

**Program Outcomes Assessment Follow-Up
2022-2023 Program Outcome (PO) Year End Reporting Form**

In response to SACSCOC 8.2, *“The institution identifies expected outcomes, assesses the extent to which it achieves these outcomes, and provides evidence of seeking improvement based on analysis of the results ...”*

Name of Program: Software Development

Outcome #1: Enrollment (unduplicated)

Action Items from Program Review:

Item #	Action Items: (Action item identified in the 2021-22 program review.)	Results / Use of Results: (Provide results of the action item identified. Was the action item successful? If not, did you want to continue this action item going forward? If so, please include this action item in the 2023-2025 action items table below.)
1	Focused recruiting efforts targeting females and minorities. (Assessed by: Coordinate internal recruiting efforts through social media, marketing materials and recruitment opportunities.)	While this action item is still in progress, there is an upward trend in increased female enrollment within the program.

Baseline: 54 # (Average of total enrollment for the last three years – 2018-19; 2019-20; 2020-21)
Standard: 56 #
Target: 58 #

Program Enrollment

Program Enrollment (unduplicated)	
Academic Year (Fall, Spring, Summer)	Enrollment
2019-2020	44
2020-2021	46
2021-2022	49

All Levels

Enrollment by Ethnicity, Gender, and Age

Ethnicity & Gender	2019-2020		2020-2021		2021-2022	
	N	%	N	%	N	%
African American, Female	3	6.8%	2	4.3%	2	4.1%
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	3	6.8%	4	8.7%	4	8.2%
Hawaiian/Other Pacific Islander, Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	3	6.8%	3	6.5%	5	10.2%
Two or More Races, Female	0	0.0%	2	4.3%	2	4.1%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	9	20.5%	11	23.9%	13	26.5%
African American, Male	7	15.9%	10	21.7%	13	26.5%
American Indian/Alaskan Native, Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	1	2.3%	2	4.3%	1	2.0%
Caucasian, Male	20	45.5%	15	32.6%	12	24.5%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	5	11.4%	5	10.9%	8	16.3%
Two or More Races, Male	2	4.5%	3	6.5%	2	4.1%
Unknown, Male	0	0.0%	0	0.0%	0	0.0%
Male Total	35	79.5%	35	76.1%	36	73.5%
Total	44	100.0%	46	100.0%	49	100.0%

Ethnicity & Age Range	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	3	6.8%	6	13.0%	8	16.3%
American Indian/Alaskan Native, 18-24	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	1	2.3%	1	2.2%	0	0.0%
Caucasian, 18-24	17	38.6%	14	30.4%	9	18.4%
Hawaiian/Other Pacific Islander, 18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	7	15.9%	6	13.0%	11	22.4%
Two or More Races, 18-24	1	2.3%	3	6.5%	2	4.1%
Unknown, 18-24	0	0.0%	0	0.0%	0	0.0%
18-24 Total	29	65.9%	30	65.2%	30	61.2%
African American, 25-44	6	13.6%	4	8.7%	6	12.2%
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	5	11.4%	5	10.9%	7	14.3%
Hawaiian/Other Pacific Islander, 25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	1	2.3%	2	4.3%	1	2.0%
Two or More Races, 25-44	1	2.3%	2	4.3%	2	4.1%
Unknown, 25-44	0	0.0%	0	0.0%	0	0.0%
25-44 Total	13	29.5%	13	28.3%	16	32.7%
African American, 45-64	1	2.3%	2	4.3%	1	2.0%
American Indian/Alaskan Native, 45-64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	1	2.2%	1	2.0%
Caucasian, 45-64	1	2.3%	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%	1	2.0%
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	2	4.5%	3	6.5%	3	6.1%
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	44	100.0%	46	100.0%	49	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.)*

Recruiting efforts and personalized service to current students led to steady enrollment. The Software Development program's enrollment remained stable in spite of the Covid-19 pandemic outbreak. Although opportunities for in-person recruiting events were ceased due to gathering restrictions enforced by the state of NC, efforts to increase/maintain enrollment included an intentional focus on current and new students with phone calls, virtual office meetings, emails, and registration assistance.

2023-2025 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	Work with the Marketing department and WCC Recruiter on campus to target females to the field	Assessed by: If the campaign is successful, there will be an increase in female enrollment in the next cycle. The faculty can also focus on reaching out directly to females who have applied for enrollment in the Software Development program to ensure they continue the admissions process and are registered.

Outcome #2: Retention**Action Items from Program Review:**

Item #	Action Items: <i>(Action item identified in the 2021-22 program review.)</i>	Results / Use of Results: <i>(Provide results of the action item identified. Was the action item successful? If not, did you want to continue this action item going forward? If so, please include this action item in the 2023-2025 action items table below.)</i>
1	Inform students of the next credential eligibility to reinforce retention. (Assessed by: Faculty will create an advising sheet which will notify students of their earned credentials (certificates, diploma, or degree) each semester to motivate and encourage students to stay enrolled.)	This action item is still in progress. We will carry forward this action item in the 2023-2025 reporting.

Baseline: 42.2 % *(Average of last three years – 2018-19; 2019-20; 2020-21; program retention)*

Standard: 44 %

Target: 45 %

Fall to Fall	Retention Rate
Fall 2019 to Fall 2020	44.1%
Fall 2020 to Fall 2021	54.8%
Fall 2021 to Fall 2022	53.0%

All Levels

Retention by Ethnicity, Gender, and Age

Ethnicity & Gender	Fall 2019 to Fall 2020		Fall 2020 to Fall 2021		Fall 2021 to Fall 2022	
	N	%	N	%	N	%
African American, Female	1	6.7%	1	5.9%	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	1	6.7%	2	11.8%	2	11.1%
Hawaiian/Other Pacific Islander, Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	1	6.7%	2	11.8%	0	0.0%
Two or More Races, Female	0	0.0%	0	0.0%	3	16.7%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	3	20.0%	5	29.4%	5	27.8%
African American, Male	2	13.3%	3	17.6%	6	33.3%
American Indian/Alaskan Native, Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	1	6.7%	1	5.9%	0	0.0%
Caucasian, Male	8	53.3%	6	35.3%	4	22.2%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	1	6.7%	1	5.9%	2	11.1%
Two or More Races, Male	0	0.0%	1	5.9%	1	5.6%
Unknown, Male	0	0.0%	0	0.0%	0	0.0%
Male Total	12	80.0%	12	70.6%	13	72.2%
Total	15	100.0%	17	100.0%	18	100.0%

Ethnicity & Age Range	Fall 2019 to Fall 2020		Fall 2020 to Fall 2021		Fall 2021 to Fall 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	1	6.7%	3	17.6%	4	22.2%
American Indian/Alaskan Native, 18-24	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	1	6.7%	1	5.9%	0	0.0%
Caucasian, 18-24	6	40.0%	6	35.3%	3	16.7%
Hawaiian/Other Pacific Islander, 18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	2	13.3%	2	11.8%	5	27.8%
Two or More Races, 18-24	0	0.0%	1	5.9%	0	0.0%
Unknown, 18-24	0	0.0%	0	0.0%	0	0.0%
18-24 Total	10	66.7%	13	76.5%	12	66.7%
African American, 25-44	1	6.7%	1	5.9%	2	11.1%
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	20.0%	2	11.8%	3	16.7%
Hawaiian/Other Pacific Islander, 25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	0	0.0%	1	5.9%	0	0.0%
Two or More Races, 25-44	0	0.0%	0	0.0%	1	5.6%
Unknown, 25-44	0	0.0%	0	0.0%	0	0.0%
25-44 Total	4	26.7%	4	23.5%	6	33.3%
African American, 45-64	1	6.7%	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	1	6.7%	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	15	100.0%	17	100.0%	18	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.)*

The Software Development program saw an increase in retention post-pandemic. The program offers multiple delivery modalities (hybrid, evening, online) to meet student needs. Faculty continue to strive for increased retention through multiple means such as early alerts, referral to the academic skills center and increased advising efforts.

2023-2025 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	Inform students of the next credential eligibility to reinforce retention.	Assessed by: Faculty will create an advising sheet which will notify students of their earned credentials (certificates, diploma, or degree) each semester to motivate and encourage students to stay enrolled.

Outcome #3: Completers (unduplicated by highest level of attainment)**Action Items from Program Review:**

Item #	Action Items: (Action item identified in the 2021-22 program review.)	Results / Use of Results: (Provide results of the action item identified. Was the action item successful? If not, did you want to continue this action item going forward? If so, please include this action item in the 2023-2025 action items table below.)
1	Continue providing excellent customer service to retain and recruit students (Assessed by: Fall and Spring graduate data)	The Software Development program experienced a 45.45 % increase in the number of completers in the 2021-2022 Graduation Year from the previous 2020-2021 Graduation year. While the number of completers in the 2022-2023 Graduation Year declined from 16 to 14, it was still up 27.27% from the year 2020-2021 Graduation Year cycle.
2	Verify student performance in classes (Assessed by: Faculty will track student progress and contact students who need additional assistance)	Still in progress

Baseline: 13 # (Average of total completers for the last three years – 2019-20; 2020-21; 2021-22)

Standard: 14 #

Target: 15 #

Number of Completers (unduplicated) – Graduation Year – Summer, Fall, Spring	
Graduation Year	Total Completers
2020-2021	11
2021-2022	16
2022-2023	14

All Levels

Completers by Ethnicity, Gender, and Age

Ethnicity & Gender	2020-2021		2021-2022		2022-2023	
	N	%	N	%	N	%
African American, Female	1	9.1%	2	12.5%	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	1	9.1%	0	0.0%	2	14.3%
Hawaiian/Other Pacific Islander, Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	0	0.0%	1	6.3%	1	7.1%
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	2	18.2%	3	18.8%	3	21.4%
African American, Male	2	18.2%	6	37.5%	5	35.7%
American Indian/Alaskan Native, Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	1	9.1%	1	6.3%	0	0.0%
Caucasian, Male	6	54.5%	4	25.0%	2	14.3%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	0	0.0%	1	6.3%	3	21.4%
Two or More Races, Male	0	0.0%	1	6.3%	1	7.1%
Unknown, Male	0	0.0%	0	0.0%	0	0.0%
Male Total	9	81.8%	13	81.3%	11	78.6%
Total	11	100.0%	16	100.0%	14	100.0%

Ethnicity & Age Range Table	2020-2021		2021-2022		2022-2023	
	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	0	0.0%	3	18.8%	1	7.1%
American Indian/Alaskan Native, 18-24	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	1	9.1%	1	6.3%	0	0.0%
Caucasian, 18-24	4	36.4%	2	12.5%	2	14.3%
Hawaiian/Other Pacific Islander, 18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	0	0.0%	2	12.5%	3	21.4%
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	5	45.5%	8	50.0%	6	42.9%
African American, 25-44	0	0.0%	0	0.0%	3	21.4%
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	0	0.0%	0	0.0%	2	14.3%
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%	1	7.1%
Two or More Races, 25-44	0	0.0%	0	0.0%	1	7.1%
Unknown, 25-44	0	0.0%	0	0.0%	0	0.0%
25-44 Total	0	0.0%	0	0.0%	7	50.0%
African American, 45-64	3	27.3%	3	18.8%	1	7.1%
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	3	27.3%	4	25.0%	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%	1	6.3%	0	0.0%
Unknown, 45-64	0	0.0%	0	0.0%	0	0.0%
45-64 Total	6	54.5%	8	50.0%	1	7.1%
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	11	100.0%	16	100.0%	14	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?)*

The Software program did not take an immediate hit from COVID-19. There was a delayed effect which caused our completion rate to experience a slight decrease in 2022-2023. Other factors for non-completer students include employment-related changes, relocation, and loss of financial aid.

2023-2025 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	Implement Instructor checkpoints to verify student performance in classes	Assessed by: Faculty will continue to track and follow up on student alerts and reach out to students who are in danger of failing courses to advise on resources available.

Approvals

- Using DocuSign (electronic signature), the Office of Institutional Effectiveness (IE) will review and approve the Program/Service Outcome Assessment when completed by the responsible program/service personnel.
- Using DocuSign (electronic signature), appropriate Department Chair, Division Dean, Director, and/or AVP is asked to read and approve the Program/Service Outcome Assessment.

IE Acceptance / Date: Dorothy Moore 10/19/2023

Department Chair, Dean, Director, and/or AVP / Date: Jennifer Tyndall Tracy M. Schmeltzer
10/18/2023 10/19/2023