

CTE LABOR MARKET TOOL

This resource provides data snapshots and insights about the overall business and finance labor market, and a closer focus on the Business Operations Specialists, Market Research Analysts and Marketing Specialists*****, and Accountants and Auditors occupations as those are popular areas for CTE business and finance programs. It also includes some guiding questions to help apply the data to your school's CTE program.

Careers in business and finance include many different kinds of jobs. Some focus on working directly with individual clients to help them invest their money, while others involve conducting analyses of financial markets that help other professionals in their work or managing organizations' money. People with these occupations primarily work in office settings, though some may have the option to work remotely. The three largest business and finance occupations in New York City are Accountants and Auditors, Market Research Analysts and Marketing Specialists, and Financial Analysts. Chart 1 below shows the many different kinds of NYC organizations hiring business and finance professionals.

Why use this resource?

- Use as a critical tool with your school's self study group to guide program planning and improvement aligned to labor market data
- Use as a critical tool to prepare students for postsecondary planning towards high-demand careers
- Feel prepared and confident when responding to NYSED questions about incorporating labor market data into your work



Chart 1: Types of organizations doing the most entry-level hiring in business and finance*, NYC, number of online job ads, 10/1/2021 - 3/31/2022**

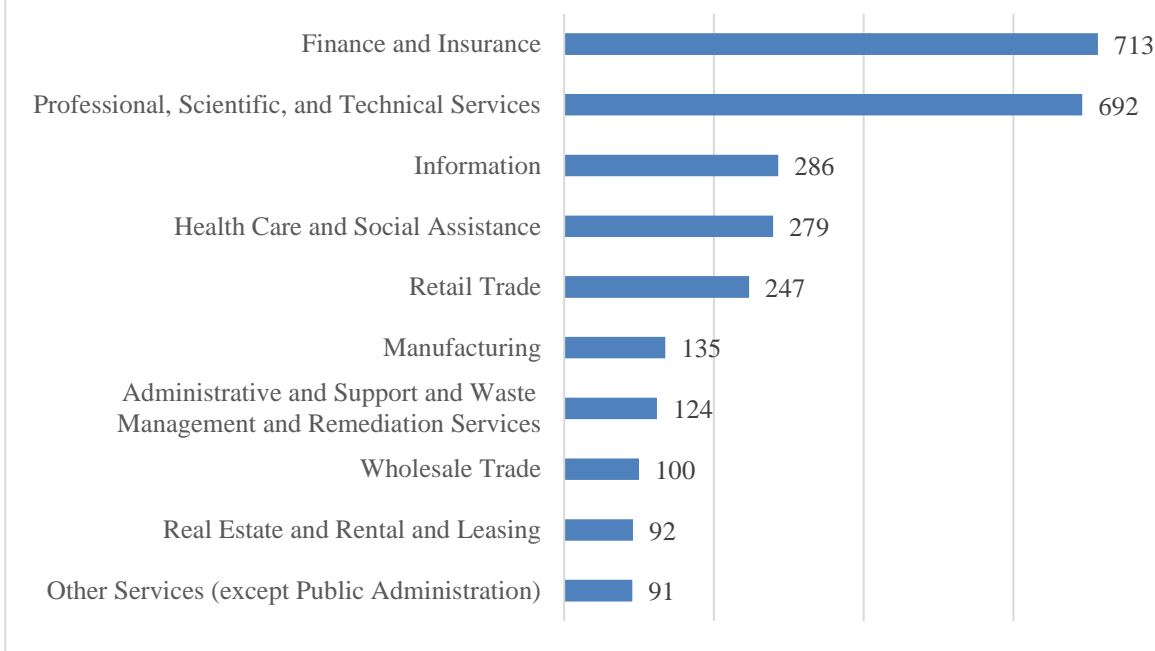


Chart 2 provides an overview of New York City employment in each of the three focus occupations. As you can see, the number of jobs available in each of the occupations is expected to grow by 2028, with the *percentage increase* the largest for the market research analysts and marketing specialists occupation (21.1%), and the predicted *size* of the occupation the largest for business operations specialists (227,010 jobs, inclusive of market research analysts and marketing specialists). It's important to keep in mind that even though these predictions help us understand the labor market's trajectory, things like new technologies or innovations, shifts in the economy, or major unexpected shocks like the COVID-19 pandemic can impact their accuracy.

Chart 2: Current & projected employment for 3 focus occupations, NYC, 2018 - 2028

	# Employed in NYC****	Projected NYC Employment***		Change Over Time (2018-2028)	
		2018	2028	Net	Percent
Business Operations Specialists	210,800	200,650	227,010	26,360	13.1%
Market Research Analysts and Marketing Specialists	50,110	46,730	56,580	9,850	21.1%
Accountants and Auditors	68,560	75,340	84,940	9,600	12.7%

IN THIS RESOURCE...

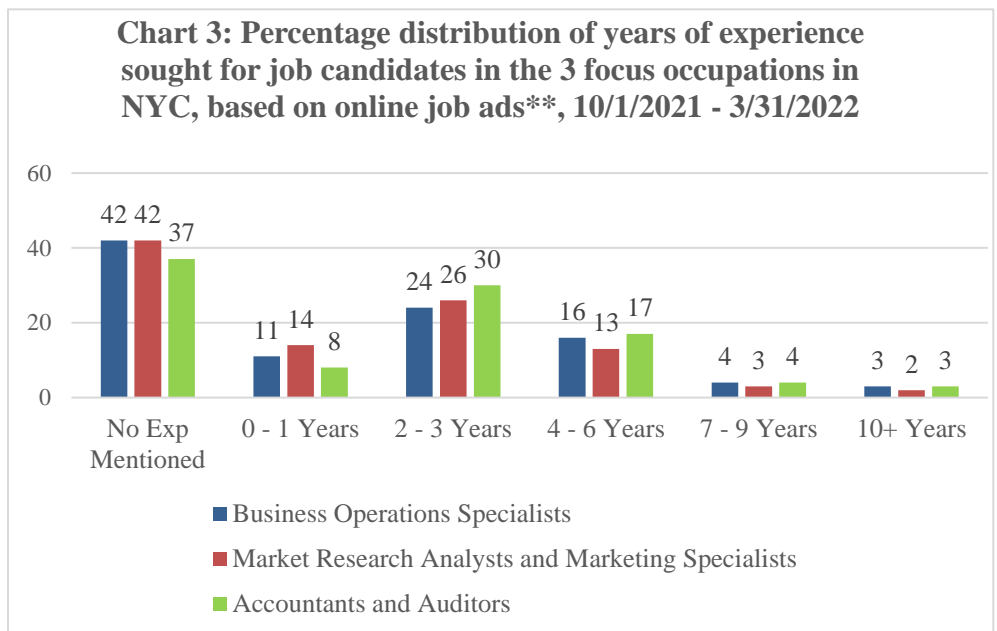
**LOOKING DEEPER:
WHO'S BEING HIRED IN
THIS FIELD? (P.2)**

**POST-SECONDARY
PLANNING (P.3-4)**

**WHAT NEXT? GUIDING
QUESTIONS & WEB
RESOURCES (P.5)**

Looking Deeper: Who's Being Hired in This Field?

- Entry-level wages for all three focus occupations exceed the living wage for a single adult in NYC (\$48,320*****).
- Many job ads did not specify preferred years of experience. For those that did, 2-3 years was the most common for all three focus occupations.
- There is significant overlap in the employability skills that organizations look for in job candidates, with communication skills and being detail oriented in-demand for all three focus occupations, and marketing, management, and Microsoft Excel skills in-demand for two of the three focus occupations.
- Over half of online job ads for all three occupations were seeking candidates with a Bachelor's degree.



The chart below reflects entry-level wages****, as well as the most in-demand (i.e., among the five most frequently requested and in at least 10% of online job ads***** employability skills, technical skills, and certifications** for entry-level jobs in the three focus occupations from 10/1/2021 – 3/31/2022. Values in parentheses reflect the percentage of online job ads in which each skill is mentioned.

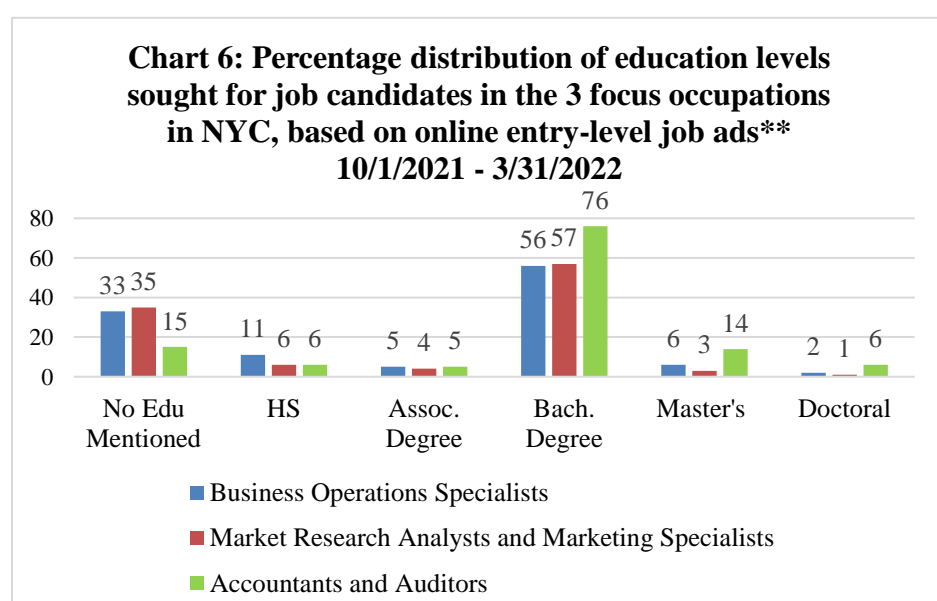
Chart 4: Entry-level wages & in-demand skills for 3 focus occupations

Occupation	Entry-level Wage	In-demand Employability Skills	In-demand Technical Skills	In-demand Certifications
Business Operations Specialists	\$56,080	Communications (60%), Detailed Oriented (39%), Marketing (33%), Management (31%), and Microsoft Excel (31%)	Finance	N/A
Market Research Analysts and Marketing Specialists	\$51,920	Marketing (75%), Communications (63%), Detailed Oriented (42%), Sales (36%), and Social Media (33%)	Digital Marketing (17%), Social Media Management (15%), Instagram (15%), Analytics (11%), and Customer Relationship Management (11%)	N/A
Accountants and Auditors	\$66,390	Communications (47%), Microsoft Excel (41%), Detail Oriented (39%), Management (35%), and Problem Solving (20%)	Accounting (88%), Auditing (51%), Finance (47%), Financial Statements (40%), and Generally Accepted Accounting Principles (29%)	Certified Public Accountant (10%)

Chart 5 shows the ethnicity and sex of people who work in the three focus occupations in NYC****. As you can see, females hold slightly more than half of the positions in two of the three occupations and nearly half in the third, while Whites hold more of the jobs in each occupation than any other ethnic group, followed by Asian/ Pacific Islanders.

Chart 5: Sex and ethnicity distributions for 3 focus occupations

Occupation	Ethnicity %						Sex %	
	American Indian/ Alaska Native	Asian/ Pacific Islander	Black	Hispanic	White	Multi-ethnic/ Other	Female	Male
Business Operations Specialists	0.22	17.21	10.08	14.90	54.54	3.05	52.41	47.59
Market Research Analysts and Marketing Specialists	0.00	15.26	7.73	9.98	62.86	4.18	55.81	44.19
Accountants and Auditors	0.11	26.02	12.65	10.25	48.34	2.62	48.22	51.78



Post-secondary Planning

CTE students are encouraged to pursue education and training after graduation from high school in order to enter into an in-demand career with family-sustaining wages in NYC. The following is a list of CUNY degree programs aligned with the business and finance industry as well as non-degree programs that result in an industry-endorsed certification and/or college credits. Some CTE programs have robust partnerships with CUNY programs that are codified by an articulation agreement. These agreements provide a range of student benefits such as advanced standing, early college credit, and preferential placement. CTE school leaders, teachers, and work-based learning coordinators are encouraged to connect with the school counseling teams at their school to determine strong postsecondary options for their students. Please reach out to your Industry Engagement Manager for more information about the articulation agreements.

- Chart 7 is a sample of the over 50 CUNY programs focused on business and finance spread across the five boroughs, ranging from certificate programs up through PhD degree opportunities. It is helpful to keep in mind the data from Chart 6, above, which suggests that having a post-secondary educational credential is valuable for job candidates in this field.
- Chart 8, on the following page, provides a list of non-degree business and finance occupation-focused training opportunities available through a variety of different NYC-based organizations.

Chart 7: CUNY post-secondary programs related to business and finance

Borough	School	Academic program	Credential*****	DOE/CUNY articulation agreement's benefits
Bronx	Bronx CC	Business Administration	AS	
Bronx	Bronx CC	Marketing	AAS	
Bronx	Hostos CC	Accounting	AAS	
Bronx	Hostos CC	Accounting and Accounting for Forensic Accounting and Business Management	AS	
Bronx	Lehman College	Accounting	BA, BS, and MS	
Bronx	Lehman College	Business Administration	BBA	
Bronx	Lehman College	Business – Finance Concentration and Business – Human Resources Management Concentration	MS	
Brooklyn	Brooklyn College	Achievement in Accounting and Non-Profit Fiscal Management	Certificate	
Brooklyn	Brooklyn College	Business Administration and Finance	BBA	
Brooklyn	Brooklyn College	Accounting, Business Management, and Financial Mathematics	BS	
Brooklyn	Brooklyn College	Industrial/Organizational Psychology	MA	
Brooklyn	Brooklyn College	Accounting and Information Systems	MS	
Brooklyn	Kingsborough CC	Accounting and Business Administration	AS	
Brooklyn	Kingsborough CC	Marketing Management	AAS	
Brooklyn	Medgar Evers College	Business Administration	AS	
Brooklyn	Medgar Evers College	Accounting, Business, and Financial Economics	BS	
Brooklyn	Medgar Evers College	Applied Management	BPS	
Brooklyn	NYC College of Tech	Business and Technology Fashion	AS and BS	
Brooklyn	NYC College of Tech	Accounting and Marketing Management and Sales	AAS	
Manhattan	Baruch College	Accounting, Finance, International Business, Management, and Marketing Management	BBA	
Manhattan	Baruch College	Business Communication	BA	
Manhattan	Baruch College	Financial Mathematics	BS	
Manhattan	Baruch College	Accounting	MBA and MS	
Manhattan	Baruch College	Business Administration	MBA and MS	
Manhattan	Baruch College	Business Administration, Healthcare Administration	Executive MBA	
Manhattan	Baruch College	Corporate Communication	MA	
Manhattan	Baruch College	Business Analytics, Finance, Financial Engineering, Financial Risk Management, Industrial/Organizational Psychology, Information Systems, Marketing, Quantitative Methods & Modeling, Real Estate, Statistics, and Taxation	MS	
Manhattan	Baruch College	Finance, Human Resource Management, and Information Systems	Executive MS	
Manhattan	Baruch College	Business and Business Administration	PhD	
Manhattan	Borough of Manhattan CC	Accounting	Certificate	
Manhattan	Borough of Manhattan CC	Accounting for Forensics, Business Administration, Digital Marketing, and Financial Management	AS	
Manhattan	Borough of Manhattan CC	Accounting	AAS	
Manhattan	Borough of Manhattan CC	Business Management and Small Business Entrepreneurship	AAS	Prior Learning Credit: 3 credits
Manhattan	City College of New York	Management and Administration	BA	
Manhattan	City College of New York	Branding + Integrated Communication	MPS	
Manhattan	City College of New York	Economics	MA	
Manhattan	Graduate Center	Economics	PhD	

Manhattan	Guttman CC	Business Administration	AA	
Manhattan	Hunter College	Business Studies	Certificate	
Manhattan	Hunter College	Accounting	BS and MS	
Manhattan	Hunter College	Economics	MA	
Manhattan	John Jay College of Criminal Justice	Forensic Accounting	Advanced Certificate	
Manhattan	John Jay College of Criminal Justice	Economics	MA	
Manhattan	School of Professional Studies	Business Communication, Financial Studies, and Management	Certificate	
Manhattan	School of Professional Studies	Business	BS	
Manhattan	School of Professional Studies	Management, Project Management, Research Administration, and Research Compliance	Advanced Certificate	
Manhattan	School of Professional Studies	Business Management & Leadership and Research Administration & Compliance	MS	
Queens	LaGuardia CC	Accounting and Business Administration	AS	
Queens	Queens College	Accounting	BA	
Queens	Queens College	Finance and International Business	BBA	
Queens	Queens College	Risk Management	Advanced Certificate	
Queens	Queens College	Accounting and Actuarial Risk Management and Risk Management	MS	
Queens	Queensborough CC	Accounting for Forensic Accounting and Business Administration	AS	
Queens	Queensborough CC	Accounting and Business Management – Marketing	AAS	
Queens	York College	Accounting, Business Administration, Finance, and Marketing	BS	
Queens	York College	Pharmaceutical Science and Business	MS	
Staten Island	College of Staten Island	Business	AAS	
Staten Island	College of Staten Island	Accounting and Business	BS	
Staten Island	College of Staten Island	Accounting and Business Management	BS/MS	
Staten Island	College of Staten Island	Business Analytics	Advanced Certificate	
Staten Island	College of Staten Island	Accounting and Business Management	MS	

Chart 8: Non-degree business and finance training opportunities

AHRC New York City's Advance and Earn Program
CUNY's Continuing and Professional Education
Grow with Google
Grace Institute's Administrative Professionals Program
NYC Tech Opps
Small Business Services' business courses
Year Up

What Next? Guiding Questions & Web Resources

“Describe how current labor market data has informed program design and choice of technical assessment.”

The prompts below are designed to promote discussion and ideas for program planning, and to help you answer the question above from the CTS self study tab and the NYSED CTE application (Part 2, Section C).

How can we incorporate this report’s data insights into our...	Data points to consider:
...program focus?	Introductory paragraph overviews on page 1 and charts 1, 2, 3, 4
...technical and employability skills?	Chart 4
...articulation agreement?	Charts 6, 7
...technical assessments?	Chart 4
... career pathway options?	Charts 1, 2, 7, 8

Consider the questions below keeping in mind the labor market data points you’ve explored in this report and the questions that you’ve answered above.

Select three ways that you might adjust your program in response to labor market data:

- Program focus
 Articulation agreement
 Technical assessments
 Career pathway options
 Technical and employability skills
 Other:

Which one of these three adjustments could most easily be implemented this school year?

Which one of the three would make the biggest difference for the quality of your program? Why?

Curious to explore more? Check out these web resources:

- CTE NYC website: www.cte.nyc
- CTE Industry Commission resources: bitly.com/CTEIndustryEngagement
- CTE College and Career Planning Team's postsecondary milestones toolkit: <https://bit.ly/35uglcc>
- CareerOneStop labor market data explorer: www.careeronestop.org

Technical Notes & Data Sources:

* “Business and finance” occupations have been operationalized as occupations with a 2010 Standard Occupation Classification (SOC) code starting with the two-digit "13" (“Business and Financial Operations Occupations”): 13-1XXX for Business; 13-2XXX for Finance.

** These analyses were conducted using the EMSI Burning Glass Analyst proprietary web-based research platform. Please note that some intra-occupation percentage totals may equal >100% if the employer indicated a range of minimum/preferred years of experience or education-attainment level. “Entry-level” jobs are considered to be those with job advertisements that specified 0-1 year of experience.

*** New York City 2018-2028 long-term employment projections are determined by New York State Department of Labor (NYSDOL). Please note that these estimates include self-employed workers, which is not always true of other estimates such as the OEWS estimates.

**** NYSDOL, Occupational Employment and Wage Statistics (OEWS) estimates for New York City (July 2021 release). NYSDOL adjusted wages to reflect levels in the first quarter of 2021. NYSDOL operationalizes “Entry Wage” as the average of the bottom third of wages.

***** Demographics based on U.S. Census, American Community Survey (ACS) estimates, NYC 2015-2019 5-year sample, IPUMS release February 2021. Please note that the ACS does not ask for respondents’ gender, only biological sex. As a result, there are only results available for male and female categories. To learn more about this, please see here: <https://www.census.gov/acs/www/about/why-we-ask-each-question/sex/>

***** AA denotes Associate in Arts; AAS denotes Associate in Applied Science; AS denotes Associate in Science; BA denotes Bachelor of Arts; BBA denotes Bachelor of Business Administration; BPS denotes Bachelor of Professional Studies; BS denotes Bachelor of Science; MA denotes Master of Arts; MPS denotes Master of Professional Studies; MS denotes Master of Science; MBA denotes Master of Business Administration; PhD denotes Doctor of Philosophy

***** Business Operations Specialists comprise a variety of occupations in business, including Market Research Analysts and Marketing Specialists.

***** Massachusetts Institute of Technology’s (MIT) Living Wage calculator, 2020 estimate for the five counties of New York City, NY (<https://livingwage.mit.edu/metros/35620>; data accessed April 2022), adjusted to the first quarter of 2021 using the U.S. Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (New York-Newark-Jersey City metropolitan area, not seasonally adjusted).

***** Additional skills that are in-demand as measured by being mentioned in at least 10% of online job ads for entry-level workers but not among the top 5 most frequently requested are:

Business Operations Specialists: Additional in-demand employability skills include planning, sales, research, Microsoft Office, problem solving, customer service, Microsoft PowerPoint, multitasking, presentations, operations, organizational skills, coordinating, interpersonal communications, leadership, written communication, time management, verbal communication skills, scheduling, prioritization, self starter, social media, innovation, and self-motivation.

Market Research Analysts and Marketing Specialists: Additional in-demand employability skills include Microsoft Excel, management, presentations, research, planning, multitasking, Microsoft PowerPoint, Microsoft Office, problem solving, self starter, writing, organizational skills, interpersonal communications, verbal communication skills, written communication, coordinating, innovation, customer service, time management, prioritization, ability to meet deadlines, operations, self-motivation, leadership, scheduling, and enthusiasm. Additional in-demand technical skills include key performance indicators (KPIs), marketing materials, Adobe Photoshop, content creation, and data analysis.

Accountants and Auditors: Additional in-demand employability skills include operations, multitasking, Microsoft Office, research, planning, written communication, organizational skills, analytical skills, budgeting, consulting, interpersonal communications, sales, collections, time management, leadership, and presentations. Additional in-demand technical skills include accounts payable, invoicing, accounts receivable, general ledger, month-end closing, public accounting, accounting software, internal controls, balance sheet, billing, reconciliation, financial services, QuickBooks (accounting software), bank reconciliations, and financial analysis.