NYC Tech Talent Pipeline

Delivering quality jobs for our people and quality talent for our businesses



Agenda

Information and Data Sharing:

- Brief overview of the City's new Tech Workforce Development Strategy
- Sharing new CUNY 2x Tech data and outcomes

New Faculty / Departmental Opportunities:

- New RFP for the next round of CUNY 2x Tech
- TTP Faculty and Departmental grants \$420,000 in total
- STEM Pedagogy Institute 30 faculty fellowships
- Accessibility Faculty Fellowship 7 faculty fellowships

Request:

"Technology Access" research survey



Information & Data Sharing

NYC Tech Workforce Development Strategy

Vision

New Yorkers have equitable opportunities, supports, and effective pathways to access and thrive in careers in the tech workforce, and employers in New York have access to the highquality and diverse tech talent they need to stay competitive.



NYC Tech Workforce Development Strategy

Principles

Equity-Focused

Build equity in the tech sector by removing systemic barriers and mitigating disparities in access and outcomes for historically underrepresented populations

Industry-Informed

Work closely with industry to ensure local talent becomes central to NYC hiring practices and that there is sustained involvement in the design and delivery of all workforce initiatives

Human-Centered

Design based on the worker experience as well as key institutional actors who are critical players supporting tech talent

Evidence-Based

Apply the principles of evidence-based policy to scale what works and measure what matters

Innovating for the Future

Endeavor to innovate and de-risk workforce development and skills development models that address longstanding challenges



NYC Tech Workforce Development Strategy

Goal #1: Prepare and position New Yorkers for roles in the tech sector by delivering effective tech education that is aligned with industry needs

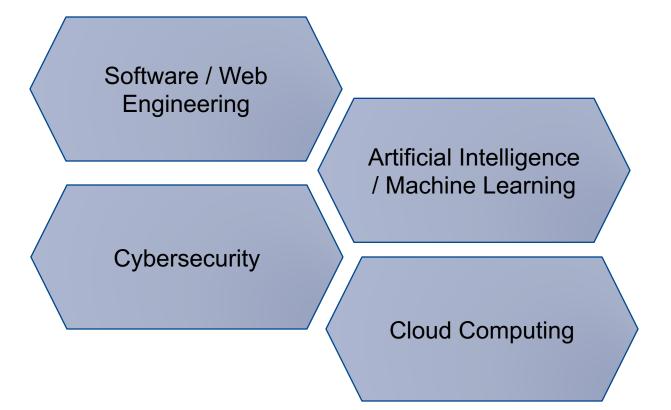
- **Strategy 1:** Provide all public school students (3K-12) with technology education, experiential learning opportunities, and career pathway exposure [Primary Partner: DOE]
- Strategy 2: Build the capacity of public higher education entities and support innovation towards developing talent for in-demand occupations [Primary Partner: CUNY]
- Strategy 3: Improve/scale workforce training programs delivered by other public, for- and nonprofit workforce development/training partners in the community [Primary Partner: CBOs and other for-/non-profit training providers, including bootcamps]







New Data on Top In-Demand Tech Occupational Clusters





New Data on Tech Internships

Where the internships are:

- 70% Web Dev
- 15% Data Analysis
- 15% "everything else"

For students to land internships, they need proficiency in both Web Dev and Data Structures **prior to the start of their junior year**.



Key Data Findings from "CUNY 2x Tech"

- CUNY CS graduates with <u>internships</u> were 3.69 times more likely to secure a job offer than candidates without an internship
- CUNY CS graduates who had a full-time <u>Academic Advisor</u> were 2.81 times more likely to secure an internship than candidates without such an advisor
- CUNY CS graduates who took at least one <u>Tech-in-Residence Corps</u> class were 2.06 times more likely to secure a job offer than candidates who had not taken such a class
- <u>Having a full-time Academic Advisor</u> reduces time-to-graduation from
 5.85 years to 4.2 years



New Faculty & Departmental Opportunities



TTP Faculty Grants (2023)

To better position CUNY tech students for success in graduating and connecting to careers in the field, the Tech Talent Pipeline (TTP) solicited proposals from CUNY Computer Science Faculty and Departments for the following grant opportunities:

Category	Grant	# Grants	Unit Cost	Total
Industry-aligned Curriculum	"Career Success" Course Innovation grant	15	\$5,000	\$75,000
	Internship Preparation Course grant	8	\$15,000	\$120,000
Diversity, Equity, & Inclusion	Broadening Participation in Computing (BPC) grant	10	\$10,000	\$100,000
	Transfer Student Remediation grant	5	\$15,000	\$75,000
Experiential Learning	Experiential Learning grant	5	\$10,000	\$50,000
			TOTAL	\$420,000



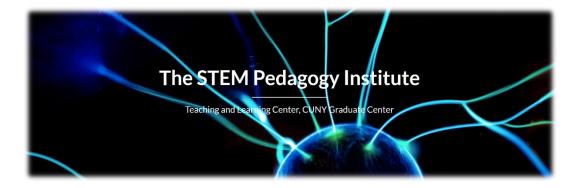
Faculty Fellowships – STEM Pedagogy Institute

Launched at the Graduate Center in 2022, the STEM Pedagogy Institute brings together a cohort of <u>30 faculty fellows</u> each year from across CUNY's STEM disciplines to support faculty in implementing <u>Inclusive- and Employment-focused pedagogy</u> in their classrooms.

Fellows will receive a direct stipend as well as ongoing support for research, publication, and conference participation.

Applications will be solicited for next year's faculty fellowships in May.

More information can be found here: https://spi.commons.gc.cuny.edu/





Faculty Fellowships – Accessibility

Launched in January 2023, the "Teach Access" Faculty Fellowship Program brings together a cohort of <u>7 faculty fellows</u> each year from across CUNY's CS Departments to collaborate with 7 faculty fellows from Cal State University to <u>infuse Accessibility into CS coursework</u>.

Fellows will receive a direct stipend as well as additional grant opportunities and ongoing support for research, publication, and conference participation.

Applications will be solicited for next year's faculty fellowships in May.

More information can be found here: https://teachaccess.org/





New RFP for "CUNY 2x Tech"

- Three new colleges will be selected to receive a 3-year investment (FY24-26) of approximately ~\$2 million per college
- RFP will be issued in April 2023
- Proposal Reviews and Interviews will take place in May-June 2023
- Final selections will be made by July 2023

Recognizing that each college and CS Department has unique characteristics, challenges, and needs, the goal of the RFP is to solicit your ideas for what will help prepare your particular students for jobs.

That said, some of the types of line-items that we anticipate supporting include:

- 1. New Faculty line
- 2. Academic Advisor / Career Coach
- 3. Industry Engagement Lead
- 4. Tech Equity Lead
- 5. Faculty stipends

... AND MORE!



Additional Opportunities

This semester, **CSI** is deploying a **Peer-enhanced Blockchain-based Learning Environment** (a.k.a. - PEBBLE) underpinned by advanced machine learning with the goal of improving student academic outcomes.

• An NSF proposal has been submitted to scale this initiative to additional CUNY campuses and courses.

Amazon Web Services is launching a National Workforce Coalition of education institutions, governments, and employers looking to jointly "cloudify" technical curriculum to prepare students for local in-demand roles.

- This work is being kicked off in New York by QCC.
- AWS has secured commitments to support CUNY CS applied learning initiatives from New York employers including American Express, Accenture, Bank of America, BNY Mellon, Bloomberg, PwC, EY, KPMG, Deloitte and Citi.



Request



Technology Access Research

This year, we funded a research project led by four CUNY faculty to explore Technology Access issues among CUNY CS students (i.e. – laptops, software, and broadband access).

We would sincerely appreciate it if you can help us circulate this IRB-approved survey to CS students at the following colleges:

- BMCC
- Laguardia
- City Tech
- CSI
- CCNY
- Queens College

https://www.surveymonkey.com/r/VKQJJCM

THANK YOU!!!

THE FACEBOOK WALL What's on your mind?

THANK YOU