

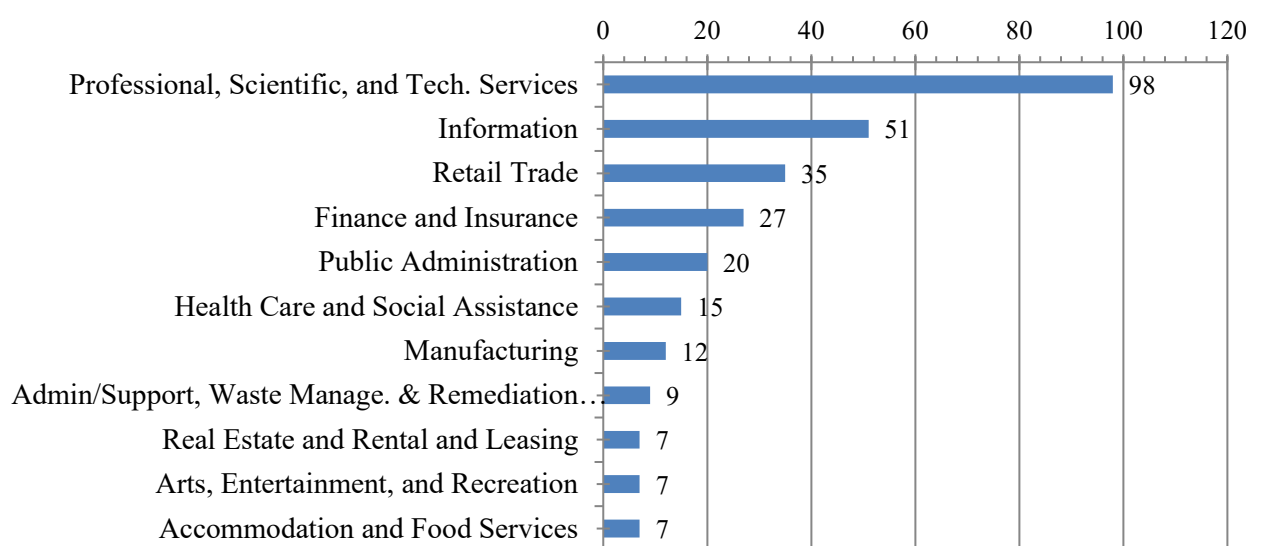
CTE LABOR MARKET TOOL

OVERVIEW: THIS RESOURCE PROVIDES DATA SNAPSHOTS AND INSIGHTS ABOUT THE GRAPHIC DESIGN, UX DESIGN, AND WEB DESIGN LABOR MARKET,* AND SOME GUIDING QUESTIONS TO HELP APPLY THE DATA TO YOUR SCHOOL'S CTE PROGRAM.

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 this field, NYC, number of job ads, 10/1/2020 - 3/31/2021**



The chart above shows the many different kinds of NYC organizations hiring professionals in this field.



The chart below shows the long-term employment projections for this field. As you can see, the field is expected to grow between 2016 – 2026. 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 the accuracy of these predictions.

Chart 2: Long-term employment projections for this field, NYC, 2016-2026***

	Projected NYC employment:		Change over time:	
	2016	2026	Net	Percent
Graphic Designers	17,410	18,940	1,530	8.8%
Web Developers	9,020	10,600	1,580	17.5%
Software Developers	35,480	48,730	13,250	37.3%
Computer Programmers	9,540	9,960	420	4.4%
Computer Occupations, All Other	1,910	2,140	230	12.0%

IN THIS RESOURCE...

LOOKING DEEPER: WHO'S WORKING IN THIS FIELD? (P.2)

DEMYSTIFYING DEMAND: EMPLOYER PRIORITIES (P.3)

WHAT NEXT? GUIDING QUESTIONS & WEB RESOURCES (P.4)

Looking Deeper: Who Works in this Field?

- **Most people working in this field in NYC have a significant amount of formal education and earn above a living wage.**
- For occupations in this field, the most commonly-held educational credential by workers in NYC is a Bachelor's degree.
- There is significant opportunity in this field for people who have a Bachelor's degree and are just starting out their career. Most recent hiring in NYC sought candidates with 5 years or less of experience (80% of job ads during the six-month period of October 2020 – March 2021).
- Median wages for entry-level through experienced professionals in this field are significantly above \$45,285, the 2021 living wage for a single adult in New York City*****.

Chart 3: Years of experience of people being hired in this field, based on job ads, NYC, 10/1/2020 - 3/31/2021**

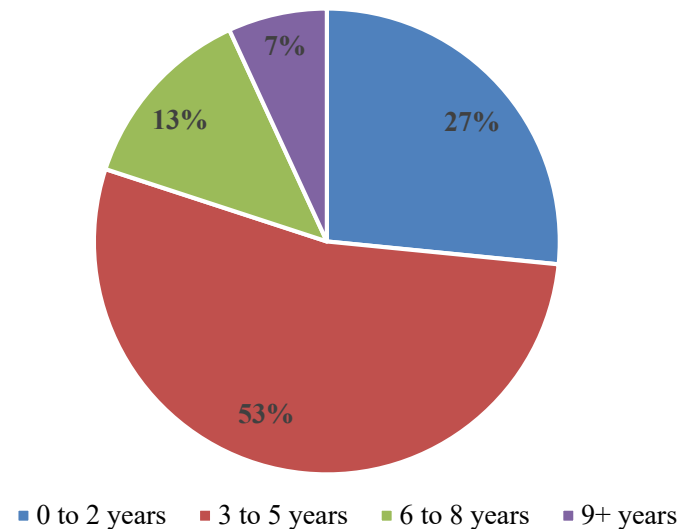


Chart 4: Median wages in this field by experience**, NYC**

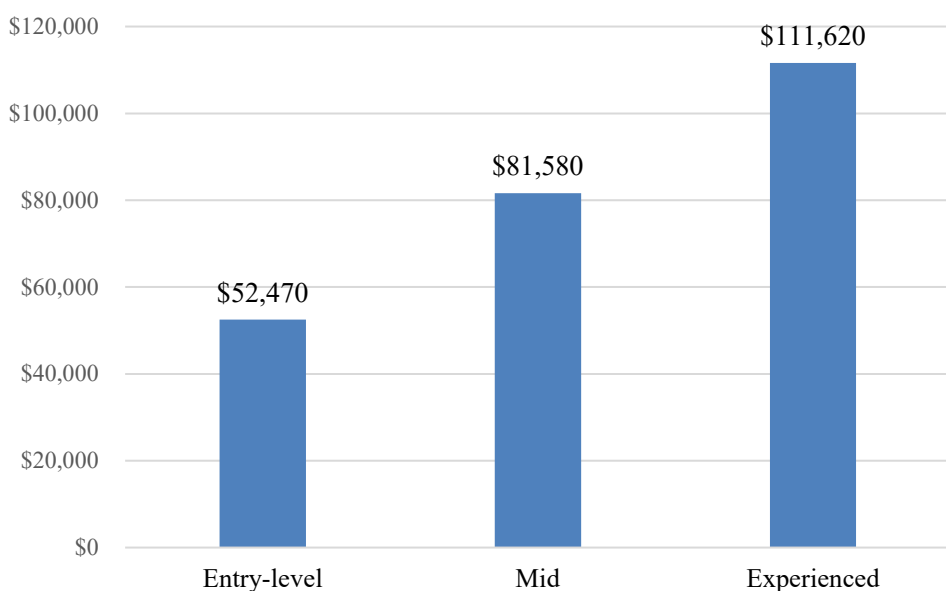
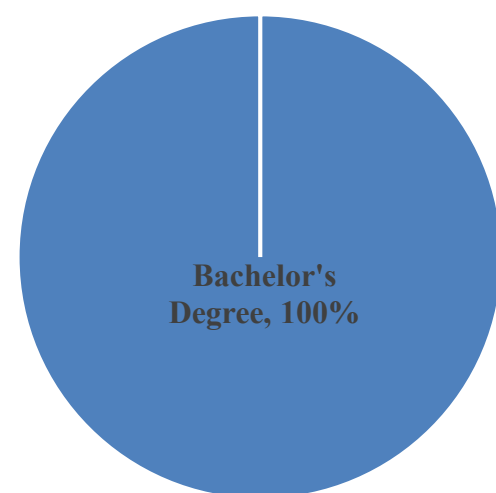


Chart 5: Most commonly-held educational credential for occupations in this field, NYC*****



The chart below reflects the gender and ethnicity of people who work in the largest three occupations within this field in NYC*****. Demographic distributions reflect a significant opportunity for educators, employers, and training providers to expand access to a set of well-paying occupations.

Chart 6: Gender and ethnicity distributions for top 3 occupations in this field in NYC

Occupation	NYC Emp.	Ethnicity %						Gender %	
		American Indian/Alaska Native	Asian/Pacific Islander	Black	Hispanic	White	Multi-ethnic/Other	Female	Male
Software Developers	50,160	0	40	4	8	45	3	15	85
Graphic Designers	14,300	0	19	10	16	53	3	51	49
Web Developers	9,070	0	27	7	13	49	4	28	72

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:
<i>...program content?</i>	Charts 2, 4, 5, 8, 9
<i>...employability profile?</i>	Charts 8, 9
<i>...articulation agreement and, if applicable, affiliation agreement?</i>	Charts 5, 7, 9
<i>...work-based learning?</i>	Charts 1, 8
<i>...technical assessments?</i>	Chart 9
<i>...faculty certification and, if applicable, professional licensures?</i>	Charts 8, 9

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 content
 Employability profile
 Articulation agreement
 Technical assessments
 Work-based learning
 Faculty certification
 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 our 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: bit.ly/2O2QIGn
- CareerOneStop labor market data explorer: www.careeronestop.org

Technical Notes & Data Sources:

* “Graphic Design, UX Design, and Web Design” occupations have been operationalized as the following 2010 Standard Occupation Classification (SOC) codes:

SOC code	Occupation
15-1131.00	Computer Programmers
15-1132.00	Software Developers, Applications
15-1134.00	Web Developers
15-1199.10	Search Marketing Strategists
15-1199.11	Video Game Designers
27-1024.00	Graphic Designers

** These analyses were conducted using the Burning Glass Labor Insight proprietary web-based research platform. The data include job ads posted by recruiting firms.

*** New York City 2016-2026 long-term employment projections are determined by New York State Department of Labor (NYSDOL). These 6-digit SOC occupation categories include the following more detailed occupations:

Graphic Designer / Desktop Publisher
 User Experience (UX) Designer
 User Interface / User Experience (UI / UX) Designer
 User Interface (UI) Developer
 Search Engine Optimization Specialist
 User Experience (UX) Researcher
 Web Designer
 Video Game Designer
 Search Engine Optimization Manager
 User Interface (UI) Designer
 Pay Per Click Specialist
 User Interface / User Experience (UI / UX) Developer
 User Experience (UX) Developer
 Search Engine Marketing Specialist
 User Interface / User Experience (UI / UX) Manager
 Search Engine Marketing Manager
 Web Design Manager

**** NYSDOL, Occupational Employment Statistics (OES) estimates for New York City, first quarter of 2020 (May 2020 release). NYSDOL operationalizes “Entry Wage” as the average of the bottom third of wages, “Mid” as median wages, and “Experienced Wage” as the average of the top two thirds of wages.

***** U.S. Census, American Community Survey (ACS) estimates, NYC 2015-2019 5-year sample, IPUMS release February 2021.

***** Massachusetts Institute of Technology’s (MIT) Living Wage calculator, 2021 estimates for New York City

***** Demographics based on U.S. Census, American Community Survey (ACS) estimates, NYC 2015-2019 5-year sample, IPUMS release February 2021. Employment estimates are from NYSDOL OES (May 2020 release).

***** “Transferable skills” are defined as “skills used in one job or career that can also be used in another” (Cambridge Business English Dictionary, <https://dictionary.cambridge.org/us/dictionary/english/>)

***** Note: Jobs in the Graphic Design, UX Design, and Web Design field may require technical skills and credentials rather than certificates. Examples: In-demand technical skills and credentials for Web Developers include JavaScript, Software Development, Cloud Computing, HTML5, Web Application Development, SharePoint, Microsoft 0365 Power Apps, Adobe XD Sketch, Data Visualization, PHP programming language, and UX/UI. In-demand technical skills and credentials for Software Developers include Software & Application Development, UX/UI, React.js Development, Java, SQL, JavaScript, Python, Linux, Git, HTML5, and Microsoft 0365 Power Apps. These top technical skills and credentials are excerpted from the *High School Intern Job Description* tools previously created by LMIS for NYCDOE in 2020: “Information Technology: Software Engineering Web Developer Intern” and “Information Technology: Software Engineering Web Developer Intern” based on mixed-methods research using Burning Glass Labor Insights software and qualitative data collected from field expert reviewers.