, per Deloitte. That's reflected in the total dollars invested, too: Investments are up to $4.5 billion in 2018 from just $490 million the year before, a staggering YoY growth rate of 837%, per Deloitte."
- Total esports viewership is expected to grow at a 9% compound annual growth rate (CAGR) between 2019 and 2023, up from 454 million in 2019 to 646 million in 2023, per Business Insider Intelligence estimates. That puts the audience on pace to nearly double over six years, as the 2017 audience stood at 335 million.

(Source: https://www.businessinsider.com/esports-ecosystem-market-report)

Perhaps the most eye-popping statistic comes from a recent Esports tournament that attracted more online viewers than the Super Bowl – over 100 million people tuned in. (Source: https:// www.cnbc.com /2019/04/14/league-of-legends-gets-more-viewers-than-super-bowlwhats-coming-next.html)

The convergence of these trends suggests the demand for management professionals to support the rapidly growing Esports industry will be incredibly high.

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

The U.S. Bureau of Labor Statistics (BLS) does not have a category yet for Esports Management positions. The field is relatively new and growing at an explosive rate. As a result, there are no concise government statistics for this sector of the economy. The proposed **B.S. in Esports Management** degree is designed to address the need for business managers within the Esports field over the next 25 years.

4. **Data showing the current and projected supply of prospective graduates.**

There are no bachelor's degrees in Esports Management in the State of Maryland. The proposed **B.S. in Esports Management** would be the first. As a result, there is no data on the current and projected supply of prospective Esports Management graduates in the state.

D. Reasonableness of Program Duplication.

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

There are no bachelor's degrees in Esports Management in the State of Maryland. The proposed **B.S. in Esports Management** would be the first in the state. There are also less than ten bachelor's degrees in Esports Management in the United States.

A review of undergraduate degrees in computer gaming shows there are bachelor's degrees in Maryland that focus on the computer science, visual arts design, and digital media arts aspects of the broader area of computer, online, and interactive gaming. Morgan State University (MSU) has a B.A. in Visual Arts with a Multimedia Studio Track. Bowie State University (BSU) has a B.S. in Visual Communication and Digital Media Arts with an Animation and Motion Graphics Concentration. BSU also has a B.S. in Computer Technology with an Internet and Multimedia Applications Track. The University of Maryland Eastern Shore (UMES) has a B.A. in Applied Design with a Sequential Arts Concentration that includes visual computing courses. Coppin State University (CSU) has a B.S. in Computer Science with computer graphics and advanced web programming courses. The University of Baltimore (UB) has a B.S. in Simulation and Game Design with a Technical Art Track and Coding and Development Track. The University of Maryland Baltimore County (UMBC) has a B.S. in Computer Science with a Game Development Track. The University of Maryland College Park (UMCP) has a B.S. in Immersive Media Design with an Emerging Creatives Track and Innovative Coders Track. Saint Mary's College of Maryland (SMCM) has a B.S. in Computer Science with at least one course in game design and development. The Maryland Institute College of Art (MICA) has a B.F.A. in Game Design and a B.F.A. in Interactive Arts. However, the existing degrees in the state do not focus specifically on Esports Management. The degrees at MSU, BSU, CSU, UMES, UB, UMBC, UMCP, SMCM, and MICA concentrate on the computer science, visual arts design, and digital media arts aspects of the broader area of computer, online, and interactive gaming. **Capitol Technology University's proposed B.S. in Esports Management focuses on the much narrower scope of Esports Management.**

2. **Provide justification for the proposed program.**

The proposed **B.S. in Esports Management** program is strongly aligned with the University's strategic priorities and is supported by adequate resources. The proposed **B.S. in Esports Management** degree will strengthen and expand upon the existing technology, management, and applied engineering degree programs at the University. In addition, the **B.S. in Esports Management** program will be an option for all students as the field integrates well with the market needs of the University's other programs. There is a thorough discussion of the need for the program in Sections B and C of this document.

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 University does not anticipate any impact on the implementation or maintenance of high-demand programs at HBIs. There are no bachelor's degree programs at Maryland HBIs in Esports Management. The existing degree programs concentrate on the computer science, visual arts design, and digital media arts aspects of the broader area of computer, online, and interactive gaming. Morgan State University (MSU) has a B.A. in Visual Arts with a Multimedia Studio Track. Bowie State University (BSU) has a B.S. in Visual Communication and Digital Media Arts with an Animation and Motion Graphics Concentration. BSU also has a B.S. in Computer Technology with an Internet and Multimedia Applications Track. The University of Maryland Eastern Shore (UMES) has a B.A. in Applied Design with a Sequential Arts Concentration that includes visual computing courses. Coppin State University (CSU) has a B.S. in Computer Science with computer graphics and advanced web programming courses. However, the existing

degrees in the state do not focus specifically on Esports Management. The degrees at MSU, BSU, CSU, and UMES concentrate on the computer science, visual arts design, and digital media arts aspects of the broader area of computer, online, and interactive gaming. **Capitol Technology University's proposed B.S. in Esports Management focuses on the much narrower scope of Esports Management.**

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 University does not anticipate any impact on the uniqueness and institutional identities and missions of HBIs. There are no bachelor's degree programs at Maryland HBIs in Esports Management. The existing degree programs concentrate on the computer science, visual arts design, and digital media arts aspects of the broader area of computer, online, and interactive gaming. Morgan State University (MSU) has a B.A. in Visual Arts with a Multimedia Studio Track. Bowie State University (BSU) has a B.S. in Visual Communication and Digital Media Arts with an Animation and Motion Graphics Concentration. BSU also has a B.S. in Computer Technology with an Internet and Multimedia Applications Track. The University of Maryland Eastern Shore (UMES) has a B.A. in Applied Design with a Sequential Arts Concentration that includes visual computing courses. Coppin State University (CSU) has a B.S. in Computer Science with computer graphics and advanced web programming courses. However, the existing degrees in the state do not focus specifically on Esports Management. The degrees at MSU, BSU, CSU, and UMES concentrate on the computer science, visual arts design, and digital media arts aspects of the broader area of computer, online, and interactive gaming. **Capitol Technology University's proposed B.S. in Esports Management focuses on the much narrower scope of Esports Management.**

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

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

The University's New Programs Group established the proposed program through a rigorous review of unmet needs. The group includes selected representation from the University's faculty, administrators, and Executive Council. Please see Section I for a detailed list of the faculty's backgrounds and qualifications.

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

Learning Objectives:

a. Students will understand the history of the games industry and the process of creating games.
b. Students will apply core business fundamentals, including marketing, finance, and accounting, to the Esports industry.
c. Students will develop an Esports go-to-market digital distribution strategy, including trade shows and other distribution channels.

d. Students will understand the nuances and complexities associated with managing Esports teams and leagues.

Learning Outcomes:

Upon graduation:

a. Graduates will be prepared for employment in the Esports industry with a strong proficiency in distribution, research, sales, and marketing tailored to the Esports industry.
b. Graduates will understand the business fundamentals that apply specifically to the Esports field to help set them apart in the labor market.
c. Graduates will have the ability to manage Esports teams, events, and leagues successfully.
d. Graduates will understand the basic fundamental principles of game design.
e. Graduates will have the ability to analyze Esports games as technology products, works of art, and cultural forces.
f. Graduates will have robust skills in the process of bringing Esports games to market.

3. Explain how the institution will:

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

Capitol Technology University will assess student achievement of the learning outcomes per the regulations specified by the University's regional accreditation organization: the Middle States Commission on Higher Education (MSCHE).

Under MSCHE, the University will use Standard V, Educational Effectiveness Assessment, of the Standards for Accreditation and Requirements of Affiliation. Standard V requires:

> Assessment of student learning and achievement demonstrates that the institution's students have accomplished educational goals with their program of study, degree level, the institution's mission, and appropriate expectations for institutions of higher education.
>
> (Source: https://www.msche.org/standards/, retrieved 7/22/2019)

Per the MSCHE's accreditation requirements, Capitol Technology University will measure Standard V by using the following criteria:

> An accredited institution possesses and demonstrates the following attributes or activities:
>
> 1. [C]learly stated educational goals at the institution and degree/program levels, which are interrelated with one another, with relevant educational experiences, and with the institution's mission;
>
> 2. [O]rganized and systematic assessments, conducted by faculty and/or appropriate professionals, evaluating the extent of student achievement of institutional and degree/program goals. Institutions should:
>
> > a. define meaningful curricular goals with defensible standards for evaluating whether students are achieving those goals;

b. articulate how they prepare students in a manner consistent with their mission for successful careers, meaningful lives, and, where appropriate, further education. They should collect and provide data on the extent to which they are meeting these goals;
c. support and sustain assessment of student achievement and communicate the results of this assessment to stakeholders;

3. [C]onsideration and use of assessment results for the improvement of educational effectiveness. Consistent with the institution's mission, such uses include some combination of the following:

a. assisting students in improving their learning;
b. improving pedagogy and curriculum;
c. reviewing and revising academic programs and support services;
d. planning, conducting, and supporting a range of professional development activities;
e. planning and budgeting for the provision of academic programs and services;
f. informing appropriate constituents about the institution and its programs;
g. improving key indicators of student success, such as retention, graduation, transfer, and placement rates;
h. implementing other processes and procedures designed to improve educational programs and services;

4. [I]f applicable, adequate and appropriate institutional review and approval of assessment services designed, delivered, or assessed by third-party providers; and

5. [P]eriodic assessment of the effectiveness of assessment processes utilized by the institution for the improvement of educational effectiveness.

(Source: http://www.msche.org/wp-content/uploads/2018/06/RevisedStandardsFINAL.pdf)

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

Program description, as it will appear in the catalog:

The Bachelor of Science (B.S.) in Esports Management program is designed to meet the rapidly growing needs of the Esports industry--the fastest going field in the entertainment world. Esports is expected to be a $1.8 billion industry by 2022 and continue to grow at a rate of at least 40% a year. **The B.S. in Esports Management** provides a first-rate, cutting-edge education in Esports operations. Students will learn how to apply core management fundamentals tailored to the Esports industry and create a go-to-market digital distribution strategy. Students will understand the nuances and complexities associated with managing Esports teams, events, and leagues. Students will also use those skills in real-world events before graduation. **The B.S. degree in Esports Management** will prepare students for entry-level positions throughout the exciting Esports industry.

Description of program requirements:

Entrance Requirements

To be fully accepted into the program, students must be accepted to the University.

Degree Requirements:

The following is a list of courses for the **B.S. in Esports Management** degree. Students expecting to complete this degree must meet all prerequisites for the courses listed below.

Bachelor of Science in Esports Management
Courses
Total Credits: 121

BUSINESS CORE COURSES: 12 CREDITS

ESM-174 Intro to Business & 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.

ESM-280 Macroeconomics (3 Credits)
This course is an introduction to macroeconomic concepts and analysis. It deals with the relationship between government, business, and the overall economy. The key areas focused on include gross domestic product, the public sector, unemployment, and aggregate supply and demand. The global economy is covered with a discussion of issues such as international trade and protectionism. Prerequisite: EN-101.

ESM-289 Entrepreneurship & Small Bus Mgmt (3 Credits)
This course provides an overview of the principles and processes of entrepreneurship and small business management. Students learn to identify characteristics of entrepreneurs, identify business innovations, conduct feasibility analyses, develop formal business plans, and finance, organize, and operate a small business. Prerequisite: EN-101.

ESM-358 Internship (3 Credits)
This course provides students with an alternative educational experience in industry and government that complements and strengthens their classroom education. Internship positions must be related to the student's major and be creative and analytical for a minimum of eight weeks. The intern is under the supervision or mentorship of an experienced professional and faculty member. Prerequisites: junior or senior status. Cumulative GPA 2.8+ and 3.0+ in major required.

MARKETING AND LEGAL CORE COURSES: 6 CREDITS

ESM-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 is regard to product, promotion, pricing, and distribution strategies. Industry standards and ethical practice are focal points of the course. Prerequisite: BUS-174.

ESM-378 Legal Environment of Business (3 Credits)
This course introduces the student to legal reasoning; ethical norms; the legal process and the American legal system; administrative law process and the role of business people in that process; the study of selected areas of public and private law, such as securities regulation, antitrust, labor, product liability, contracts, and consumer and environmental law; and international dimensions of the legal environment of law. The course aims to establish legal literacy and develop an understanding of legal dynamics, particularly in the business world. Prerequisites: EN-102 and BUS-174.

LEADERSHIP AND MANAGEMENT CORE COURSES: 18 CREDITS

ESM-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. Essential functions such as recruitment, selection, development, appraisal, retention, compensation, and labor relations are examined in the context of government, private, and public sectors.

ESM-279 Introduction to Leadership (3 Credits)
This course overviews the disciplines and competencies associated with leadership in the 21st Century. In particular, the study and application of skills, theories, and concepts in a multicultural society will be examined. This is a seminar course with emphasis on class discussion and collaborative learning. Prerequisite: BUS-174.

ESM-301 Project Management (3 Credits)
This course is an introduction to project management. It covers the origins, philosophy, 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: BUS-174.

ESM-384 Productions & Operations Management (3 Credits)
This course stresses the decisions that managers make in increasing productivity in a world economy, productions and operations management examines the processes by which goods and services are produced. Strategies, techniques and problems in forecasting, statistical quality control, total quality management, inventory management, scheduling, maintenance and reliability, product, process, technology, location, layout, and purchasing are the core topics of this course. Prerequisites: MA-128 and BUS-386.

ESM-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. The course will discuss management and organizational behavior and concepts associated with continuous improvement in individual and group processes. 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. Prerequisites: BUS-275.

ESM-410 Strategic Management (3 Credits)
This senior-level course is 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. Prerequisites: BUS-279, BUS-301, and BUS-386.

GAME MANAGEMENT COURSES: 18 CREDITS

ESM-120 Introduction to Games (3 Credits)
This course provides students with a broad overview of the games industry. It covers the state of the industry, the societal impact of games, and the fundamentals of game creation. Additionally, students will explore the different genres of games and improve their understanding of the heuristics and aesthetics of play. This course requires no prior knowledge of game design or programming.

ESM-140 Introduction to Esports Management (3 Credits)
Between 2018 and 2019, the number of jobs in esports nearly doubled-growing a staggering 185%. In addition, there are numerous business jobs elsewhere in the games industry, including roles in distribution, research, sales, and marketing. The explosive growth in esports -- and the attendant growth within the games industry that it has field -- has created a demand for business professionals with skills tailored to the nuances of the industry. This course provides students with an understanding of the complexities specific to managing esports teams, events, and leagues.

HU-210 Game Design and Theory (3 Credits)
This course teaches how to design a standalone game that is balanced, playable, and has that intangible of "fun." Topics include the history of games, player psychology, mathematical game theory, topology, statistics, multiplayer interactions, and art and aesthetics. We also cover the milestones needed to produce a game. Each student will take their concept from idea to creating their choice of a tabletop game or a paper prototype for a future marketable game.

ESM-220 Working with Unity (3 Credits)
This course grows students' familiarity with the Unity engine and editor. Students will explore a variety of concepts, tools, and frameworks, with the ultimate goal of building the skills necessary to create a game in Unity. These topics will include interfaces, environments, physics, animation, lighting, and sound. Prerequisite: ESM-120.

ESM-370 Convention, Event and Trade Show Planning (3 Credits)
One of the significant ways in which games are marketed to consumers is the convention. Shows like the Tokyo Game Show, PAX, and E3 attract audiences ranging from 60,000 - 300,000 and serve as one of the best opportunities for game studios to generate excitement and favorable word-of-mouth for upcoming projects. Successfully executing a company presence at one of

these unique trade shows requires a working understanding of budgeting, goal-setting, demo creation, logistics, staffing, merchandising, and ROI evaluation -- all topics covered in this course. Prerequisite: ESM-120.

ESM-440 Distribution of Games: The Role of the Publisher (3 Credits)
The role of a publisher in the games industry is to ensure that a game can get in front of its audience successfully. To do that, a publisher must consider a variety of distribution strategies and channels. This course explains the role of a publisher in game distribution and details the various channels by which a game can be distributed. Prerequisites: ESM-120, ESM 376.

COMPUTER PROGRAMING COURSES: 9 CREDITS

CS-120 Introduction to Programming Using 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: none

CS-150 Programming in C (3 Credits)
This Introductory course in programming will enable students to understand how computers translate basic human instructions into machine-executable applications. The language of choice for this course is C. The C syntax that will be covered includes functions, variables, and memory allocations, including pointer notation, conditional statements, and looping. Students will also learn binary to hexadecimal and decimal conversions along with basic computer architecture. Memory management, data input output, and file manipulations will be among some other topics discussed and applied during this course. Prerequisite: MA-111 or MA-112 and CS-100 or placement test or CS-120. Formerly titled Introduction to Programming Using C.

CS-220 Database Management (3 Credits)
Database Management An overview of database systems, with an emphasis on relational databases. Terminology, basic analysis, and design using Entity-Relationship diagrams and relational schemas. Database implementation, queries, and updates in a modern relational database management system. An overview of database administration, transactions, and concurrency. Data warehouses. Projects, which are assigned as homework, are implemented in Oracle. Prerequisite: CS-130 or CS-150.

TECHNICAL ELECTIVE COURSES: 18 CREDITS

Technical Elective #1 (3 Credits)
Technical Elective #2 (3 Credits)
Technical Elective #3 (3 Credits)
Technical Elective #4 (3 Credits)
Technical Elective #5 (3 Credits)
Technical Elective #6 (3 Credits)

GENERAL EDUCATION COURSES: 40 CREDITS

PHYSICAL SCIENCE COURSES: 6 CREDITS

CH-120 Chemistry (3 Credits)
Metric system and significant figures; stoichiometry; fundamental concepts of atomic structure and its relationship to the periodic table; electron configuration; bonds and electronegativity; gases; oxidation states and redox; solutions, acids and bases, changes of state, thermodynamics, chemical kinetics, and equilibrium. Prerequisites: MA-114.

PH-201 General Physics I (3 Credits)
Non-calculus physics. The course will cover mechanics (units), conversion factors (vector diagrams), translational equilibrium (uniformly accelerated motion), projectiles (Newton's Law), work energy and power (kinetics and potential energy), conservation of energy (impulse and momentum), heat (temperature scales), thermal properties of matter, heat and temperature change, heat and change of phase, and the physics of heat transfer (applications). Prerequisite: MA-114.

MATHEMATICS COURSES: 13 CREDITS

MA-112 Intermediate Algebra (3 Credits)
Designed for students needing mathematical skills and concepts for MA-114 and MA-216. 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: MA-005 or placement test score.

MA-114 Algebra & Trigonometry (4 Credits)
Prerequisite: MA-112 or placement test score: Designed for students needing mathematical skills and concepts for MA-216; topics in this course are as follows. Algebra: basic operations on real and complex numbers, fractions, exponents, and radicals. Determinates. The solution of linear, fractional, quadratic and system equations. Trigonometry: definition and identities, angular measurements, solving triangles, vectors, graphs, and logarithms. Prerequisite: MA-112 or acceptable based on the placement test score.

MA-128 Introduction to Statistics (3 Credits)
Probability: definitions, theorems, permutations and combinations. Binomial, hypergeometric, Poisson and normal distributions. Sampling distribution and central limit theorem, estimation and hypothesis testing. Prerequisite: MA-110, MA-111 or MA-112.

BUS-101 Introduction to Data Science (3 Credits)
Fundamental coursework on the standards and practices for collecting, organizing, managing, exploring, and using data. Topics include preparation, analysis, and visualization of data and creating analysis tools for larger data sets. Co-requisite: MA-112.

ENGLISH COURSES: 6 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 two essays and two 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: 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 and 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. The course includes group work. Presentations are required. Prerequisite: EN-101.

SOCIAL SCIENCES COURSES: 6 CREDITS

SS-171 Introduction to Psychology (3 Credits)
This course is a fundamental study of human behavior, exploring such topics as learning and cognition, memory, intelligence, motivation and emotion, consciousness, personality, and abnormal behavior. A discussion of the scientific character of psychology and the research methodology employed in the discipline will be included. Prerequisite or Corequisite: EN-001 or EN-101.

SS-351 Ethics (3 Credits)
Prerequisite: EN-102: 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 for this course. Prerequisite: None.

ARTS AND HUMANITIES: 9 CREDITS

HU-220 Critical Thinking (3 Credits)
This course explores the process of thinking critically and guides students in thinking more clearly, insightfully, and effectively. Concrete examples from personal experience and contemporary issues help students develop the abilities to solve problems, analyze arguments and issues, as well as make informed decisions in their academic career and personal lives. Readings, structured writing assignments, and ongoing discussions help students develop sophisticated thinking abilities. Prerequisite: EN-102.

HU-225 Writing for the Internet (3 Credits)
This course introduces students to writing for the Internet, allowing more effective online communication in forums such as blogs and websites. Students will learn how to write in a more active voice, bringing more energy and vibrancy to their articles and commentaries. Course material examines the workflow and demands of Internet writing and publishing. Students will learn how to launch their own blog and develop an audience, as well as learn how to prepare articles for other blogs and websites. This course is designed for all students, regardless of their communication, writing, or journalism experience. This course is not a Web design course. Prerequisite: 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 a 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: EN-102.

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

   The general education requirements will meet or exceed the specifications in The Code of Maryland Regulations (COMAR). Please see Section G.4 to review the general education requirements for the proposed degree.

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

   The program will be accredited regionally by the Middle States Commission on Higher Education (MSCHE).

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

   The University will not be contracting with another institution or non-collegiate organization.

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.**

   The **B.S. in Esports Management** 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.

   Curriculum, course, and degree information will be available on the university website and via e-mail as well as regular mail (by request). The expectations for faculty/student interaction are available to students during virtual open house events, literature, website, etc. This information is also part of the material distributed for each course. Students receive guidance on proper behavior/interaction with their Department Chair and faculty members both in-person and online to facilitate a high-level experience. Technology competence and skills and technical equipment requirements are part of the material distributed for each course. The technical equipment requirements are also listed on our website and provided to students in the welcome package.

   The University's academic support services, financial aid resources, costs and payment policies, and Learning Management System are covered in the University Open Houses, the application process, the Welcome Aboard process, Orientation, Student Town Halls, and individual

counseling.

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.**

   The **B.S. in Esports Management** program's advertising, recruiting, and admissions materials will clearly and accurately represent the proposed program and the services available. The content for every new program is derived from the new program request sent to the Maryland Higher Education Commission is the source of the content for every new program at the University.

H. Adequacy of Articulation:

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

   This program does not currently have articulation partners. However, the articulation process will work as it does for the University's current degrees. The University is very active with its transfer partners throughout the state and beyond. The goal of the University is to work with partners to make the transfer as seamless as possible and to maximize the student's transfer credits as possible. There are University transfer admissions personnel to guide the student through the process.

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

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

   Dr. Antunes, Dr. Ashmall, Dr. Bajracharya, Dr. Bajwa, Dr. Baker, Dr. Butler, Prof. Hendron, Dr. Pretty, and Dr. Steele are full-time faculty members. The University leadership is confident in the quality of the faculty and their abilities to provide a learning environment supportive of the University's goals for student success. Additional Ph.D.-qualified faculty will be added as needed.

   Instructors who will be engaged with the **B.S. in Esports Management** are:

Dr. Alex Antunes Full time	Ph.D. Computational Astrophysics M.S. Astronomy B.S. Astronomy and Physics	All PH courses and Tech Electives
Dr. Lt. Col. Soren Ashmall, USMC (Ret.) Full time	Ph.D. Technology M.A. Broadcast Journalism MOS 0202 Intelligence Officer MOS 2602 Signals Intelligence Officer/ Electronic Warfare Officer MOS 3450 Planning, Programming, & Budget Systems Officer MOS 8055 Information Management Officer	All BUS, EN, HU, and SS courses, ESM-275, ESM-279, ESM-301, ESM-384, ESM-386, ESM-410

	Facilities Security Officer, National Industrial Security Program (NISP)	
Dr. Chandra Bajracharya Full time	Ph.D. Electrical and Computer Engineering M.S. Applied Computing M.S. Electrical Power Engineering B.E. Electrical Engineering	All CS courses and Tech Electives
Dr. Garima Bajwa Full time	Ph.D. Computer Science and Engineering M.S. Electrical and Computer Engineering B.S. Electronics and Communication Engineering	All CS courses and Tech Electives
Dr. Richard Baker Full time	Ph.D. Information Systems M.S. Computer Science B.S. Mathematics	ESM-275, ESM-279, ESM-301, ESM-384, ESM-386, and Tech Electives
Dr. Hasna Banu Adjunct	Ph.D. Theoretical Physics M.S. Mathematics B.S. Mathematics	All MA Courses
Dr. William Butler Full-time	D.Sc. Cyber Security M.S. Strategic Studies B.S. Computer Science NSTISSI No. 4011 CNSSI No. 4012 NSTISSI No. 4015 CNSSI No. 4016	All CS courses and Tech Electives
Prof. Joseph Hendron Full time	M.S. Aviation B.S. Commercial Aviation Commercial Single/Multi-engine Rating Instrument Rating CFI, CFII Complex/High-Performance Rating	ESM-174, ESM-358, and Tech Electives
Prof. Sam Morgan III Adjunct	M.S. Aerospace, Aeronautical, & Astronautical Engineering B.G.S. General Studies MQ-1 Predator Pilot MQ-9 Reaper Instructor Pilot A-10 Instructor/Evaluator Pilot F-16 Maintenance Officer Military Pilot (T-37, T-38)	Tech Electives
Dr. Mark Opeka Adjunct	Ph.D. Materials Engineering M.S. Materials Engineering B.S. Mechanical Engineering	All PH and CH courses.
Dr. Jeremy Pretty Full time	Ph.D. Product Management M.S. Project Management M.A.S. Aviation Management B.S. Professional Aeronautics A.S. Game Design and Development	All ESM courses

	PMP PMI-ACP PMI-SP CSPO CSM	
Dr. Robert Steele Full time	Ph.D. Computer Science B.Sc. (Honors) Computer Science B.Sc. Math and Computer Science	All CS courses and Tech Electives

ADDITIONAL JUSTIFICATION FOR KEY FACULTY:
Capitol Technology University's instructors for this program are leading experts in their fields, including:

a. Dr. LtCol. Soren Ashmall, USMC (Ret.)
Dr. LtCol. Ashmall is a seasoned professor at Capitol Technology University. In addition to his career in academia, Dr. LtCol. Ashmall has also worked as a Senior Director of Business Development for General Dynamics Information Technology, involving major projects in the United States and overseas. He has held other senior positions at commercial companies and U.S. government agencies. Dr. LtCol. Ashmall is an expert in business, terrorism, counterterrorism, intelligence, and signals intelligence. He retired as a Lieutenant Colonel from the United States Marine Corps in 2009 following over 21 years of continuous active duty military service. He served as an Intelligence Officer, Signals Intelligence Officer, and Electronic Warfare Officer during his military career. Dr. LtCol. Ashmall conducted operations worldwide in support of national and international missions. He held positions of increasing authority throughout his career, including service as a Vice Chairman, Commanding Officer, Executive Officer, Operations Officer, Officer-In-Charge, and Division Head multiple times at Headquarters, U.S. Marine Corps. He is also an expert in resources, having directed all resourcing and budgeting for Marine Corps Intelligence, regularly briefed U.S. Congressional Committees, directed all signals intelligence policy for the U.S. Marine Corps, led a large national event for the U.S. Marine Corps, and held fiscal responsibility for hundreds of millions of dollars during his military career.

b. Dr. Richard Baker
Prior to joining Capitol Technology University, Dr. Baker served as the Chair of Indiana State University's Department of Aviation Technology and the Director of Indiana State University's Center for Unmanned Systems and Human Capital Development. Baker holds a bachelor's degree in Mathematics and a master's degree in Computer Science from Indiana State University. He received his doctorate in Information Systems from Nova Southeastern University. Dr. Baker was instrumental in the successful launch of ISU's Center for Unmanned Systems and directed the research and collaboration efforts with strategic partners. Dr. Baker brings many years of executive-level experience in Information Technology (IT) from companies such as General Motors and Electronic Data Systems (EDS). Prior to entering the academic world, he also had extensive experience in the aviation industry. Dr. Baker served as the Director of Human Factors and Safety for American Airlines, where his responsibilities included CRM and safety training for all pilots and flight attendants. He received professional certification in Risk Management from the Transportation Safety Institute. Dr. Baker retired as a Colonel from the Indiana National Guard in 2003, where he held command positions including Indiana State Director of Operations, Indiana State Director of Support, 181st Fight Wing Support Group Commander, 181st Mission Support Squadron Commander, and 181st Chief of Supply. During his tenure with the Air Guard, he was a Weapons Systems Officer in the F-4 and worked extensively with airspace issues, rapid response teams for counter-terrorism, the Counterdrug Operations at the United States Joint Forces Command, and

was a trainer for the Air National Guard's Domestic Preparedness Operations. Dr. Baker also holds a private pilot's license, instruments rating, and multi-engine rating.

c. Prof. Col. Sam Morgan III, USAF (Ret.)
Prof. Morgan has served as the Director of Unmanned Systems and an Aviation Instructor at Indiana State University. Prof. Morgan has over 26 years of experience in aviation and unmanned systems. During his 24 years as a pilot in the United States Air Force, Prof. Morgan served as an A-10 Instructor/Evaluator Pilot, MQ-9 Reaper Instructor Pilot, MQ-1 Predator Pilot, F-16 Maintenance Officer, T-37/T-38 Pilot, Fight Safety Officer, Functional Check Flight Pilot, A-10 IP Flight Commander, Command Post Chief, Emergency Actions Controller, Airborne Jump-certified Battalion Air Liaison Officer, and Air Force ROTC Detachment Commander. He retired from active duty as a Colonel in the U.S. Air Force. Following his retirement from active duty, Prof. Morgan continued his work in aviation and unmanned systems as an instructor at Indiana State University.

d. Dr. Jeremy Pretty
Dr. Jeremy Pretty is a professor at Capitol Technology University and an expert in Esports, gaming, cloud management, and emerging cloud tools and technology. In addition to his career in academia, Dr. Pretty serves as the Senior Technical Program Manager for an A1 Virtual Data Center. He is the mentor on several Discord servers for Unity 3D game development. His current research areas include diversity in the gaming industry, gaming glove development, gaming reflexes-fatigue-stamina, undervalued games, and the elements of success in younger and older-aged members of Esport teams. Dr. Pretty is a highly-regarded Beta tester of new games; he is an expert in assisting companies with high-quality game development and high-value product releases. Dr. Pretty is also a veteran of the U.S. Air Force.

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

a) Pedagogy that meets the needs of the students

The primary pedagogy for faculty at Capitol Technology University is the Active Learning model. The university believes strongly in a highly-interactive, thinking, and hands-on experience for students in each class to the maximum extent possible.

> It was two Missouri State professors, historian Charles Bonwell and psychologist James Eison, who coined the term "active learning." In their 1991 book on the subject, Active Learning: Creating Excitement in the Classroom, they offered this definition of the concept: "active learning involves students in doing things and thinking about the things they are doing."
>
> The definition, though it seems circuitous, marks a definitive pedagogical shift in college teaching and learning. Rather than think about what they are watching, hearing, or reading, students are first encouraged to be "doing" something in class, and then to apply critical thought and reflection to their own classroom work and activity. Their argument was backed up by research. Even Bligh, 20 years earlier, had pointed out that the immediate rehearsal of new information and knowledge had a significant impact on learning.
>
> This approach is as helpful in the sciences as it is in the arts or humanities: whether it's organic chemistry, creative writing, or behavioral economics, concepts are all best

> understood through repeated practice and open, social exploration. The central tenet of active learning is that practice matters, and that classroom time is better spent giving students opportunities to work with concepts over and over, in a variety of ways and with opportunities.
>
> The central tenet of active learning — that practice and interaction matters— can be applied across disciplines for immediate feedback, so that knowledge can take hold in their own minds.
>
> (Source: Preville, P. Active Learning: The Perfect Pedagogy for the Digital Classroom: An Essential Guide for the Modern Professor)

All faculty receive regular periodic and recurring pedagogical training during the academic year. Those training sessions occur in a hybrid format – simultaneously live online and live on-ground in the classroom. The sessions are designed to reach all faculty, both full-time and adjunct, in order to ensure everyone receives the training. Additionally, the sessions are recorded for those faculty who are unable to attend the live training session due to other professional and teaching commitments.

b) The Learning Management System

The University's Department of Online Learning and Information Technology Division supports the online program needs of faculty and students. The Department of Online Learning and the IT Help Desk provide 24-hour support to the faculty. Canvas is the University's online Learning Management System. When a new faculty member is assigned to teach an online course, the Department of Online Learning provides formal training for the instructor. New faculty are assigned an experienced faculty mentor to ensure a smooth transition to the online environment as well as to ensure compliance with the institution's online teaching pedagogy. The University believes this provides the highest-level learning experience for the faculty member and, in turn, students attending online classes.

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

Faculty at Capitol Technology University receive training in Keller's ARCS Motivational Model and his associated strategies for distance education/online learning.

> A model used in the online delivery of teaching and learning to increase learner motivation is Keller's ARCS motivational model. This model has been considered an important element in online education because of its implications on increased learner motivation and learning outcomes. The Keller's model consists of motivating students by maintaining and eliciting attention (A), such as virtual clinical simulations; making the content and format relevant (R), by modeling enthusiasm or relating content to future use; facilitating student confidence (C), by providing "just the right challenge"; and promoting learner satisfaction (S), by providing reinforcement and praise when appropriate. Examples of Keller's model include increasing motivation including the arousal of curiosity of students, making the connection between learning objectives and future learning goals, autonomous thinking and learning, and fostering student satisfaction. Keller's ARCS model has been researched by various educational online programs to analyze student motivation and learning outcomes. Keller's model serves as an example

and guide for instructors to motivate and increase online engagement with their students as wells as research purposes.

A qualitative study by Chan Lin investigated online student learning and motivation. Discussion boards, student projects, and reflection data were collected and analyzed from a 12-week web-based course. Respondents indicated the importance of online feedback from the instructor and peer modeling of course tasks to visualize learning progress. The study revealed using Keller's ARCS strategies fosters greater student online engagement by fostering self-efficacy and a sense of accomplishment.

In a mixed-method study, assessing the use of Keller's ARCS on instructional design, the use of educational scaffolding fostered positive levels of student motivation. Relevancy, attention, confidence, and satisfaction were all common factors associated with student success in the course and course completion.

(Source: Pinchevsky-Font T, Dunbar S. Best Practices for Online Teaching and Learning in Health Care Related Programs. The Internet Journal of Allied Health Sciences and Practice. January 2015. Volume 13 Number 1.)

All faculty receive regular periodic and recurring training on evidence-based practices for distance education/online learning during the academic year. Those training sessions occur in multiple formats: asynchronous, synchronous (i.e., live online), hybrid (i.e., simultaneously live online and live on-ground), and on-ground in the classroom. The sessions are designed to reach all faculty, both full-time and adjunct, to ensure all members receive the training. Additionally, the live sessions are recorded for those faculty who are unable to attend the live training session due to other professional commitments or who are teaching classes at the training delivery time.

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

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

Library Services: The Puente Library offers extensive services and a vast collection for Capitol Technology University students to succeed academically. Library resources are available digitally. The library also provides a mailing service for materials borrowed through the Maryland system.

The library is currently supporting the following degrees at the undergraduate level: B.S. in Astronautical Engineering, B.S. in Aviation Professional Pilot, B.S. in Computer Engineering, B.S. in Computer Engineering Technology, B.S. in Computer Science, B.S. in Construction Information Technology and Cybersecurity, B.S. in Construction Management and Critical Infrastructure, B.S. in Construction Safety, B.S. in Counterterrorism, B.S. in Cyber Analytics, B.S. in Cybersecurity, B.S. in Data Science, B.S. in Electrical Engineering, B.S. in Electrical Engineering Technology, B.S. in Engineering Technology, B.S. in Facilities Management and Critical Infrastructure, B.S. in Information Technology, B.S in Management of Cyber and Information Technology, B.S. in Mechatronics Engineering, B.S. in Mechatronics and Robotics Engineering Technology, B.S. in Mobile Computing, B.S. in Professional Trades Administration,

B.S. in Software Engineering, and B.S. in Technology and Business Management, B.S in Unmanned and Autonomous Systems, and B.S. in Web Development.

The library is currently supporting the following degrees at the graduate level: Master of Business Administration (M.B.A.), Master of Science (M.S.) in Astronautical Engineering, M.S. in Aviation, M.S. in Aviation Cybersecurity, M.S. in Computer Science, M.S. in Construction Cybersecurity, M.S. in Construction Safety, M.S. in Critical Infrastructure, M.S. in Cyber Analytics, M.S. in Cybersecurity, M.S. in Information Systems Management, M.S. in Engineering Technology, M.S. in Internet Engineering, M.S. in Unmanned and Autonomous Systems Policy and Risk Management, Technical Master of Business Administration (T.M.B.A.) in Business Analytics and Data Science, and T.M.B.A. in Cybersecurity, Doctor of Science (D.Sc.) in Cybersecurity, Doctor of Philosophy (Ph.D.) in Artificial Intelligence, Ph.D. in Aviation, Ph.D. in Business Analytics and Data Sciences, Ph.D. in Construction Science, Ph.D. in Counterterrorism, Ph.D. in Critical Infrastructure, Ph.D. in Cybersecurity Leadership, Ph.D. in Emergency and Protective Services, Ph.D. in Human Factors, Ph.D. in Manufacturing, Ph.D. in Occupational Health and Safety, Ph.D. in Operational Technology, Ph.D. in Product Management, Ph.D. in Quantum Computing, Ph.D. in Technology, Ph.D. in Technology/M.S. Research Methods Combination Program, and Ph.D. in Unmanned Systems Applications.

Therefore, the library is fully prepared to support a **B.S. in Esports Management.**

Services provided to online students include:

- "Ask the Librarian"
- Research Guides
- Tutorials
- Videos
- Online borrowing

The John G. and Beverley A. Puente Library provides access to management, decision science, engineering, technology, and research methods materials through its 10,000-title book collection, e-books, and 90 journal subscriptions. The library will continue to purchase new and additional materials in management, decision science, and research methods to maintain a substantial and current collection in the subject areas. Students can also access materials through the library's participation in Maryland's Digital eLibrary Consortium. This online electronic service provides access to numerous databases (Access Science, NetLibrary) that supply students with the documents they need. Available databases include ProQuest, EBSCO, ACM, Lexis Nexis, Taylor Francis, and Sage Publications.

The Puente Library can provide access to historical management and decision science materials through its membership in the Maryland Independent College and University Association (MICUA) and the American Society of Engineering Education (ASEE). Reciprocal loan agreements with fellow members of these organizations provide the library access to numerous research facilities that house and maintain archives of management and decision science documents. The proximity of the University of Maryland, College Park, and other local area research and academic libraries provide the Puente Library with quick access to these materials as well.

The library currently supports the needs of students at the undergraduate, master's, and doctoral levels.

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

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

   No new facilities are required for the program. The online class platform is web-based and requires no additional equipment for the institution. The current Learning Management System, Canvas, and Zoom meet the needs of the degree program. The Business and Technology Lab, Computer Science Lab, Cyber Lab, Robotics Lab, and Unmanned Systems Lab meet the potential research needs of the students. The labs provide both local and virtual support.

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

   a. **An institutional electronic mailing system**

      Capitol Technology University provides an institutional electronic mailing system to all students and faculty. The University requires the use of the email system by all students and faculty in all the institution's modalities of course delivery. Capitol Technology University students and faculty are required to use the institution's email addresses (e.g., xxxxxxxx@captechu.edu) in all University matters and communications. The University uses the email capabilities in Microsoft Office 365 and Microsoft Outlook.

   b. **A Learning Management System that provides the necessary technological support for distance education**

      Capitol Technology University provides a robust Learning Management Systems (LMS) through the use of the Canvas LMS by Instructure (www.canvaslms.com). The University pairs Canvas with Zoom (zoom.us) to provide a platform for every student and faculty member to meet face-to-face in a synchronous "live" mode of communication. The University requires Canvas for every class; as a result, every course has a classroom on Canvas and Zoom. All syllabi, grades, and assignments must be entered into Canvas on a timely basis throughout the semester.

      Canvas provides the world's most robust LMS. It is a 21st Century LMS; Canvas is a native cloud, Amazon Web Service hosted system. The system is adaptable, reliable, and customizable. Canvas is easy to use for students and faculty. The system is fully mobile and has proven to be timesaving when compared to other systems. The following list provides the features of the system:

      <u>Time and Effort Savings</u>

- CANVAS DATA
  Canvas Data parses and aggregates more than 280 million rows of Canvas usage data generated daily.
- CANVAS COMMONS
  Canvas Commons makes sharing a whole lot easier.
- SPEEDGRADER ANNOTATIONS
  Preview student submissions and provide feedback all in one frame.
- GRAPHIC ANALYTICS REPORTING ENGINE
  Canvas Analytics helps you turn rich learner data into meaningful insights to improve teaching and learning.
- INTEGRATED MEDIA RECORDER
  Record audio and video messages within Canvas.
- OUTCOMES
  Connect each learning outcome to a specific goal, so results are demonstrated in clearly measurable ways.
- MOBILE ANNOTATION
  Open, annotate, and submit assignments directly within the Canvas mobile app.
- AUTOMATED TASKS
  Course management is fast and easy with automated tasks.
- NOTIFICATION PREFERENCES
  Receive course updates when and where you want - by email, text message, even Twitter or LinkedIn.
- EASE OF USE
  A familiar, intuitive interface means most users already have the skills they need to navigate, learn, and use Canvas.
- IOS AND ANDROID
  Engage students in learning anytime, anywhere from any computer or mobile device with a Web-standard browser.
- USER-CUSTOMIZABLE NAVIGATION
  Canvas intelligently adds course navigation links as teachers create courses.
- RSS SUPPORT
  Pull feeds from external sites into courses and push out secure feeds for all course activities.
- DOWNLOAD AND UPLOAD FILES
  Work in Canvas or work offline—it's up to you.
- SPEEDGRADER
  Grade assignments in half the time.

Student Engagement

- ROBUST COURSE NOTIFICATIONS
  Receive course updates when and where you want—by email, text message, and even Facebook.

- PROFILE
  Introduce yourself to classmates with a Canvas profile.

- AUDIO AND VIDEO MESSAGES
  Give better feedback and help students feel more connected with audio and video messages.

- MULTIMEDIA INTEGRATIONS
  Insert audio, video, text, images, and more at every learning contact point.

- EMPOWER GROUPS WITH COLLABORATIVE WORKSPACES
  By using the right technologies in the right ways, Canvas makes working together easier than ever.

- MOBILE
  Engage students in learning anytime, anywhere from iOS or Android, or any mobile device with a Web-standard browser.

- TURN STUDENTS INTO CREATORS
  Students can create and share audio, video, and more within assignments, discussions, and collaborative workspaces.

- WEB CONFERENCING
  Engage in synchronous online communication.

- OPEN API
  With its open API, Canvas easily integrates with your IT ecosystem.

- BROWSER SUPPORT
  Connect to Canvas from any Web-standard browser.

- LTI INTEGRATIONS
  Use the tools you want with LTI integrations.

- MODERN WEB STANDARDS
  Canvas is built using the same Web technologies that power sites like Google, Facebook, and Twitter.

Lossless Learning

- CANVAS POLLS
  Gauge comprehension and incorporate formative assessment without the need for "clicker" devices.

- MAGICMARKER
  Track in real-time how students are performing and demonstrating their learning.

- QUIZ STATS
  Analyze and improve individual assessments and quiz questions.

- LEARNING MASTERY FOR STUDENTS
  Empower students to take control of their learning.

(Source: https://www.canvaslms.com/higher-education/features)

Capitol Technology University has been using Canvas for over six years. Canvas has proven to be a wholly reliable LMS system that provides the necessary technological support for distance education/online learning.

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

1. **Table 1: Resources.**

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)	$560,934	$755,656	$1,225,008	$1,847,626	$2,361,030
a. Number of F/T Students	17	22	32	46	58
b. Annual tuition/Fee rate	$25,830	$26,527	$27,243	$27,979	$28,734
c. Total F/T Revenue (a x b)	$439,110	$583,594	$871,776	$1,287,034	$1,666,572
d. Number of P/T Students	8	11	22	34	41
e. Credit Hour Rate	$846	$869	$892	$916	$941
f. Annual Credit Hour	18	18	18	18	18
g. Total P/T Revenue (d x e x f)	$121,824	$172,062	$353,232	$560,592	$694,458
3. Grants, Contracts and Other External Sources	0	0	0	0	0
4. Other Sources	0	0	0	0	0
TOTAL (Add 1 – 4)	$560,934	$755,656	$1,225,008	$1,847,626	$2,361,030

A. Provide a narrative rationale for each of the resource categories. If resources have been or will be reallocated to support the proposed program, briefly discuss those funds.

1. **Reallocated Funds**
   The University will not need to reallocate funds for the program.
2. **Tuition and Fee Revenue**
   Tuition is calculated to include an annual 2.7% tuition increase. A 20% attrition rate has been calculated.
3. **Grants and Contracts**
   There are currently no grants or contracts.
4. **Other Sources**
   There are currently no other sources of funds.
5. **Total Year**
   No additional explanation or comments needed.

2. **Table 2: Program Expenditures.**

TABLE 2: EXPENDITURES

Expenditure Category	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b + c below)	$155,071	$238,421	$325,843	$417,486	$513,511
a. #FTE	2	3	4	5	6
b. Total Salary	$129,226	$198,684	$271,536	$347,905	$427,926
c. Total Benefits (20% of salaries)	$25,845	$39,737	$54,307	$69,581	$85,585
2. Admin Staff (b + c below)	$5,942	$6,091	$6,244	$6,400	$6,559
a. #FTE	.08	.08	.08	.08	.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 below)	$59,885	$92,076	$125,837	$161,230	$198,313
a. #FTE	1.00	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	$1,875	$2,640	$4,590	$7,200	$9,405
5. Library	$0	$0	$0	$0	$0
6. New or Renovated Space	$0	$0	$0	$0	$0
7.Other Expenses	$15,750	$21,450	$36,450	$58,400	$74,250
TOTAL (ADD 1-7)	$238,523	$360,678	$498,964	$650,716	$802,038

A. Provide a narrative rationale for each expenditure category. If expenditures have been or will be reallocated to support the proposed program, briefly discuss those funds.

a. Faculty
Table 2 reflects the faculty hours in total, but this does not necessarily imply new hire requirements.

b. Administrative Staff
Capitol Technology University will continue with the current administrative staff through the proposed period.

c. **Support Staff**
Capitol Technology University will add additional support staff to facilitate the program.

d. **Equipment**
Software for courses is available free to students or is freeware. Additional licenses for the LMS will be purchased by the University at the rate of $75 per student in Year 1. The rate is estimated to increase by $5 per year.

e. **Library**
Money has been allocated for additional materials to be added to the on-campus and virtual libraries to ensure current and relevant literature. However, it has been determined that the existing materials serve this degree's needs due to the extensive online database.

f. **New or Renovated Space**
No new or renovated space is required.

g. **Other Expenses**
Funds have been allocated for office materials, travel, professional development, course development, marketing, and additional scholarships.

h. **Total Year**
No additional explanation or comments needed.

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

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

The assessment process at the University consists of a series of events throughout the Academic Year. The results of each event are gathered by the University Assessment Team and stored in Canvas for analysis and use in annual reports, assessments, etc. The University Assessment Team analyzes the results, develops any necessary action plans, and monitors the implementation of the action plans.

Academic Year Assessment Events:

Fall Semester:

- At the August Faculty Retreat, the faculty reviews any outstanding student learning challenges that have not been adequately addressed. The issues are brought to the Academic Deans for review and development of implementation plans.
- Faculty submit performance plans consistent with the mission and goals of the University and department. The documents are reviewed and approved by the Academic Deans.
- Department Chairs and Academic Deans review the Graduating Student Survey data.
- Department Chairs and Academic Deans review student internship evaluations.
- Department Chairs and Academic Deans review grade distribution reports from the spring and summer semesters.
- Department Chairs and Academic Deans review student course evaluations from the Summer Semester.
- Departments conduct Industrial Advisory Board meetings to review academic curriculum recommendations. The Advisory Board meets to begin curriculum review or address special

issues that may arise related to the curriculum. Based on an analysis and evaluation of the results, the Academic Deans, faculty, and the advisory boards will develop the most effective strategy to move the changes forward.

  - NOTE: A complete curriculum review for degrees occurs every two years. In most cases, the changes only require that the Academic Deans inform the Vice President of Academic Affairs and University President and provide a report that includes a justification and the impact of the changes as well as a strategic plan. Significant changes typically require the approval of the Executive Council.

- The Academic Deans attend the Student Town Hall and review student feedback with Department Chairs.
- Department Chairs conduct interviews with potential employers at our Career Fair.
- Post-residency, the Academic Deans meet with the faculty to review the student learning progress and discuss needed changes.

Spring Semester:

- Faculty Performance Plans are reviewed with faculty to identify issues of divergence and to adjust the plan as needed.
- Department Chairs and Academic Deans review grade distribution reports from the Fall Semester.
- Department Chairs and Academic Deans review the Graduating Student Survey data.
- Department Chairs and Academic Deans review student course evaluations from the Fall Semester and the Spring Semester (in May before the Summer Semester begins).
- Department Chairs and Academic Deans meet to review the content of the graduating student, alumni, and course surveys to ensure the surveys continue to meet the university's assessment needs.
- At the Annual Faculty Summit in May, the faculty review and discuss student learning challenges from the past academic year and provide recommendations to the Academic Deans. The results also lead to implementation plans for improvement.
- Department Chairs conduct interviews with potential employers at our Career Fair.
- Departments conduct Industrial Advisory Board meetings to review academic curriculum recommendations.

In addition to these summative assessments, the Academic Deans meet with the Department Chairs every week to review current student progress. This formative assessment allows for immediate minor changes, which increase faculty effectiveness and, ultimately, student outcomes.

The Faculty Senate meets monthly from August through April. The Faculty Senate addresses issues that impact student outcomes as those issues emerge. The leadership of the Faculty Senate then provides a report on the matter to the Academic Deans. The report may include a recommendation or a request to move forward with a committee to examine the issue further. In most cases, the changes only require the Academic Deans to inform the Vice President of Academic Affairs and University President and provide a report that includes a justification and the impact of changes as well as a strategic plan. Significant changes typically require the approval of the Executive Council.

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.

Student Learning Outcomes:

Student learning outcomes for the proposed **B.S. in Esports Management** will be measured using the instruments identified in Section G and Section M as well as the assessment measures dictated by the accreditation requirements of the University's regional accreditor [i.e., Middle States Commission in Higher Education (MSCHE)]. This program is designed to meet the requirements of MSCHE. The University is in good standing with MSCHE and all its accrediting bodies.

Student Retention:

The University maintains a comprehensive student retention program under the Vice President for Student Engagement. The program assesses student retention at all levels, including the individual course, major, and degree. During the semester and term, the University's Drop-Out Detective capability, within its Learning Management System (i.e., Canvas), provides an early alert at the course level to potential issues related to retention. Within the Office of Student Life, Academic Advisors monitor Drop-Out Detective and contact students who appear to have problems with their academic performance. The Academic Advisors work with each student to create a plan to remove any barriers to success. The Academic Advisors also work with the course instructors as needed to gain additional insight that may help correct the situation.

Each student also meets with their Academic Advisor each semester to evaluate their progress toward degree completion. An updated plan of action is developed for each student for their next semester's registration and each following semester through degree completion.

The Vice President for Student Engagement also meets regularly with the Vice President of Academic Affairs and Academic Deans to review student retention within each degree program and address any issues that appear to be impediments to degree completion.

Student and Faculty Satisfaction:

Evaluations and assessments of Student and Faculty satisfaction occur every semester. Faculty members are evaluated every semester by students enrolled in their courses. Students must complete a course evaluation online within a specified time frame at the end of the semester for every enrolled course, or they are locked out of Canvas (the University's Learning Management System) until they complete each survey. Every faculty member is also required to review each of their courses after each semester; the goal is to ensure up-to-date content, effective and efficient methods of delivery, and appropriate outcomes.

The Department Chairs and Academic Deans review the student evaluations for every course offered at the University. The Department Chairs and Academic Deans also review faculty satisfaction every semester. If changes are needed at the course level, the changes are developed and implemented by the faculty upon approval of the Department Chairs and Academic Deans. If changes are required at the faculty level, the Department Chairs will make the changes. At the end of the following semester, appropriate stakeholders analyze the results of a follow-on evaluation for the effectiveness of the changes. This cycle is an ongoing process.

Cost Effectiveness:

Based on the year-long inputs, evaluations, and reviews described in Section M.1, the Department Chairs and Academic Deans prepare the proposed academic budget for each program for the upcoming year. Budget increases are tied to increasing student learning and performance as well as critical strategic initiatives.

The Interim Vice President of Finance and Administration also monitors each academic program throughout every semester and term for its cost-effectiveness. Additionally, the revenue and costs of every University program are reviewed annually by the Executive Council and Board of Trustees before approving the next year's budget.

N. Consistency with the State's Minority Student Achievement goals (as outlined in COMAR 13B.02.03.05 and the State Plan for Post-Secondary Education):

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

   Capitol Technology University is a majority-minority school. Our programs attract a diverse set of students who are multiethnic and multicultural. The University actively recruits minority populations for all undergraduate and graduate-level degrees. Special attention is also provided to recruit females into the STEM and multidisciplinary programs at all degree levels – undergraduate, master's, and doctoral. The University will use the same approach for the **B.S. in Esports Management.**

O. Relationship to Low Productivity Programs Identified by the Commission:

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

   This program is not associated with a low productivity program identified by the Commission.

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

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

   Capitol Technology University is fully eligible to provide distance education. The University has a long history of providing high-quality distance education. The University is accredited regionally by the Middle States Commission in Higher Education (MSCHE) and through four specialized accrediting organizations: International Accreditation Council of Business Education (IACBE), Accreditation Board for Engineering and Technology (ABET), NSA, and DHS. All five accrediting organizations have reviewed the University's distance education program as part of their accreditation process. Capitol Technology University is fully accredited by MSCHE, IACBE, ABET, NSA, and DHS. The University is in good standing with all its accrediting bodies.

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

Capitol Technology University has a long history of providing high-quality distance education/online learning that complies with the Council of Regional Accrediting Commissions (C-RAC) Interregional Guidelines for the Evaluation of Distance Education. The University will also continue to abide by the C-RAC guidelines with the proposed **B.S. in Esports Management**.

a. Council of Regional Accrediting Commissions (C-RAC) Interregional Guidelines for the Evaluation of Distance Education.

1. **Online learning is appropriate to the institution's mission and purposes.**

   Online learning is consistent with the institution's mission, purpose, and history. Please refer to Section A of this proposal.

2. **The institution's plans for developing, sustaining, and, if appropriate, expanding online learning offerings are integrated into its regular planning and evaluation processes.**

   All programs at the University – online, hybrid, and on-ground – are subject to the same regular planning, assessment, and evaluation processes. Please see Section M of this proposal for the detailed process.

3. **Online learning is incorporated into the institution's systems of governance and academic oversight.**

   All programs at the University – online, hybrid, and on-ground – are subject to the same regular planning, assessment, and evaluation processes. Please see Section M of this proposal for the detailed process.

4. **Curricula for the institution's online learning offerings are coherent, cohesive, and comparable in academic rigor to programs offered in traditional instructional formats.**

   Online programs/courses meet the same accreditation standards, goals, objectives, and outcomes as traditional instruction at the University. The online course development process incorporated the Quality Matters research-based set of standards for quality online course design to ensure the academic rigor of the online course is comparable to the traditionally offered course. The University Academic Deans, chairs, and faculty review curriculum annually. Courses are reviewed at the end of each term of course delivery. This process applies to online and traditional classes. In addition, advisory boards are engaged in the monitoring of course quality to ensure quality standards are met regardless of the delivery platform.

5. **The institution evaluates the effectiveness of its online learning offerings, including the extent to which the online learning goals are achieved, and uses the results of its evaluations to enhance the attainment of the goals.**

   Online programs/courses meet the same accreditation standards, goals, objectives, and outcomes as traditional classroom delivery. The University selects the learning platforms to ensure the high standards of the technical elements of each course. The Academic Deans monitor any course conversion from in-class to online to ensure the online course

is academically equivalent to the traditionally offered course and that the technology is appropriate to support the expected rigor and breadth of the course.

6. **Faculty responsible for delivering the online learning curricula and evaluating the students' success in achieving the online learning goals are appropriately qualified and effectively supported.**

   The Department of Business and Aviation, where this degree will be sponsored, is staffed by a qualified University Department Chair, Prof. Joseph Hendron. Other appropriately credentialed faculty with multi-disciplinary level skills will also be part of the delivery process.

   The evaluation of the courses in the program will be done using the same processes as all other programs at the University. (Please see Section M.) All Capitol Technology University faculty teach in the traditional classroom environment and online. (Please see faculty qualifications in Section I of this document.)

7. **The institution provides effective student and academic services to support students enrolled in online learning offerings.**

   Students can receive assistance in using online learning technology via several avenues. Student aides are available to meet with students and provide tutoring support in both subject matter and use of the technology. Tutors are available in live real-time sessions using Zoom or other agreed-upon tools. Pre-recorded online tutorials are also available.

   In addition to faculty support, on-ground and online tutoring services are available to students in a one-on-one environment.

   Laboratories (on-campus and virtual) are available for use by all students. Faculty and highly-qualified tutors staff the laboratories and provide academic support.

   Library services and resources are appropriate and adequate. Please refer to Section J of this document and the attached letter from the University President. The library adequately supports the students learning needs.

8. **The institution provides sufficient resources to support and, if appropriate, expand its online learning offerings.**

   The University has made the financial commitment to the program (please refer to Section L). The University has a proven record of accomplishment in supporting degree completion.

9. **The institution assures the integrity of its online offerings.**

   Current faculty serve on internal advisory boards that examine possible program changes, including course and program development. All faculty are selected on domain expertise and program-related teaching experience.

   When new faculty or outside consults are necessary for the design of courses offered, the University's Human Resource Department initiates a rigorous search and screening

process to identify appropriate faculty to design and teach online courses. Again, all faculty are selected on domain expertise and program-related teaching experience

The University's online platforms offer several avenues to support instructors engaged in online learning. The Director of Online Learning is highly skilled and trained in faculty development. Several seminars and online tutorials are available to the faculty every year. Mentors are assigned to new faculty. Best practice sharing is facilitated through the Academic Deans, Department Chairs, and formal meetings.

The assessment for online learning classes/students is the same as for all academic programs at the University. Faculty provide required data on student achievement. The Learning Management System includes data on student achievement. Proof of these assessments is available during the class and following class completion to the Academic Deans and Department Chairs. On an annual basis, the information is reported to the University's accreditation authorities such as MSCHE and NSA/DHS.