



Academic Program Demand Analysis

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Strategic Planning

Georgia Gwinnett College

Submitted by:

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Background and Overview



Georgia Gwinnett College (“GGC” or “College”) selected MGT to perform strategic consulting services to provide an updated two-year strategic plan as well as reports on enrollment, academic programs, and implementation services to plan for a vibrant future.

The purpose of this Academic Program Demand report is to compile and analyze the College’s current programmatic offerings, identify initial gaps in program inventory related to occupational projections and changing market conditions, and compare current offerings to demand to make recommendations to the College based on future demand. More specifically, the research MGT conducted will identify similar surpluses or deficits in higher education over the upcoming years in the region, calculate the expected program demand for main programs needed by level based on interest levels and other important indications and considerations. Data will also be used to identify opportunities and needs for new programs, as well as for the expansion or modification of current programs.

Background

Georgia Gwinnett College, founded in 2006, has grown from a small college to a metropolitan college of over 11,000 students. GGC was the first four-year college founded in Georgia in more than 100 years, and the first four-year, public college created in the U.S. in the 21st century. GGC recently earned the federal designation as a Hispanic Serving Institution. GGC’s groundbreaking, four-year college model changes how educators facilitate and support student learning. The innovative model is characterized by GGC’s integrated approach to three critical elements: attention, affordability, and access as the primary ways for serving the community.

In addition to serving Gwinnett County with 70% of students coming from the local area, GGC also admits students from Georgia, other states, and other countries. Most recently, GGC has entered into an agreement that allows the College to offer in-state tuition to students from Georgia, Florida, Alabama, Tennessee, North Carolina, and South Carolina.

Methodology

The objective of this report is to investigate trends and patterns in demand for specific academic programs. To achieve this, data was collected from Lightcast, a database that contains information on educational attainment, graduation rates, and occupation placement for various educational programs offered by colleges.¹ This data was used to perform statistical analysis and data visualization in order to present the findings in a clear and concise manner.

The data was analyzed using various statistical techniques, including trend analysis and pattern recognition. The resulting insights were then presented using data visualization, including bar graphs, line graphs, and circular bar plots. The visualizations were used to provide a clear and comprehensive overview of the findings, highlighting any significant trends and patterns in demand for particular academic programs. The data visualization and statistical analysis were also used to highlight any notable outliers or unexpected results, which were further investigated to determine their significance and impact on the overall findings.

¹*Lightcast Analyst, 2023*

Academic Program Demand Analysis

Microcredentialing Trends

According to the findings of the poll conducted by Collegis Education and UPCEA, 95% of employers value the microcredentials that their employees can earn.² Following microcredentials shows an employee's desire to advance their talents, and according to 76% of the 500 organizational leaders polled; 63% considered it a proactive endeavor; and 60% considered it to be an advantageous method for demonstrating an employee's capabilities and expertise. Furthermore, 80% of participants indicated that obtaining certificates that could be combined together to obtain a degree increased their marketability.

The lack of consistency in microcredential programs and the difficulty in determining their legitimacy, however, are two issues that the research also brings to light as concerns among organizational leaders. A little to no concern was voiced by 20% of respondents about alternative credentials, whereas 17% were concerned about obsolete qualifications and a lack of vital preparation, and 12% were apprehensive about the caliber of the education being offered. When selecting schools and universities to partner with on creating a microcredential program, two-thirds of the executives polled looked for evidence of efficiency. According to the poll, concerns about the quality of microcredential programs could be addressed through increased engagement between industry and higher education institutions.

Gwinnett County Educational Attainment

Education attainment data in Gwinnett County reveals a strong emphasis on college education and advanced degrees. A bachelor's degree is the most widely obtained level of education, constituting 24.2% of all education completions, a figure that surpasses the national average by 3.8%. Additionally, 13.2% of the population holds a graduate degree or higher. The county also has a relatively large portion of residents with an associate degree, with 9.5% of individuals holding this type of degree, which exceeds the national average by 0.7%.

² *Employers Are All in on Microcredentials, Survey Shows | inside Higher Ed, 2023*

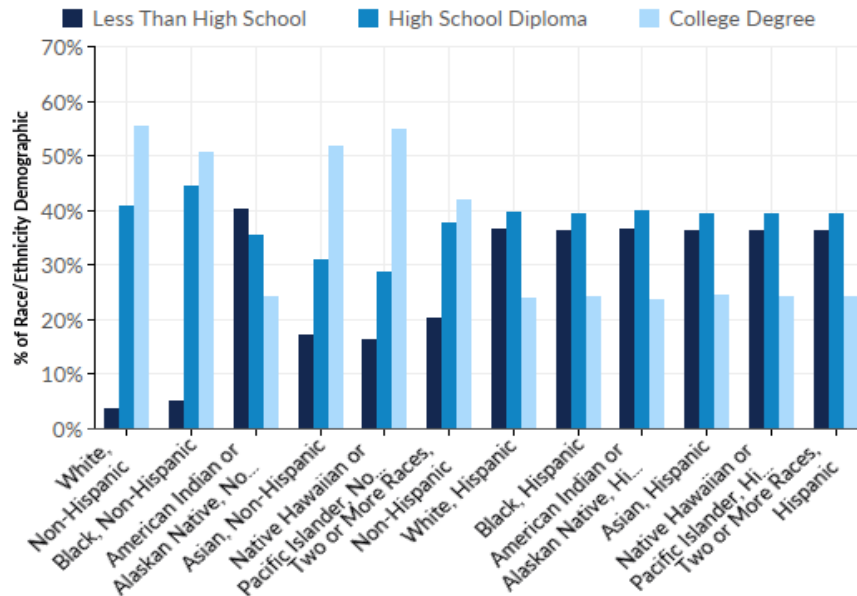
Exhibit 1. Educational Attainment in Gwinnett County.



Source: LIGHTCAST, Q4 2022 Data Set.

In Gwinnett County, the highest level of overall education attainment was observed among White Non-Hispanic individuals. This group obtained 42.3% of college degrees (Associate, Bachelor’s, and Graduate Degree and higher) in 2022. The college degree attainment rate for Black (Non-Hispanic and Hispanic) individuals was 31.4%. The Hispanic cohort obtained 9.5% of the college degrees in Gwinnett County. By 2032, the Black population is expected to be the most prevalent race accounting for 34.3% of the population. Those identifying as Hispanic are predicted to comprise 21.8% of the population. This may have an impact on increasing diversity on the GGC campus.

Exhibit 2. Educational Attainment by Race/Ethnicity in Gwinnett County.



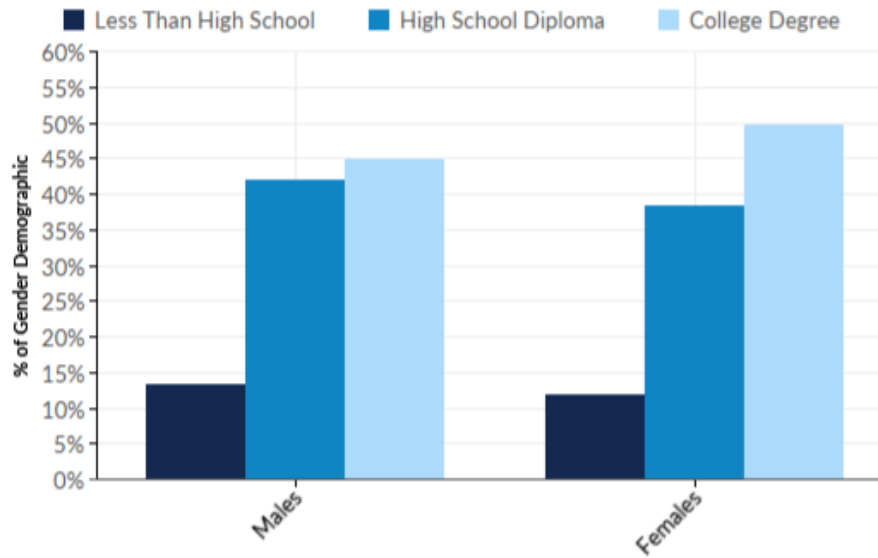
ACADEMIC PROGRAM DEMAND ANALYSIS

Race/Ethnicity	2022 Population	2032 Population	2022 Less Than High School	2022 High School Diploma	2022 College Degree
White, Non-Hispanic	227,915	182,201	8,498	93,097	126,320
Black, Non-Hispanic	180,297	227,165	9,219	79,871	91,208
American Indian or Alaskan Native, Non-Hispanic	1,032	1,123	416	367	250
Asian, Non-Hispanic	92,141	124,475	15,819	28,551	47,770
Native Hawaiian or Pacific Islander, Non-Hispanic	275	284	45	79	151
Two or More Races, Non-Hispanic	9,514	15,260	1,935	3,591	3,987
White, Hispanic	102,118	130,352	37,287	40,511	24,319
Black, Hispanic	9,638	14,296	3,504	3,803	2,331
American Indian or Alaskan Native, Hispanic	3,498	4,032	1,282	1,394	822
Asian, Hispanic	714	964	259	281	174
Native Hawaiian or Pacific Islander, Hispanic	227	398	82	89	55
Two or More Races, Hispanic	2,535	3,381	922	1,001	612
Total	629,903	703,930	79,270	252,635	297,998

Source: LIGHTCAST, Q4 2022 Data Set.

In Gwinnett County, females earned 54.6% of the college degrees awarded in 2022, 9.2% higher than males. Men earned a high school diploma or less education level at a rate of 49.6%, which was only 0.8% greater than that of women.

Exhibit 3. Educational Attainment by Gender in Gwinnett County.




Gender	2022 Population	2032 Population	2022 Less Than High School	2022 High School Diploma	2022 College Degree
Males	302,658	334,858	40,343	126,990	135,325
Females	327,245	369,072	38,927	125,645	162,673
Total	629,903	703,930	79,270	252,635	297,998

Source: LIGHTCAST, Q4 2022 Data Set.

Georgia Gwinnett College Overview

In 2021, 1,208 students graduated from Georgia Gwinnett College. This represents an increase of 7.2% over a reported 1,127 completions in 2020. In addition to increasing graduation rates, there has been an overall rise in enrollments since 2017. As of Fall 2021, all GGC programs were available in person.

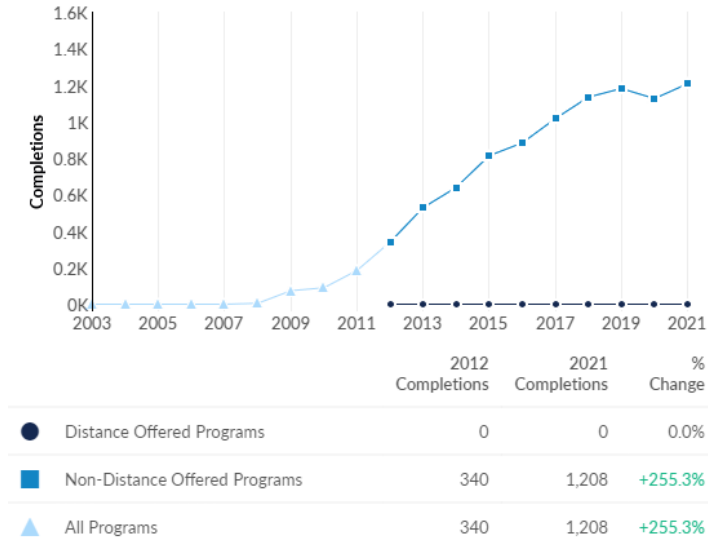
Exhibit 4. GGC Program Overview, 2021.

Institution	Completions (2021)	Growth % YOY (2021)	Market Share (2021)	IPEDS Tuition & Fees (2021)	Completions Trend (2017-2021)
Georgia Gwinnett College	1,208	7.2%	100.0%	\$4,948	

Source: LIGHTCAST, Q4 2022 Data Set.

In Gwinnett County, there has been a 255.3% growth in program completions since 2012, resulting in a total of 1,208 graduates in 2021. All programs were completed in person.

Exhibit 5. Programs Completions for GGC, 2012-2021.



Source: LIGHTCAST, Q4 2022 Data Set.

Program Analysis

With 5,753 graduates across the State, Registered Nursing/Registered Nurse was Georgia's most pursued program. The Film/Video and Photographic Arts, Other program had greatest year over year growth with 43% more graduates in 2021 than 2020. English Language and Literature, General had largest decline in graduates, with an 8% loss in completions.

At GGC, the Business/Commerce, General program had the most graduates (379), making it the most pursued program. Film/Video and Photographic Arts, Other experienced a 550% increase in graduations, which is comparable to the Georgia trend that makes it the fastest-growing program for degree completions. The program losing the most graduates was Criminal Justice/Safety Studies, with a 15% reduction in graduates.

Exhibit 6. Top Programs Georgia and GGC.

CIP Code	Description	Georgia Completions 2021	Georgia Completions % Change (2020-2021)	GGC Completions 2021	GGC Completions % Change (2020-2021)
52.0101	Business/Commerce, General	2,025	4%	379	6%
11.0103	Information Technology	895	12%	164	21%
42.0101	Psychology, General	3,544	5%	123	6%
26.0101	Biology/Biological Sciences, General	3,359	(1%)	115	(13%)
31.0505	Exercise Science and Kinesiology	952	(5%)	65	25%
13.1202	Elementary Education and Teaching	1,890	8%	65	(2%)
51.3801	Registered Nursing/Registered Nurse	5,753	3%	55	4%
43.0104	Criminal Justice/Safety Studies	2,731	(1%)	51	(15%)
54.0101	History, General	650	(1%)	29	7%
19.0702	Adult Development and Aging	34	21%	27	29%
23.0101	English Language and Literature, General	880	(8%)	26	(7%)
50.0699	Film/Video and Photographic Arts, Other	66	43%	26	550%
13.1001	Special Education and Teaching, General	455	2%	21	(5%)
45.1001	Political Science and Government, General	1,195	(0%)	20	(0%)
03.0104	Environmental Science	103	21%	15	36%
27.0101	Mathematics, General	474	(5%)	15	114%
40.0501	Chemistry, General	655	(6%)	12	(8%)

Source: LIGHTCAST, Q4 2022 Data Set.

The most pursued programs for bachelor's degree completions in 2021 were Business/Commerce, General at GGC and Registered Nursing/Registered Nurse across the state. General Business/Commerce had the most master's degree completions with 347 graduates. There were no completions of this degree category at GGC. Chemistry, General, with 97 completions, was the most pursued program for doctoral degrees in Georgia. Once again, GGC did not offer any completions for this degree category.

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Exhibit 7. Top Programs Georgia and GGC by Degree Type.

CIP Code	Description	Georgia Completions Bachelor's Degree 2021	GGC Completions Bachelor's Degree 2021	Georgia Completions Master's Degree 2021	Georgia Completions Doctor's Degree 2021
51.3801	Registered Nursing/Registered Nurse	3,795	55	422	12
42.0101	Psychology, General	3,190	123	126	34
26.0101	Biology/Biological Sciences, General	3,115	115	134	18
52.0101	Business/Commerce, General	1,173	379	347	26
45.1001	Political Science and Government, General	1,121	20	37	20
13.1202	Elementary Education and Teaching	1,091	65	541	4
43.0104	Criminal Justice/Safety Studies	854	51	84	4
23.0101	English Language and Literature, General	797	26	52	17
31.0505	Exercise Science and Kinesiology	759	65	173	11
54.0101	History, General	576	29	46	7
11.0103	Information Technology	527	164	198	0
40.0501	Chemistry, General	507	12	44	97
27.0101	Mathematics, General	382	15	64	16
13.1001	Special Education and Teaching, General	146	21	211	6
3.0104	Environmental Science	95	15	7	0
19.0702	Adult Development and Aging	27	27	0	0
50.0699	Film/Video and Photographic Arts, Other	26	26	0	0

Source: LIGHTCAST, Q4 2022 Data Set.

In Gwinnett County, Liberal Arts and Sciences, General Studies and Humanities, Other was the top program with 414 completions. Despite only 4 completions in 2020, this program experienced the largest year over year growth with 10,250% more graduates between 2020- 2021. With an 94% drop in completions, Health Services/Allied Health/Health Sciences, General programs experienced the greatest decrease in graduates.

Exhibit 8. Top Programs Gwinnett County and GGC.

CIP Code	Description	Gwinnett County Completions 2021	Gwinnett County Completions % Change (2020-2021)	Georgia Gwinnett College Completions 2021	Georgia Gwinnett College % Change (2020-2021)
24.0199	Liberal Arts and Sciences, General Studies and Humanities, Other	414	10250%	0	0%
52.0101	Business/Commerce, General	379	6%	379	6%
11.1003	Computer and Information Systems Security/Auditing/Information Assurance	338	17%	0	0%
47.0607	Airframe Mechanics and Aircraft Maintenance Technology/Technician	333	13%	0	0%
47.0604	Automobile/Automotive Mechanics Technology/Technician	278	(24%)	0	0%
52.0302	Accounting Technology/Technician and Bookkeeping	181	1%	0	0%
52.0201	Business Administration and Management, General	165	35%	0	0%
11.0103	Information Technology	164	12%	164	21%

ACADEMIC PROGRAM DEMAND ANALYSIS

CIP Code	Description	Gwinnett County Completions 2021	Gwinnett County Completions % Change (2020-2021)	Georgia Gwinnett College Completions 2021	Georgia Gwinnett College % Change (2020-2021)
51.0601	Dental Assisting/Assistant	160	42%	0	0%
11.1001	Network and System Administration/Administrator	158	(7%)	0	0%
47.0104	Computer Installation and Repair Technology/Technician	155	5%	0	0%
51.0801	Medical/Clinical Assistant	150	10%	0	0%
51.3801	Registered Nursing/Registered Nurse	125	10%	55	4%
42.0101	Psychology, General	123	6%	123	6%
12.0401	Cosmetology/Cosmetologist, General	117	8%	0	0%
26.0101	Biology/Biological Sciences, General	115	(13%)	115	(13%)
43.0104	Criminal Justice/Safety Studies	107	16%	51	(15%)
48.0508	Welding Technology/Welder	95	(30%)	0	0%
52.1401	Marketing/Marketing Management, General	85	35%	0	0%
11.0201	Computer Programming/Programmer, General	74	17%	0	0%
50.0408	Interior Design	70	8%	0	0%
51.0713	Medical Insurance Coding Specialist/Coder	68	51%	0	0%
15.0501	Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology/Technician	68	33%	0	0%
52.0407	Business/Office Automation/Technology/Data Entry	67	22%	0	0%
47.0201	Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician	67	(15%)	0	0%
46.0201	Carpentry/Carpenter	66	20%	0	0%
11.0801	Web Page, Digital/Multimedia and Information Resources Design	66	6%	0	0%
13.1202	Elementary Education and Teaching	65	(2%)	65	(2%)
46.0412	Building/Construction Site Management/Manager	65	(6%)	0	0%
31.0505	Exercise Science and Kinesiology	65	25%	65	25%
51.0904	Emergency Medical Technology/Technician (EMT Paramedic)	62	(15%)	0	0%
19.0709	Child Care Provider/Assistant	60	(29%)	0	0%
11.0202	Computer Programming, Specific Applications	58	32%	0	0%
52.0901	Hospitality Administration/Management, General	54	93%	0	0%
52.1001	Human Resources Management/Personnel Administration, General	52	33%	0	0%
51.0899	Allied Health and Medical Assisting Services, Other	51	(18%)	0	0%
52.0401	Administrative Assistant and Secretarial Science, General	49	2%	0	0%
12.0409	Aesthetician/Esthetician and Skin Care Specialist	43	65%	0	0%
01.8301	Veterinary/Animal Health Technology/Technician and Veterinary Assistant	40	0%	0	0%
15.1302	CAD/CADD Drafting and/or Design Technology/Technician	40	8%	0	0%
50.0913	Music Technology	38	(19%)	0	0%
51.0909	Surgical Technology/Technologist	35	(34%)	0	0%
51.0911	Radiologic Technology/Science - Radiographer	31	0%	0	0%
13.1210	Early Childhood Education and Teaching	30	(50%)	0	0%
51.0710	Medical Office Assistant/Specialist	29	26%	0	0%
54.0101	History, General	29	7%	29	7%
10.0203	Recording Arts Technology/Technician	28	87%	0	0%

ACADEMIC PROGRAM DEMAND ANALYSIS

CIP Code	Description	Gwinnett County Completions 2021	Gwinnett County Completions % Change (2020-2021)	Georgia Gwinnett College Completions 2021	Georgia Gwinnett College % Change (2020-2021)
19.0702	Adult Development and Aging	27	29%	27	29%
50.0699	Film/Video and Photographic Arts, Other	26	550%	26	550%
23.0101	English Language and Literature, General	26	(7%)	26	(7%)
51.0805	Pharmacy Technician/Assistant	26	24%	0	0%
50.0406	Commercial Photography	25	(70%)	0	0%
52.0907	Meeting and Event Planning	24	33%	0	0%
52.0703	Small Business Administration/Management	22	5%	0	0%
12.0407	Hair Styling/Stylist and Hair Design	22	(15%)	0	0%
51.0714	Medical Insurance Specialist/Medical Biller	21	(13%)	0	0%
13.1001	Special Education and Teaching, General	21	(5%)	21	(5%)
50.0411	Game and Interactive Media Design	21	(5%)	0	0%
51.3902	Nursing Assistant/Aide and Patient Care Assistant/Aide	20	43%	0	0%
45.1001	Political Science and Government, General	20	0%	20	0%
51.0910	Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	20	(9%)	0	0%
51.0908	Respiratory Care Therapy/Therapist	19	6%	0	0%
15.0303	Electrical, Electronic, and Communications Engineering Technology/Technician	19	(32%)	0	0%
15.0000	Engineering Technologies/Technicians, General	18	-	0	0%
52.0903	Tourism and Travel Services Management	16	(24%)	0	0%
15.1301	Drafting and Design Technology/Technician, General	16	(53%)	0	0%
03.0104	Environmental Science	15	36%	15	36%
27.0101	Mathematics, General	15	114%	15	114%
23.1303	Professional, Technical, Business, and Scientific Writing	15	(12%)	0	0%
51.0000	Health Services/Allied Health/Health Sciences, General	15	(94%)	0	0%
52.0701	Entrepreneurship/Entrepreneurial Studies	14	(22%)	0	0%
11.0199	Computer and Information Sciences, Other	14	17%	0	0%
12.0503	Culinary Arts/Chef Training	13	(35%)	0	0%
52.0203	Logistics, Materials, and Supply Chain Management	12	(8%)	0	0%
51.0920	Magnetic Resonance Imaging (MRI) Technology/Technician	12	71%	0	0%
40.0501	Chemistry, General	12	(8%)	12	(8%)
51.3501	Massage Therapy/Therapeutic Massage	10	(72%)	0	0%
01.0601	Applied Horticulture/Horticulture Operations, General	10	(62%)	0	0%
41.0101	Biology/Biotechnology Technology/Technician	10	(29%)	0	0%
47.0302	Heavy Equipment Maintenance Technology/Technician	9	(36%)	0	0%
12.0505	Food Preparation/Professional Cooking/Kitchen Assistant	9	13%	0	0%
22.0302	Legal Assistant/Paralegal	8	14%	0	0%
52.1404	Digital Marketing	8	33%	0	0%
31.0101	Parks, Recreation, and Leisure Studies	8	167%	0	0%
19.0708	Child Care and Support Services Management	7	40%	0	0%
51.0901	Cardiovascular Technology/Technologist	7	0%	0	0%
13.1501	Teacher Assistant/Aide	7	(36%)	0	0%

ACADEMIC PROGRAM DEMAND ANALYSIS

CIP Code	Description	Gwinnett County Completions 2021	Gwinnett County Completions % Change (2020-2021)	Georgia Gwinnett College Completions 2021	Georgia Gwinnett College % Change (2020-2021)
52.0301	Accounting	6	20%	0	0%
51.0719	Clinical Research Coordinator	6	(14%)	0	0%
47.0609	Avionics Maintenance Technology/Technician	5	(29%)	0	0%
51.0707	Health Information/Medical Records Technology/Technician	5	0%	0	0%
11.1099	Computer/Information Technology Services Administration and Management, Other	4	-	0	0%
12.0402	Barbering/Barber	4	(60%)	0	0%
01.0608	Floriculture/Floristry Operations and Management	4	(56%)	0	0%
52.0905	Restaurant/Food Services Management	3	200%	0	0%
47.0608	Aircraft Powerplant Technology/Technician	3	-	0	0%
01.0605	Landscaping and Groundskeeping	2	0%	0	0%
41.9999	Science Technologies/Technicians, Other	2	0%	0	0%
15.1703	Solar Energy Technology/Technician	2	(71%)	0	0%
12.0501	Baking and Pastry Arts/Baker/Pastry Chef	1	(75%)	0	0%
12.0413	Cosmetology, Barber/Styling, and Nail Instructor	1	0%	0	0%
11.0601	Data Entry/Microcomputer Applications, General	1	(67%)	0	0%
50.0903	Music Performance, General	1	(83%)	0	0%
10.0201	Photographic and Film/Video Technology/Technician	1	-	0	0%

Source: LIGHTCAST, Q4 2022 Data Set.

Exhibit 9 presents the degree completions across the bachelor programs at GGC in 2021. The largest number of bachelor’s degree recipients in Gwinnett County in 2021 included 379 graduates from Business/Commerce, General, 164 graduates from Information Technology, and 123 graduates Psychology, General. The program with the fewest graduates was general chemistry, with only 12 completions leading to a bachelor's degree.

Exhibit 9. Top Programs Gwinnett County and GGC by Degree Type.

CIP Code	Description	Gwinnett County Completions Bachelor’s Degree 2021
52.0101	Business/Commerce, General	379
11.0103	Information Technology	164
42.0101	Psychology, General	123
26.0101	Biology/Biological Sciences, General	115
31.0505	Exercise Science and Kinesiology	65
13.1202	Elementary Education and Teaching	65
51.3801	Registered Nursing/Registered Nurse	55
43.0104	Criminal Justice/Safety Studies	51
54.0101	History, General	29
19.0702	Adult Development and Aging	27
23.0101	English Language and Literature, General	26
50.0699	Film/Video and Photographic Arts, Other	26

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13.1001	Special Education and Teaching, General	21
45.1001	Political Science and Government, General	20
03.0104	Environmental Science	15
27.0101	Mathematics, General	15
40.0501	Chemistry, General	12

Source: LIGHTCAST, Q4 2022 Data Set.

Occupational Analysis

The surplus or deficit in the number of annual openings in 2021 is referred to as an occupational gap. This is calculated by subtracting the number of students who successfully completed a program relevant to the position from the total annual openings. A positive (green) figure implies that there are more job openings than qualified candidates, which presents opportunity to grow and develop initiatives that are comparable to those that give this competitive edge. A negative (red) figure signifies an oversupply of degree holders vying for a small number of open positions.

In **Exhibit 10**, Elementary school teachers, except special education had an excess of 293 jobs available, the highest occupational gap among the others, given there were only 121 completions in 2021 while there were 414 job openings on average. Software Developers had the highest average annual openings with 498 positions. Given the 335 completions (164 from GGC) by 2021, there was an average surplus of 163 job openings requiring educated talent to fill roles related to this occupation. Coaches and Scouts with no regional completers had the lowest occupational gap of 85 given the lowest average annual openings (85).

Given that there was 1,492 completions in 2021, but only 103 job opportunities on average, Computer Occupations, All Other had the greatest occupational gap among the others with a shortage of 1,389 jobs. According to the 169 average annual openings, there was a 1,358 person occupational deficit among Project Management Specialists given the 1,527 regional completers. There were only 488 positions available on average each year for Managers, All Other. By 2021, there would be an average shortage of 940 individuals unable to find employment in this field, considering the 1,428 completions (617 from GGC).

Exhibit 10. Gwinnett County Occupational Gap.

SOC	Description	Avg. Annual Openings	GGC Completions (2021)	Regional Completions (2021)	Occupational Gap
25-2021	Elementary School Teachers, Except Special Education	414	91	121	293
29-1141	Registered Nurses	361	55	125	236
21-2011	Clergy	164	0	0	164
15-1252	Software Developers	498	164	335	163
25-2022	Middle School Teachers, Except Special and Career/Technical Education	225	70	70	155
13-1028	Buyers and Purchasing Agents	144	0	0	144
25-3031	Substitute Teachers, Short-Term	129	0	0	129
13-2011	Accountants and Auditors	448	0	352	96
17-2051	Civil Engineers	89	0	0	89
27-2022	Coaches and Scouts	85	0	0	85
11-2021	Marketing Managers	95	15	711	(616)
15-1241	Computer Network Architects	41	164	678	(637)
15-1212	Information Security Analysts	50	215	785	(735)

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13-1199	Business Operations Specialists, All Other	373	430	1,170	(797)
11-1011	Chief Executives	201	394	1,009	(808)
11-3021	Computer and Information Systems Managers	115	164	975	(860)
11-2022	Sales Managers	171	394	1,058	(887)
11-9199	Managers, All Other	488	617	1,428	(940)
13-1082	Project Management Specialists	169	445	1,527	(1,358)
15-1299	Computer Occupations, All Other	103	558	1,492	(1,389)

Source: LIGHTCAST, Q4 2022 Data Set.

In **Exhibit 11**, Short-Term Substitute Teachers had the largest occupational gap with 1,282 more opportunities available than program graduates in Georgia, compounded by the state's zero completions in 2021. Sales Engineers had the lowest positive occupational gap of 240, with 277 average annual openings and 37 regional completers. Among the occupations with a positive occupational gap, Training and Development Specialists had the most program completers with 802 graduates and 1,493 average annual openings. These factors lead to an occupational gap of 691.

The occupation with the largest average annual openings in Georgia was General and Operations Management, with a negative occupational gap of 10,716 positions. By 2021, due to 27,722 completions (394 from GGC) there was an average of 17,006 individuals who were unlikely to obtain employment in this field. The occupation of Managers, All Others, had the highest level of occupation saturation, with 39,272 more program graduates than average yearly opportunities (4,717). Similar to Gwinnett County, Computer and Information Systems Managers had a negative occupational gap of 18,495 due to more program graduates (19,921) than average annual openings (1,426).

Exhibit 11. Georgia Occupational Gap by Average Annual Openings.

SOC	Description	Avg. Annual Openings	GGC Completions (2021)	Regional Completions (2021)	Occupational Gap
25-3031	Substitute Teachers, Short-Term	1,282	0	0	1,282
25-9099	Educational Instruction and Library Workers, All Other	1,165	0	0	1,165
53-2011	Airline Pilots, Copilots, and Flight Engineers	1,103	0	81	1,022
13-1028	Buyers and Purchasing Agents	1,489	0	640	849
13-1081	Logisticians	1,427	0	694	733
13-1151	Training and Development Specialists	1,493	0	802	691
21-2021	Directors, Religious Activities and Education	769	0	166	603
21-2099	Religious Workers, All Other	487	0	86	401
25-9044	Teaching Assistants, Postsecondary	303	0	0	303
41-9031	Sales Engineers	277	0	37	240
11-1021	General and Operations Managers	10,716	394	27,722	(17,006)
11-3021	Computer and Information Systems Managers	1,426	164	19,921	(18,495)
15-1299	Computer Occupations, All Other	1,479	558	22,208	(20,729)
11-3031	Financial Managers	2,295	0	25,061	(22,766)
13-1199	Business Operations Specialists, All Other	5,524	430	28,449	(22,925)
11-2021	Marketing Managers	1,130	15	24,863	(23,733)
11-2022	Sales Managers	1,744	394	26,003	(24,259)
11-1011	Chief Executives	1,696	394	27,645	(25,949)
13-1082	Project Management Specialists	1,867	445	30,032	(28,165)
11-9199	Managers, All Other	4,717	617	43,989	(39,272)

Source: LIGHTCAST, Q4 2022 Data Set.