

**Wayne Community College
Program Review – 2021-2022**

Name of Program: Game and Automation Programming

Section 1: Program Overview

Mission/Purpose: *As part of the review cycle, programs are asked to formally evaluate their mission/purpose statement.*

Please provide your current mission/purpose statement.

The mission of the Information Systems Technology Department is to provide graduates the skills for employment in diverse computer technology environments.

Provide narrative for the analysis of the mission/purpose statement. *(Are you planning to revise your mission/purpose statement? If so, please provide your revised mission/purpose statement and reason for the change.)*

No changes

Describe how the program’s mission aligns with the College’s vision, mission, core values, and strategic goals. Identify which Institutional Goal(s) best align with your program and explain why.

- Goal 1: Increase Student Access**
- Goal 2: Ensure Program Excellence**
- Goal 3: Improve Student Success**
- Goal 4: Ensure Institutional Quality**

The program’s mission directly correlates to the College’s vision, mission, core values, and strategic goals. The core values are directly woven into the curriculum and taught to students and modeled to them from the moment they enter the program. “Student access” is increased by making courses online or during times and days that increase accessibility. Faculty take great measures to ensure textbooks and other learning materials are free or low cost. Instructors “ensure program excellence” by examining rigor, relevance, and quality each semester in all of their courses. This is intensified by the feedback from the advisory committee to ensure the content is up-to-date, competitive, and relevant to the world of work--there is a continuous effort to “improve student success”. All program faculty are keenly aware that remote learning still provides the global community many options for learning; hence, each faculty member makes great strides to ensure WCC is the preferred choice for quality education and training.

Associates, Diplomas, Certificates, and Pathways Offered: Please list all associates, diplomas, certificates, and pathways offered in the table below.

Program Type (Associate, Diploma, Certificate, or Pathway)	Program Title
Associate	Game and Automation Programming A25450P
Diploma	Game and Automation Programming D25450P
Certificate	Mobile Game Development C25450MG
Certificate	Production for Simulation and Game Development C25450PN
Certificate	Simulation and Game Development C25450
Certificate	Programming for Simulation and Game Development C25450PG
Certificate	Level Design for Simulation and Game Development C25450L

Activities to ensure program is current (2019-20; 2020-21; 2021-22 – Academic Year, Fall, Spring, Summer)

List program curriculum changes, revisions, and/or deletions.

Curriculum Changes	Date – Updated / Revised / Deleted
SGD Degree Split	2021; Simulation and Game Development Degree (A25450) split into Game and Automation Programming Degree (D25450P) and Game Art and Animation Degree (A25450A)
SGD 164	2021; deleted course from Game and Automation Programming Degree (A25450P)
SGD 134	2021; deleted course from Game and Automation Programming Degree (A25450P)
CSC 134	2021; added course to Game and Automation Programming Degree (A25450P)
CSC 121	2021; added course to Game and Automation Programming Degree (A25450P)
CSC 221	2021; added course to Game and Automation Programming Degree (A25450P)
SGD 125	2021; added course to Game and Automation Programming Degree (A25450P)
CSC 151	2021; added course to Game and Automation Programming Degree (A25450P)
Quality Assurance for Simulation and Game Development (C25450Q)	2021; deleted certificate

Provide an overview of the significance of the program changes and improvements that occurred over the past three years. (What were the program's / discipline's goals and rationale for expanding and improving student learning, including new courses, program degrees, certificates, diplomas, and/or delivery methods?)

The Simulation and Game Development degree program is now split into two different programs to meet the needs of students wishing to specialize in either the art side of game development or the programming side. By creating the new Game Art and Animation (A25450A) degree, students are able to take additional art-based simulation and game development courses. The Game Programming and Automation (A25450P) degree provides

additional programming courses for students wishing to specialize as a game programmer or working in the field of automation programming. Existing courses were added to the Simulation and Game Development degree and some courses were removed to add additional courses teaching Unity 3D and to remove courses focused solely on subjects such as Mobile App Development and Virtual Reality. With advancements in game engines and technology, those topics no longer required their own courses as exporting to a mobile app became possible within multiple game engines rather than the need to make programs specifically for mobile app devices and VR hardware became more mainstream and affordable that game engines now also provided means to create apps for VR and AR development. When the original Simulation and Game Development degree split into two different degrees it was necessary to remove some courses and add existing courses to these programs to specialize them. Game Art courses were added to the Game Art and Automation Degree (A25450A) and Programming courses were removed from it. The opposite occurred for the Game Programming and Automation Degree (A25450P).

Advisory Committee: dates, summary of minutes, activities (2019-20; 2020-21; 2021-22 – Academic Year – Fall, Spring, Summer)

Summary of Advisory Committee Activities

Year	Meeting Dates	Recommendations / Activities
2019-2020	Oct 29, 2019; Spring 2020 cancelled because of the pandemic.	The fall meeting covered recommended hard skills for courses related to service desk, tech support, system admin, cybersecurity, storage, and virtualization. During the webinar, there was discussion about the need for updated motion capture technology. Refer to meeting minutes on file for more details.
2020-2021	No Advisory Meetings held due to COVID restrictions	
2021-2022	Nov 10, 2022	The newly revised program review form was explained. The group discussed the outcomes (enrollment, retention, and completion) and the new data that shows disaggregated student data. The group talked about incorporating other types of program assessment including licensure and certification. The group also talked about justifying the need for additional resources, to include personnel, equipment, and facilities.

(Ensure that Advisory Committee Meeting Minutes are filed in the IE Shared Program Folder.)

Provide narrative for analysis of trends in the field or industry (emerging needs) that contribute to maintaining program relevance. *(Based on advisory committee suggestions, environmental scans, industry demands, and other sources external to the program/discipline, how well is the program/discipline responding to the current and emerging needs of the industry and/or community? What resources might your program need?)*

Input from advisory members covers a broad range of technologies, hard skills and soft skills. All of these recommendations are directly mapped to current industry trends and expectations. Campus policies, leadership, and funding have allowed the program maximum flexibility to adapt to rapid changes within the industry. Planning objectives are based upon advisory input. As a result, the program learning environment stays aligned with preparing students for workforce needs. The spring advisory committee meeting is a joint meeting with other departments in the division that is held annually. Students are invited to the spring meeting so that they have the opportunity to connect with employers (advisory members) for potential job placement. The program also stands to acquire another experienced full-time Instructor to be able to handle all of the different software and technology that is taught across the Game Art and Animation Degree (A25450A) as well as the Game Automation and Programming Degree (A25450P).

Section 2: Program Outcomes**Outcome #1: Enrollment (unduplicated)****Baseline:** 63 # (Average of total enrollment for the last three years – 2018-19; 2019-20; 2020-21)**Standard:** 65 #**Target:** 70 #**Program Enrollment**

Program Enrollment (unduplicated)	
Academic Year (Fall, Spring, Summer)	Enrollment
2018-2019	75
2019-2020	64
2020-2021	51

Enrollment by Ethnicity, Gender, and Age

Ethnicity & Gender	2018-2019		2019-2020		2020-2021	
	N	%	N	%	N	%
African American, Female	4	5.3%	3	4.7%	2	3.9%
American Indian/Alaskan Native, Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female	4	5.3%	7	10.9%	5	9.8%
Hawaiian/Other Pacific Islander, Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	2	2.7%	2	3.1%	1	2.0%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	0	0.0%	0	0.0%	1	2.0%
Female Total	10	13.3%	12	18.8%	9	17.6%
African American, Male	16	21.3%	11	17.2%	10	19.6%
American Indian/Alaskan Native, Male	0	0.0%	0	0.0%	1	2.0%
Asian, Male	1	1.3%	0	0.0%	0	0.0%
Caucasian, Male	44	58.7%	35	54.7%	28	54.9%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	4	5.3%	4	6.3%	3	5.9%
Two or More Races, Male	0	0.0%	2	3.1%	0	0.0%
Unknown, Male	0	0.0%	0	0.0%	0	0.0%
Male Total	65	86.7%	52	81.3%	42	82.4%
Total	75	100.0%	64	100.0%	51	100.0%

Ethnicity & Age Range	2018-2019		2019-2020		2020-2021	
	N	%	N	%	N	%
African American, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Asian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Caucasian, Under the age of 18	0	0.0%	1	1.6%	0	0.0%
Hawaiian/Other Pacific Islander, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Unknown, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Under the age of 18 Total	0	0.0%	1	1.6%	0	0.0%
African American, 18-24	16	21.3%	13	20.3%	10	19.6%
American Indian/Alaskan Native, 18-24	0	0.0%	0	0.0%	1	2.0%
Asian, 18-24	0	0.0%	0	0.0%	0	0.0%
Caucasian, 18-24	44	58.7%	35	54.7%	27	52.9%
Hawaiian/Other Pacific Islander, 18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	5	6.7%	5	7.8%	3	5.9%
Two or More Races, 18-24	0	0.0%	2	3.1%	0	0.0%
Unknown, 18-24	0	0.0%	0	0.0%	0	0.0%
18-24 Total	65	86.7%	55	85.9%	41	80.4%
African American, 25-44	4	5.3%	1	1.6%	2	3.9%
American Indian/Alaskan Native, 25-44	0	0.0%	0	0.0%	0	0.0%
Asian, 25-44	1	1.3%	0	0.0%	0	0.0%
Caucasian, 25-44	4	5.3%	6	9.4%	6	11.8%
Hawaiian/Other Pacific Islander, 25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	1	1.3%	1	1.6%	1	2.0%
Two or More Races, 25-44	0	0.0%	0	0.0%	0	0.0%
Unknown, 25-44	0	0.0%	0	0.0%	0	0.0%
25-44 Total	10	13.3%	8	12.5%	9	17.6%
African American, 45-64	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 45-64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	0	0.0%	0	0.0%
Caucasian, 45-64	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 45-64	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%
Unknown, 45-64	0	0.0%	0	0.0%	1	2.0%
45-64 Total	0	0.0%	0	0.0%	1	2.0%
African American, 65+	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 65+	0	0.0%	0	0.0%	0	0.0%
Asian, 65+	0	0.0%	0	0.0%	0	0.0%
Caucasian, 65+	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 65+	0	0.0%	0	0.0%	0	0.0%
Unknown, 65+	0	0.0%	0	0.0%	0	0.0%
65+ Total	0	0.0%	0	0.0%	0	0.0%
Total	75	100.0%	64	100.0%	51	100.0%

Provide narrative for analysis of program enrollment. *(Is enrollment increasing or decreasing? What are possible reasons for increase/decrease? Describe any action plans to improve or increase program enrollment.)*

In the years since 2019 we have seen an overall decrease in students of all ethnicities, race, gender, and age backgrounds. Covid-19 hit us in Spring 2020 which caused the shutdown of in person classes for a prolonged period of time. We are still recuperating from this mass quarantine. We have also during this period (2021) split the previous Simulation and Game Development Degree (A25450) in two, meaning the numbers once shared across one degree is now allotted differently. The Game and Automation Programming Degree (A25450P) will remain small while numbers stabilize. To improve numbers in the Game and Automation Degree (A25450P) we plan to bring most if not all classes that were previously offered in person. This has already started to happen as we make the shift from Online/Hyflex courses to strictly in person.

Identify Enrollment Action Items

Item	Action Items <i>(What actions can be taken to increase enrollment in your program?)</i>	Assessment of Action Items <i>(How will you assess the results of action items?)</i>
1	Advertise the Degree	Enrollment will increase as the degree is advertised more with flyers, word of mouth, and partnerships.
2	Offer more classes in person	Enrollment numbers will increase as more students are drawn back to the classroom.

Outcome #2: Retention**Baseline:** 66.6 % (Average of last three years – 2018-19; 2019-20; 2020-21; program retention)**Standard:** 70 %**Target:** 75 %

Year	Program Retention Rate
2018-2019	70.0%
2019-2020	71.2%
2020-2021	58.7%

Retention by Ethnicity, Gender, and Age

Ethnicity & Gender	Fall 2018 to Fall 2019		Fall 2019 to Fall 2020		Fall 2020 to Fall 2021	
	N	%	N	%	N	%
African American, Female	2	4.8%	2	5.4%	0	0.0%
American Indian/Alaskan Native, Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female	2	4.8%	5	13.5%	3	11.1%
Hawaiian/Other Pacific Islander, Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	1	2.4%	2	5.4%	1	3.7%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	5	11.9%	9	24.3%	4	14.8%
African American, Male	7	16.7%	5	13.5%	4	14.8%
American Indian/Alaskan Native, Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	1	2.4%	0	0.0%	0	0.0%
Caucasian, Male	26	61.9%	21	56.8%	17	63.0%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	3	7.1%	2	5.4%	2	7.4%
Two or More Races, Male	0	0.0%	0	0.0%	0	0.0%
Unknown, Male	0	0.0%	0	0.0%	0	0.0%
Male Total	37	88.1%	28	75.7%	23	85.2%
Total	42	100.0%	37	100.0%	27	100.0%

Ethnicity & Age Range	Fall 2018 to Fall 2019		Fall 2019 to Fall 2020		Fall 2020 to Fall 2021	
	N	%	N	%	N	%
African American, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Asian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Caucasian, Under the age of 18	0	0.0%	1	2.7%	0	0.0%
Hawaiian/Other Pacific Islander, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Unknown, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Under the age of 18 Total	0	0.0%	1	2.7%	0	0.0%
African American, 18-24	6	14.3%	7	18.9%	3	11.1%
American Indian/Alaskan Native, 18-24	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	0	0.0%	0	0.0%	0	0.0%
Caucasian, 18-24	26	61.9%	22	59.5%	16	59.3%
Hawaiian/Other Pacific Islander, 18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	4	9.5%	3	8.1%	2	7.4%
Two or More Races, 18-24	0	0.0%	0	0.0%	0	0.0%
Unknown, 18-24	0	0.0%	0	0.0%	0	0.0%
18-24 Total	36	85.7%	32	86.5%	21	77.8%
African American, 25-44	3	7.1%	0	0.0%	1	3.7%
American Indian/Alaskan Native, 25-44	0	0.0%	0	0.0%	0	0.0%
Asian, 25-44	1	2.4%	0	0.0%	0	0.0%
Caucasian, 25-44	2	4.8%	3	8.1%	4	14.8%
Hawaiian/Other Pacific Islander, 25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	0	0.0%	1	2.7%	1	3.7%
Two or More Races, 25-44	0	0.0%	0	0.0%	0	0.0%
Unknown, 25-44	0	0.0%	0	0.0%	0	0.0%
25-44 Total	6	14.3%	4	10.8%	6	22.2%
African American, 45-64	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 45-64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	0	0.0%	0	0.0%
Caucasian, 45-64	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 45-64	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%
Unknown, 45-64	0	0.0%	0	0.0%	0	0.0%
45-64 Total	0	0.0%	0	0.0%	0	0.0%
African American, 65+	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 65+	0	0.0%	0	0.0%	0	0.0%
Asian, 65+	0	0.0%	0	0.0%	0	0.0%
Caucasian, 65+	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 65+	0	0.0%	0	0.0%	0	0.0%
Unknown, 65+	0	0.0%	0	0.0%	0	0.0%
65+ Total	0	0.0%	0	0.0%	0	0.0%
Total	42	100.0%	37	100.0%	27	100.0%

Provide narrative for analysis of program retention data. *(Based on the data, provide a narrative of your analysis of retention. Indicate factors that may have affected your retention. State any changes you plan to make to improve retention.)*

Retention has decreased on average by 8 students per year. Covid-19 hit us in Spring 2020 which caused the shutdown of in person classes for a prolonged period of time. Students left the degree to wait for classes to return to fully in person. We have also during this period (2021) split the previous Simulation and Game Development Degree (A25450) in two, meaning the numbers once shared across one degree is now allotted differently. The Game and Automation Programming Degree (A25450P) will remain small while numbers stabilize. To improve numbers in the Game and Automation Programming Degree (A25450P) we plan to bring most if not all classes that were previously offered in person. This has already started to happen as we make the shift from Online/Hyflex courses to strictly in person. Students obtain more personable help this way and gain familiarity not only with WCC as an institution but with its Staff and Instructors. A community setting is also helpful in building connections with other students who in turn can provide a safety net when problems arise.

Identify Retention Action Items

Item	Action Items <i>(What actions can be taken to increase program retention?)</i>	Assessment of Action Items <i>(How will you assess the results of action items?)</i>
1	Offer more classes in person	Retention numbers will increase as more students are drawn back to the classroom.

Outcome #3: Completers (unduplicated) (Degree level, highest level of attainment)**Baseline:** 22 # (Average of total completers for the last three years – 2019-20; 2020-21; 2021-22)**Standard:** 23 #**Target:** 24 #

Number of Completers (unduplicated) – Graduation Year – Summer, Fall, Spring	
Graduation Year	Total Completers
2019-2020	32
2020-2021	25
2021-2022	10

Completers by Ethnicity, Gender, and Age

Ethnicity & Gender	2019-2020		2020-2021		2021-2022	
	N	%	N	%	N	%
African American, Female	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female	4	12.5%	4	16.0%	1	10.0%
Hawaiian/Other Pacific Islander, Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	1	3.1%	0	0.0%	0	0.0%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	5	15.6%	4	16.0%	1	10.0%
African American, Male	6	18.8%	2	8.0%	1	10.0%
American Indian/Alaskan Native, Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	0	0.0%	0	0.0%	1	10.0%
Caucasian, Male	19	59.4%	19	76.0%	5	50.0%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	2	6.3%	0	0.0%	2	20.0%
Two or More Races, Male	0	0.0%	0	0.0%	0	0.0%
Unknown, Male	0	0.0%	0	0.0%	0	0.0%
Male Total	27	84.4%	21	84.0%	9	90.0%
Total	32	100.0%	25	100.0%	10	100.0%

Ethnicity & Age Range Table	2019-2020		2020-2021		2021-2022	
	N	%	N	%	N	%
African American, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Asian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Caucasian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Unknown, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Under the age of 18 Total	0	0.0%	0	0.0%	0	0.0%
African American, 18-24	6	18.8%	1	4.0%	1	10.0%
American Indian/Alaskan Native, 18-24	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	0	0.0%	0	0.0%	1	10.0%
Caucasian, 18-24	20	62.5%	18	72.0%	5	50.0%
Hawaiian/Other Pacific Islander, 18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	3	9.4%	0	0.0%	2	20.0%
Two or More Races, 18-24	0	0.0%	0	0.0%	0	0.0%
Unknown, 18-24	0	0.0%	0	0.0%	0	0.0%
18-24 Total	29	90.6%	19	76.0%	9	90.0%
African American, 25-44	0	0.0%	1	4.0%	0	0.0%
American Indian/Alaskan Native, 25-44	0	0.0%	0	0.0%	0	0.0%
Asian, 25-44	0	0.0%	0	0.0%	0	0.0%
Caucasian, 25-44	3	9.4%	5	20.0%	1	10.0%
Hawaiian/Other Pacific Islander, 25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 25-44	0	0.0%	0	0.0%	0	0.0%
Unknown, 25-44	0	0.0%	0	0.0%	0	0.0%
25-44 Total	3	9.4%	6	24.0%	1	10.0%
African American, 45-64	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 45-64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	0	0.0%	0	0.0%
Caucasian, 45-64	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 45-64	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%
Unknown, 45-64	0	0.0%	0	0.0%	0	0.0%
45-64 Total	0	0.0%	0	0.0%	0	0.0%
African American, 65+	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 65+	0	0.0%	0	0.0%	0	0.0%
Asian, 65+	0	0.0%	0	0.0%	0	0.0%
Caucasian, 65+	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 65+	0	0.0%	0	0.0%	0	0.0%
Unknown, 65+	0	0.0%	0	0.0%	0	0.0%
65+ Total	0	0.0%	0	0.0%	0	0.0%
Total	32	100.0%	25	100.0%	10	100.0%

Provide narrative for analysis of completers. *(Based on the data, provide a narrative of your analysis of completions. Indicate factors that may have affected your completions. How might you increase the number of completers in your program?)*

Based on the data over time females of all ethnicity and race backgrounds have decreased significantly. Covid-19 caused courses to go strictly online for a prolonged period of time. This impacted multiple students track for completion within the degree as they did not want to continue in the program until in person classes were again provided. Online classes are also not the teaching method of Game and Automation Programming (A25450P) and the information does not translate well in most classes online. In-person yields the highest results for successful completers.

Identify Completer Action Items

Item	Action Items <i>(What actions can be taken to increase student completion in your program?)</i>	Assessment of Action Items <i>(How will you assess the results of action items?)</i>
1	Reach out to former Students	A large chunk of students in the program left to wait until classes were offered again in person. Reaching out to restart them on their path to graduation will increase completers numbers.
2	Offer more classes in person	Completer numbers will increase as more students are drawn back to the classroom.

Section 3: Other Assessments

Do you use other methods of assessment to evaluate the effectiveness of your program, to include surveys, self-assessments, student licensure/certification, or third-party credentials?. If so, please explain how information collected from the(se) assessments can be used to improve the program.)

Not Applicable

Planning Objectives (2019-20; 2020-21; 2021-22 – Fiscal Year, July 1-June 30)

Provide a summary of planning objectives submitted for the last three years, including the use of results of the planning objectives in the table provided.

Summary of Planning Objectives

Planning Year (Fiscal Year – July 1-June 30)	Objective(s) Submitted	Use of Results
2019-20	<ol style="list-style-type: none"> 1) Information Systems Technology – Motion Capture Suit 2) Information Systems Technology – (9) SGD computers, with hardware that has the potential to support SGD activities 3) Information Systems Technology - (2) Laptops and (2) USB cameras 	<ol style="list-style-type: none"> 1) <u>2019-20 End-of-Year Status Report</u>: Awaiting receipt. Unable to assess objective due to COVID campus shut-down, stay-at-home orders. Carry forward to the 2020-21 Plan to report assessment. <u>2020-21 End-of-Year Status Report and Use of Results</u>: Because of COVID-19 protocols, the devices will not be used until conditions change. The devices will likely be put into service during Spring 2022 at the latest. Carry forward to 2021-22 Plan to report assessment. 2) <u>2019-20 End-of-Year Status Report</u>: Awaiting receipt. Unable to assess objective due to COVID campus shut-down, stay-at-home orders. Carry forward to the 2020-21 Plan to report assessment. <u>2020-21 End-of-Year Status Report and Use of Results</u>: Because of COVID-19 protocols, the devices will not be used until conditions change. The devices will likely be put into service during Spring 2022 at the latest. Carry forward to 2021-22 Plan to report assessment. 3) <u>2018-19 Status Report</u>: The laptops were received at the end of the Fall 2018 semester, just prior to the holiday break. They have not been configured by Red Hat; those tasks have to be completed before the laptops can be used for exam administration. The laptops required configurations from Red Hat. However, after months negotiating configuration start dates with Red Hat, the company informed Glenn the laptops received were not of the correct specs. This was Dell's error. The correct laptops were requested in

		late April 2019 and received in April 2019. However, they have not been configured by Dell. Carry forward to the 2019-20 Plan/Budget to report assessment of the objective. <u>2019-20 Status Report</u> : Submitted for purchase by Purchasing Director. Awaiting receipt. Unable to assess objective due to COVID campus shut-down, stay-at-home orders. Carry forward to the 2020-21 Plan to report assessment. <u>2020-21 Status Report</u> : Because of COVID-19 protocols, the devices will not be used until conditions change. The devices will likely be put into service during Spring 2022 at the latest. <u>2020-21 Use of Results / Assessment</u> : Carry forward to the 2021-22 Plan to report assessment.
2020-21	Information Systems Technology – Game Art and Animation, Game and Automation Programming – HoloLens Device Units	<u>2020-21 End-of-Year Status Report</u> : The devices were received about two weeks before the end of the fall semester. However, because of COVID-19 protocols, the devices will not be used until conditions change. The devices will likely be put into service during Spring 2022. Carry forward to 2021-22 Plan to report assessment. <u>2021-22 Use of Results / Assessment</u> : Because of COVID-19 and transitioning SGD instructors, the technology will not be implemented until the 2022-23 academic year.
2021-22	Information Systems Technology – Cybersecurity – 15 Cyberbit cyber range licenses	Because of the delayed arrival of the licenses associated with the delayed state budget, the technology was not implemented during Spring 2022 as planned. The technology will be used during the 2022-23 academic year. Carry forward to 2022-23 Plan to report assessment.

What planning objectives (equipment, supplies, software, etc.) do you anticipate needing over the next three years? Justify the need.

SGD 116 Graphic Design Tools needs a new update with Photoshop. We have been using CS6 and it is obsolete enough that students who run the newer software are not able to understand directions, find tools, or complete assignments.

What positions (faculty and/or staff) do you anticipate needing over the next three years? Justify the need.

Another full-time position is anticipated to cover both the Game and Automation Programming (A25450P) and Game Art and Animation (A2545A) Degrees. One full-time Instructor is not enough to Advise all students, teach all current and different topics for two degrees, and keep everything up to date in the program(s). Once students start regularly returning to Game and Automation Programming (A25450P) over the course of three years, more in-person help will be needed that extends past Adjuncts.

Provide narrative for your program facility needs over the next three years. If facilities are adequate, please confirm.

Another room equipped to teach Game and Automation Programming (A2545P) in. We only teach out of one room (Spruce 206) for both degrees due to the computers and software we use. This has led to scheduling issues and extremely late classes for students in the past. This also conflicts with our need to bring as many courses back in person as possible. With limited space, we can only schedule a certain number of classes a day per week while those deemed less computer heavy remain online. An extra classroom would alleviate the stress of the schedule and offer a chance for students to have more options for courses.

Provide narrative for academic / student support services needs over the next three years. (Are services adequate for your program/service?)

Services are adequate for our program.

Provide narrative for analysis of the program's / discipline's strengths, weaknesses, and opportunities.

- On-campus labs provide students opportunity to work with 3D modeling software.
- Articulation agreement with North Carolina Wesleyan College that provides 4-year degree completion.
- Relationships with local and metro area employers provide internships and employment opportunities to students.
- Administration advocates new ideas and progressive learning methods that enhance student success in the classroom and the workforce.
- Administration strives to secure funding required to keep technology current.
- Division has an environment that promotes decisions to be made at the lowest possible level and encourages faculty to "think big"; faculty have flexibility to quickly implement technologies and curricula to stay current with workforce needs.
- Faculty routinely evaluate course content and technology to ensure they prepare students for current workforce skill requirements.
- Industry-technology professional development opportunities are available to faculty.
- Courses continue to be redesigned to keep up with the latest industry demand and trends.
- Classes are located in a modern facility.
- Space limitations will be a challenge as emerging technologies arise; however, there are projected expansion opportunities as classrooms are projected to be repurposed after entities are relocated.

Review prepared and submitted by: *(Please list name(s) and titles)*

Cheyenne Prybylinski – Simulation and Game Development Instructor

Approvals

1. Using DocuSign (electronic signature), the Office of Institutional Effectiveness (IE) will review and approve the Program/Service Review when completed by the responsible program/service personnel.
2. Using DocuSign (electronic signature), appropriate Division Dean, Director, or AVP is asked to read and approve the Review.
3. Using DocuSign (electronic signature), appropriate Vice President/Associate Vice President is asked to read and approve the Review.

IE Acceptance / Date: Dorothy Moore 11/18/2022

Dean, Director, or AVP / Date: Tracy M. Schmeltzer 11/28/2022

Administrator Approval / Date: Dr. Brandon M. Jenkins 1/13/2023