



Business-Higher Education Forum

National Higher Education and Workforce Initiative

Creating Solutions. Inspiring Action.®

About the Business-Higher Education Forum

The Business-Higher Education Forum (BHEF) is a membership organization of CEOs, college and university presidents, and other leaders who collaborate and form strategic partnerships to develop a highly-skilled future workforce.

BHEF Value

BHEF members work together to:

- Create undergraduate pathways to increase baccalaureate attainment,
- Improve alignment between higher education and the workforce, and
- Produce a diverse, highly-skilled talent pool to meet demand in emerging fields.

BHEF members gain value from:

- Opportunities to form purposeful peer relationships between business or academic counterparts,
- Access to BHEF's expertise and regional work, and
- Insight on in-demand high skill trends, collaboration best practices, and case studies.

**Builds Action-Oriented
Relationships**



**Strengthens Members' Workforce
Initiatives**



**Helps Practitioners Navigate
Emerging Trends and Challenges**



Higher Education and Workforce Initiative Strategy

What are the supply challenges?

- Innovation and competition increasingly rely on new and emerging fields
- There is an increase in competition for talent
- Increased need to recruit and retain a diverse workforce

What is BHEF's strategy?

- Deploy a model of strategic business engagement with higher education to shift from transactional relationships to strategic partnerships to develop talent ecosystems
- Create undergraduate career pathways that satisfy employer demand for a high-skilled workforce, especially for women, minorities, and veterans

Why does this strategy work?

- BHEF has conducted extensive research to understand the interventions and strategies that work best to support the success of undergraduate students
- BHEF has successfully implemented this strategy, beginning with cybersecurity at the University of Maryland

BHEF's Data Science and Analytics (DSA) Strategy

Talent Development Models

Method of Inquiry

- Integrated into current courses across disciplines
- Faculty empowered to embed DSA in courses, use DSA in research, and ask new set of questions through DSA

Core Requirement

- Offered as quantitative sciences course to all first or second year students regardless of major
- Two course sequence – employer-engaged foundations course leading to applied research experience (ECURE)

New Credentials and Pathways

- Development of new industry-engaged credentials including majors, minors, concentrations, and certificates
- Connection of DSA competencies to domain knowledge
- Credential that industry can recognize and hire against

Employer Engagement

- Articulation of needs across sectors and disciplines
- Input and validation of competency maps and curriculum
- Provide research questions and data sets
- Create a robust talent pipeline aligned to industry needs
- Strengthen higher education partnerships
- Engage human resources to align hiring practices to workforce needs and new education offerings

Skills Continuum

Example: *Data Science and Analytics*

As the field evolves, definitions are being developed to convey differences in the type and level of skill required across the spectrum of data science and analytics workforce needs.

In-depth data science and analytics skills

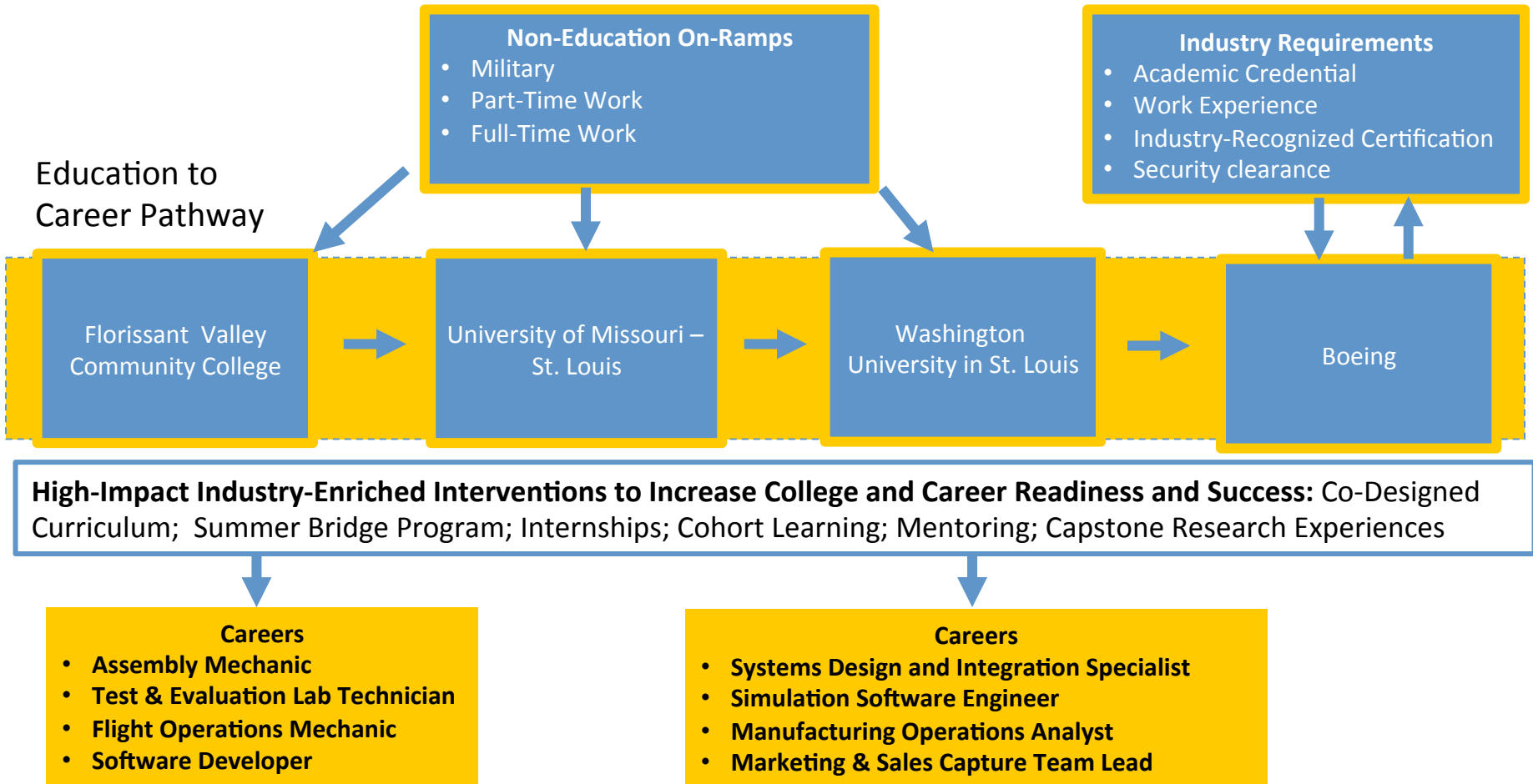
Basic data science and analytics skills

Data Science and Analytics-Enabled Professionals

A student graduating from a postsecondary institution 'enabled' in DSA has the individual and team skills necessary to identify appropriate data and request, consume, capture, and synthesize data and information to develop and communicate data-driven insights that drive value.

Business Engagement in a Community with Chronic Unemployment - Ferguson, Missouri

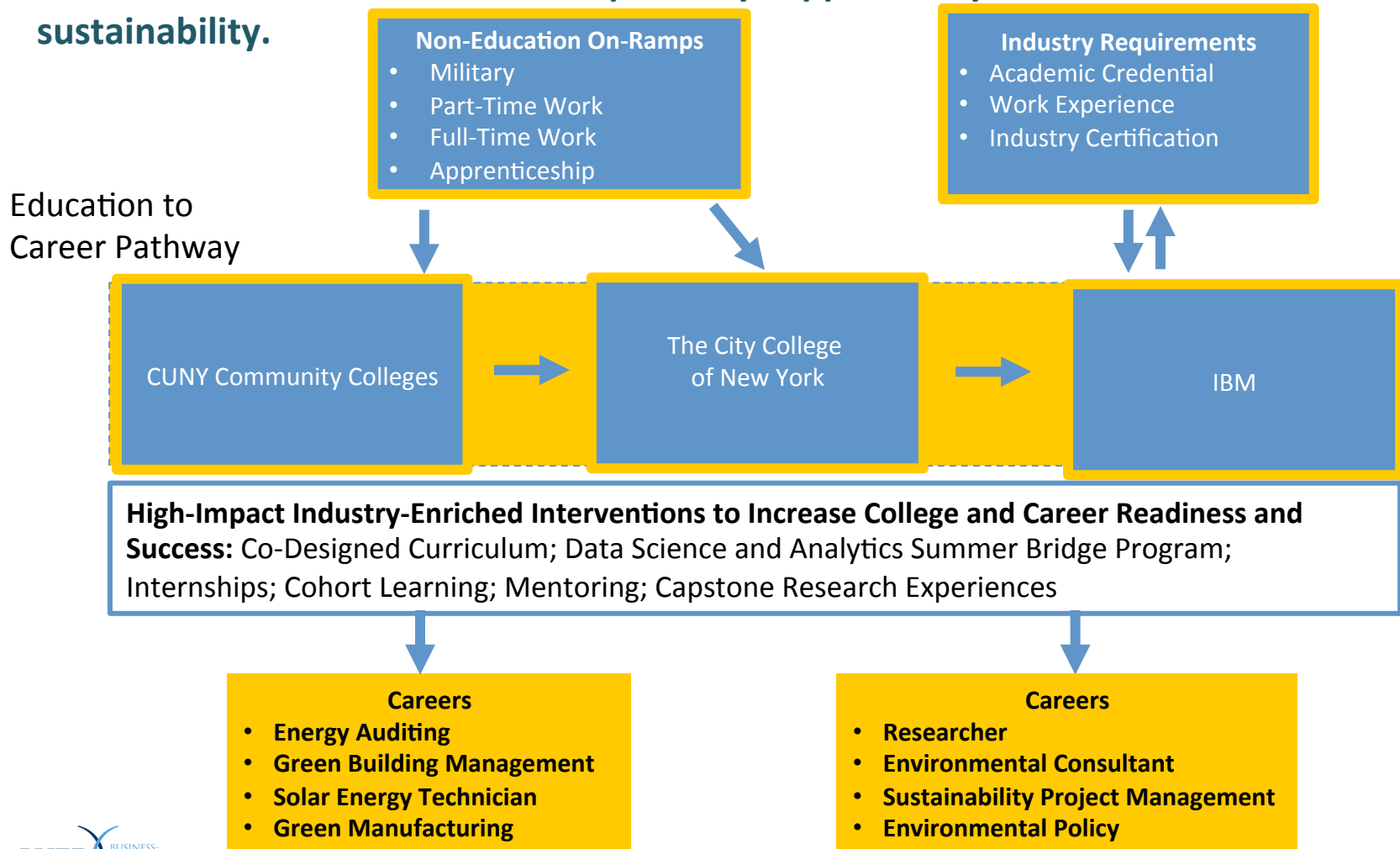
Students entering Florissant Valley Community College’s Engineering Science program have defined clear pathways to both careers and further educational opportunities.



Green Career Talent Ecosystem

The Bronx, New York

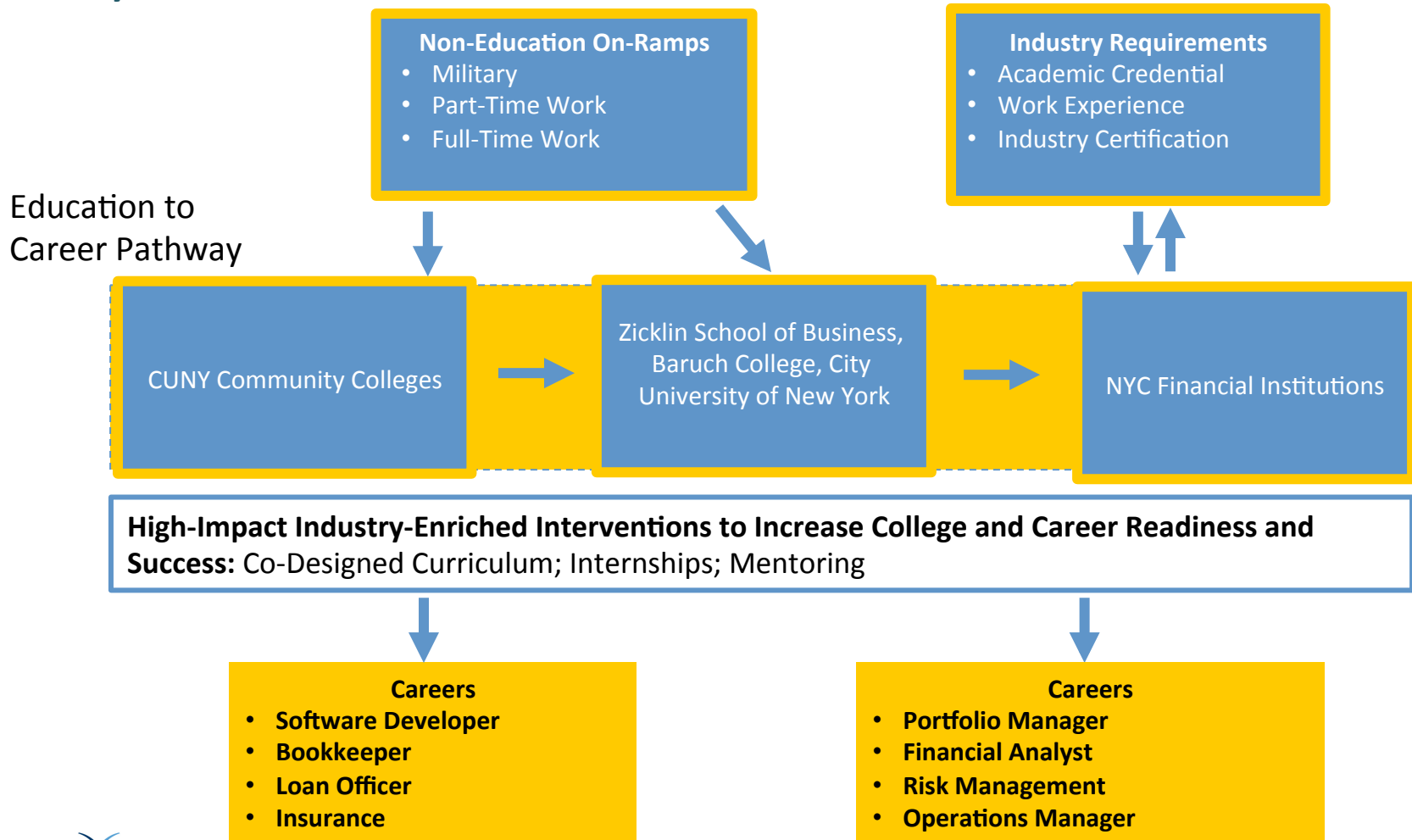
Students transitioning from the CUNY Community College System to The City College of New York enter a career-oriented pathway supported by IBM in urban resilience and sustainability.



Financial Services Career Pathways

New York City-Wide

Students in the CUNY System receive industry-validated education in data science and analytics related to careers in business and financial services.



BHEF New York City Data Science Task Force

Building New Employer-Driven Undergraduate Pathways to Increase Educational and Employment Opportunities for Underserved NYC Students

- Define employer needs in data science and analytics across multiple sectors (e.g. financial, retail, high tech, public agencies)
- Map competencies and skills required for the “data-enabled” student
- Focus on the first two years of college and explore connections between community colleges and four-year institutions
- Expand capacity of academic institutions to deliver quality data science education
- Invest in new pathways to increase employability of diverse populations
- Develop innovative applied learning opportunities in data science (e.g., employer-enhanced research courses)