



■ Overview

The Da Vinci Science Center STEAM Career Pathways Program is a comprehensive initiative designed to engage **students in grades 6-12** with STEAM fields that will address the challenge of **advancing educational attainment and employment opportunities for traditionally underrepresented groups** in the Lehigh Valley.

■ Position Statement

The Da Vinci Science Center is pivotal in the Lehigh Valley's career readiness ecosystem through its STEAM Career Pathways Certificate Program. Aimed at enhancing STEAM and job-readiness skills among youth in low-income areas, the Science Center acts as a crucial bridge connecting students, families, educators, businesses, and community partners. By fostering a workforce pipeline, it addresses the dual needs of students seeking careers and employers requiring skilled labor. This initiative not only positions Da Vinci Science Center as a leader in STEAM education but also strengthens the region's economic vitality by making education and employment opportunities accessible to all, ensuring community-wide success and sustainability.

■ Expected Accomplishments for the STEAM Career Pathways Program

- Engage students in career awareness, preparation, and acquisition through hands-on activities, mentorship opportunities, workshops, internship experiences and direct interactions with STEM professionals who have diverse backgrounds and levels of experience.
- Offer opportunities to practice core and transferable 21st century skills: communication, collaboration, critical thinking, creativity.
- Increase science capital while building STEAM leadership, employability skills, and encouraging youth to pursue further studies through the STEAM Career Pathways Certificate Program completion.
- Expand opportunities for STEAM learning through delivered programs related to digital and financial literacy, innovation, and entrepreneurship.

■ Certificate Program Completion Credentials

- Successfully participate and complete a series of career readiness educational programs and field trips to real work environments, ranging from tech companies, engineering firms, and healthcare facilities, to manufacturing organizations and research labs.
- Complete volunteer experience to further develop students' skills in community engagement: agency, confidence, social responsibility.
- Complete a 120-hour paid internship that deepens students' understanding of their chosen pathway, including the successful completion of an individual project and/or learning portfolio.

■ Conclusion

The Da Vinci Science Center's STEAM Career Pathways Program is a transformative initiative for the youth of the Lehigh Valley, particularly those in the Allentown School District, located in Pennsylvania's third-largest city which has an above-average unemployment rate. By engaging with this program and its collaborative partnering organizations, participants are equipped with meaningful work experiences and comprehensive exposure to diverse STEAM careers and pathways. Successfully completing the program not only enhances their job readiness but also addresses the critical workforce needs of the region, paving the way for a brighter, more prosperous future for its communities.



Personal Interests
& Career Planning

Growth
& Advancement

Employability
Skills

Career Awareness
and Preparation

College & Career Ready

Grade 12

Dual Enrollment
Internships/Shadowing
Leadership Development
Coaching

Grade 11

Dual Enrollment
Internships/Shadowing
Leadership Development
Coaching

Grade 10

Educational Programs w/ Career Focus
Community Service
Mentoring
Job Shadowing

Grade 9

Educational Programs w/ Career Focus
Community Service
Mentoring
Job Shadowing

Grade 8

Educational Programs
Portfolio Building
Career Field Trips
Meet/Interview STEM Professionals

Grade 7

Educational Programs
Portfolio Building
Career Field Trips
Meet/Interview STEM Professionals

Grade 6

Educational Programs
Portfolio Building
Career Field Trips
Meet/Interview STEM Professionals

STEAM Career Pathways Certificate Program

Investing in Youth and Our Future Workforce