

Syracuse City School District

HIGH SCHOOL CHOICE

Career and Technical Education Program

- Programs of choice
- 9th 12th pathway model
- College-level credits and degrees
- Industry Recognized Credentials

Automotive Technology

Barbering

Business Technology

Computer Forensics

Construction Technology

Cosmetology

Creative Expression and Design

Culinary Arts

Cybersecurity

Electrical Trades

Emergency Medical Technician

Fire/Rescue

Forensic Sciences

Geospatial Technology

HVAC/R Heating Ventilation Air Conditioning

and Refrigeration Clean Energy

Law Enforcement

Manufacturing Pre-Apprenticeship

Media Communications

Medical Assisting

Natural Resources

Urban Teaching Preparation Program

Welding



P-TECH Programs

Pathways in Technology Early College High School

- NYS grant funded programs
- Partnership with SCSD, Community College and Industry
- Pathway to an Associates Degree and first inline for jobs!
- No cost to student or parent/guardian

- Clinical Laboratory Technology
- Health Information Technology
- Health Professions
- Remotely Piloted Aircraft Systems
- Computer Information Systems
- Electrical Technology
- Mechanical Technology
- Semiconductor Microchip Technology



STEAM High School Programs

- Programs of choice
- 9th 12th pathway model
- College-level credits and degrees
- Industry Recognized Credentials

- Animation and Game Design
- Business Entrepreneurship
- Construction Management
- Data Analytics
- Entertainment Engineering
- Robotics and Automation
- Semiconductor
 Manufacturing Technology
- Performing Arts
- Visual Arts



High School Choice Options

- Not Career and Technical Education programs
- High School pathway programs
- 4-year programs
- College and Career preparation

- Biotechnology Program
- Navy National Defense Cadet Corps
- International Baccalaureate





Public Service Leadership Academy @ Fowler

Barbering
Business Technology
Computer Forensics
Cosmetology
Cybersecurity
Electrical Trades
Emergency Medical Technician

Fire Rescue
Forensic Science
Geospatial Technology
Law Enforcement
Navy National Defense Cadet Corps
(NNDCC)

P-TECH Programs

Remotely Piloted Aircraft Systems Computer Information Systems



PSLA @ Fowler > Entrepreneurial Academy

Barbering

Career Opportunities

- Hair Stylist
- Barber
- Shop Owner
- Manager



This program is designed to prepare students for entry-level employment or post-secondary education. Students will learn the important skills necessary to prepare for this career.

PSLA @ Fowler > Entrepreneurial Academy

Business Technology

Career Opportunities:

- Accountant
- Advertising
- Data Analyst
- Banking
- Business Administration
- Communications/Info Technology
- Entrepreneurship
- Human Resources
- Legal
- Marketing
- Public Administration
- Public Relations
- Sales/Business Development
- Transportation & Supply Logistics



The Business Technology programs will provide skills necessary to pursue business or finance degrees in college, learn the fundamentals of running a successful business and develop career ready practices.



PSLA @ Fowler > Homeland Security Academy

Computer Forensics

Career Opportunities

- Information Technology
- Law Enforcement
- Computer Forensics Specialist
- Digital Forensics Expert



Computer forensics is the application of investigation and analysis techniques to gather and preserve evidence from computing devices in a way that is suitable for presentation in a court of law.



PSLA @ Fowler > Entrepreneurial Academy

Cosmetology Pathway

Career Opportunities

- Hair Stylist
- Makeup Artist
- Salon Owner/Manager
- Nail Technician
- Esthetician
- Product Educator
- Color Specialist



This program is designed to prepare students for a career in the beauty enhancement field. Classes follow the NYS approved curriculum required for taking the state licensing exams.

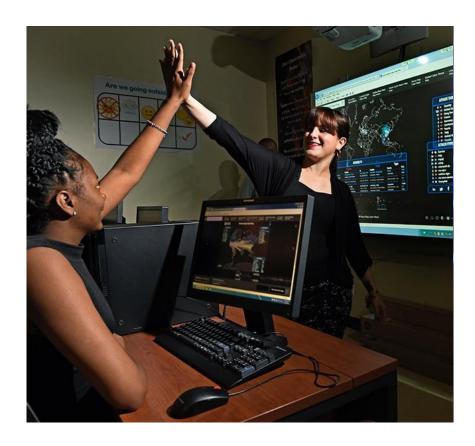


PSLA @ Fowler > Homeland Security Academy

Cybersecurity Pathway

Career Opportunities

- Cyber Threat Analyst
- Security Manager
- Information Security Analyst
- Information Technology



Cybersecurity involves the monitoring of networks for security breaches, responding to cyber attacks, and gathering data and evidence to be used in prosecuting cyber crime.



PSLA @ Fowler > Entrepreneurial Academy

Electrical Trades

Career Opportunities

- Electrician
- TransmissionTechnician
- Lineman
- Residential Wireman



This program provides the hands-on skill development and technical training to secure entry-level employment or higher in the electrical trades field.

Emergency Medical Technician (EMT)

Career Opportunities

- Emergency Medical Technician
- Paramedic
- Medical Professions
- Emergency Room
 Technician
- Patient Care Technician



EMT program trains students to function independently in a medical emergency and provide pre-hospital care at the scene of an emergency and en route to a hospital.



Fire Rescue

Career Opportunities

- Firefighter
- Fire Protection Professional
- Industrial Fire Safety Professional
- Fire Investigator/Fire Inspector
- Emergency Management
- Fire Code Enforcement
- Forestry Fire Prevention Specialist



Students will learn about fire prevention and develop critical fire skills necessary to handle the challenges and demands of fire protection. Students will also learn skills needed to react effectively in an emergency situation. Students will graduate with several industry credentials.

Forensic Science

Career Opportunities

- Evidence Technician
- Police Detective
- Medical Examiner
- Crime Scene Investigator
- Private Investigator
- Forensic Photographer
- Fingerprint Technician
- Forensic Scientist



Forensic sciences play a vital role in the criminal justice system by providing investigators with scientifically based information through the analysis of physical evidence.



PSLA @ Fowler > Homeland Security Academy

Geospatial Technology

Career Opportunities

- Geospatial Technician
- Geospatial Analyst
- Geospatial Software Developer
- Web Application Designer
- Satellite & Aerial Imaging Technician
- Forestry, Agriculture, & Natural Resource
 Manager
- Community & Urban Planning



Geographic Information System (GIS) professionals use information about geographical features, to visualize and assess real-world problems, in order to provide solutions.



PSLA @ Fowler > Military Science Academy

Navy National Defense Cadet Corps (NNDCC)

Career Opportunities

- Military Leadership
- Engineering and Applied Science
- Health Care
- Communications
- Environmental Health & Safety
- Human Resources/Social Work
- Legal/Law Enforcement/Security
- Mechanic & Repair Technicians
- Surface/Aviation/Special Warfare
- Transportation & Supply Logistics



The mission of NNDCC is to instill in students the values of citizenship, service to the United States, personal responsibility and a sense of accomplishment.



Law Enforcement

Career Opportunities

- Law Enforcement
- Private Investigator
- F.B.I. Agent
- State Trooper
- Secret Service Agent
- U.S. Marshall
- A.T.F. Agent



Students in the Law Enforcement pathway will learn to react appropriately and professionally to situations where the public might be at risk by manmade or natural emergencies. They will learn the tactics, theory and skills required of today's law enforcement professionals including training in DNA analysis, surveillance expertise, white-collar crime tactics, specialty services instituted since 9/11, cadet training



P-TECH: Remotely Piloted Aircraft Systems

Career Opportunities:

- Drone pilot
- Disaster Relief, Search & Rescue
- Law enforcement, Border patrol
- Oil & gas operations
- Agriculture, Forestry
- Engineering
- Computer Science
- Commercial contractors
- Film



The RPAS program prepares students to enter this fast-growing field. Students will participate in hands-on-learning, working with both simulators and real drones. They will learn the basic skills necessary for piloting, engineering and repairing RPAS.

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P-TECH:

Computer Information Systems

Career Opportunities

- Programmer
- Junior Systems Analyst
- Web site managers/designers
- Operations trainee
- Tech Support/Helpdesk
- Network trainee



Students in the CIS program will learn about information processing, networks, hardware, software applications and web publishing through hands-on activities.





Corcoran High School

International Baccalaureate Program

HVAC/R Heating Ventilation Air Conditioning and Refrigeration Clean Energy

Manufacturing Technology Pre-Apprenticeship Program

Urban Teacher Preparation Program

Welding Technology

P-TECH Semiconductor Microchip Technology



International Baccalaureate Diploma Program

- Rigorous college preparatory curriculum
- Promotes the education of the whole person; emphasizing intellectual, personal, emotional and social growth
- Receive up to 30 college credits and earn college sophomore status while still in high school!



Manufacturing Technology Pre-Apprenticeship

Training for careers in manufacturing technology. *In-demand jobs!*

- Machinists
- Electronic Assemblers
- Metal & Plastic Machine Operators
- Tool & Die Makers
- Mechanical Technician
- Quality Control Inspectors
- Forklift Operator
- Testing Technician



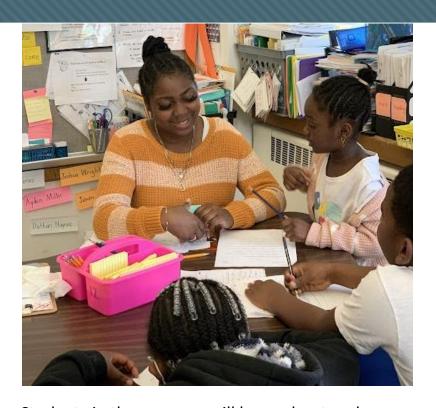
The program offers students the opportunity to work as a pre-apprentice in a manufacturing field of their choice. Students will receive assistance in matching up their interests and skills to a specific manufacturing career and will learn basic technical and career readiness skills that will prepare them for a Registered Apprenticeship.



Urban Teacher Preparation

Career Opportunities

- Classroom Teacher K-12
- Teaching Assistant
- Coach

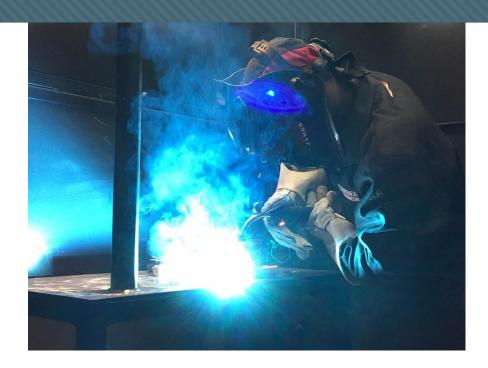


Students in the program will learn about and practice the unique skills required to be a successful educator in a diverse urban environment.

Welding Technology

Career Opportunities

- Welding
- Construction
- Fabrication



Learn the skills of welding through classroom and handson laboratory experience. Students will be prepared to certify through the American Welding Society standards of welding.



HVAC/R Heating Ventilation Air Conditioning Refrigeration Clean Energy

Career Opportunities

- HVACR Installer
- Construction
- Fabrication
- Maintenance
- Systems Designer
- Repair



HVACR technicians install, maintain, and repair heating, cooling, and refrigeration systems.

P-TECH: Semiconductor Microchip Technology

Career Opportunities

- Cleanroom
- Manufacturing
- Fabrication
- Maintenance
- Designing
- Inspection



Semiconductor Technicians help manufacture semiconductors with the use of special purpose furnaces, x-ray equipment, chemical baths, and equipment used to form circuitry and change conductive properties.





Institute of Technology at Syracuse Central High School

Automotive Technology

Biotechnology Program

Culinary Arts

Media Communications

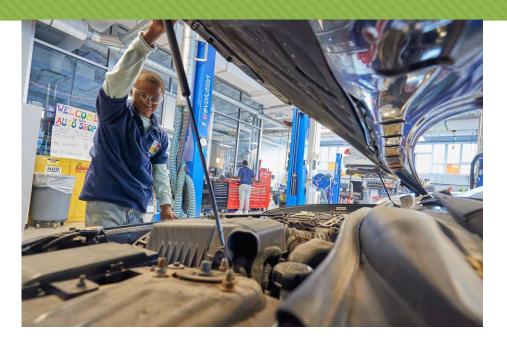
P-TECH Programs: Electrical Technology and Mechanical Technology



Automotive Technology

Career Opportunities

- Professional Mechanic
- Body Shop Technician
- Automotive Repair
- Garage Owner
- Maintenance Mechanic



Teaches diagnostics and repair of all automotive systems using modern tools and diagnostic equipment with an emphasis on engine performance, electrical systems, brakes systems, steering and suspension systems.

STEM Pathway: Biotechnology

Career Opportunities

- Physician
- Physician Assistant
- Medical Technology
- Biotechnology
- Environmental Science



In this STEM pathway, students will be exposed to several different levels of science and math courses. Students will begin earning college credits as early as their 9th grade and will earn a minimum of 24 college credits.

Excellent for students wishing to pursue a science or mathbased careers.



Culinary Arts

Career Opportunities

- Personal & Private Chef
- Catering
- Restaurant Owner
- Pastry Chef
- Line Cook
- Restaurant & Banquet
 Management



Students will learn the skills needed to excel in a career in the culinary professions including pastry/baking techniques, food preparation, restaurant management, and food and kitchen safety.



Media Communications

Career Opportunities

- Reporter
- Anchor
- Producer
- Editor
- Public Relations
- Advertising
- Spokesperson



Students will learn to work in a professional television studio, operate the school's news and communication network, create communication media of multiple formats (web-based, digital and print).



P-TECH: Electrical Technology

Career Opportunities

Electronics Technicians

Electronics Assembler

Engineering Assistants in Research, Design and Manufacturing

Test Technician

Sales and Service



Students will construct, test, analyze, trouble shoot and repair electrical and mechanical systems. Students will learn about electronics, industrial controls, instrumentations, power distribution and electronic hardware.



P-TECH: Mechanical Technology

Career Opportunities

- Mechanical Engineer
- Drafter
- Machinist/Tool and Die Maker



Students will construct, test, analyze, trouble shoot and repair mechanical systems. Students will learn about mechanical systems, computer-aided design and manufacturing systems.





Henninger High School

Health Careers Programs

Medical Assisting

<u>P-TECH Programs</u>: Clinical Laboratory Technology, Health Information Technology, Health Professions



Medical Assisting

Career Opportunities

- Medical Lab Technician
- Phlebotomist
- Nurse
- Case Manager
- Radiology Technician



Students who are interested in working in a health care environment with both patient care and medical technology.

P-TECH: Clinical Laboratory Technology

Career Opportunities

- Medical Laboratory Technicians
- Biological Technicians
- Research Technicians
- Phlebotomists
- Clinical Chemists



Students enrolled in the Clinical Laboratory Technology program will acquire the knowledge and technical skills that will prepare them for entry-level laboratory positions. Lab Techs are the front line in supporting the diagnosis for medical doctors.

P-TECH: Health Information Technology

Career Opportunities

- Health Information Technicians
- Medical Coding Specialist
- Data or Systems Analyst
- HIPPA Privacy Officer



Health information Technology (HIT) is information technology applied to health care. HIT makes it possible for health care providers to better manage patient care through secure use and sharing of health information. Students will develop skills in the use of information technology and patient care management.

P-TECH: Health Professions

Career Opportunities

- Nursing
- Medical Imaging
- Physician Assistant
- Radiation Therapy
- Respiratory Therapy
- Agricultural and Food Scientists
- Epidemiologist
- Physicians and Surgeons
- Veterinarians



Health care professions are among the fastest growing occupations in the United States. This program will help students prepare for a health profession career. In this college preparatory program, students will learn while being exposed to a variety of professions through job shadows and classroom experience.



Nottingham High School

Business Technology

Construction Technology

Creative Expression and Design

Natural Resources



Business Technology

Career Opportunities:

- Accountant
- Advertising
- Data Analyst
- Banking
- Business Administration
- Communications/Info Technology
- Entrepreneurship
- Human Resources
- Legal
- Marketing
- Public Administration
- Public Relations
- Sales/Business Development
- Transportation & Supply Logistics



The Business Technology programs will provide skills necessary to pursue business or finance degrees in college, learn the fundamentals of running a successful business and develop career ready practices.



Construction Technology

Career Opportunities

- Construction Trades
- Framing Carpenter
- Craft Laborer
- Mason
- Drywall Finisher



The Construction Technology Program teaches students the essentials skills needed to begin a career in the in the building and construction trades. Upon program completion, SCSD students will have mastered hands-on skills and obtained industry credentials.

Creative Expression and Design

Career Opportunities

- Communications Design
- Design Studies
- Environmental and Interior Design
- Fashion Design
- Industrial and Interaction Design



The Creative Expression and Design program is partnered with the Syracuse University School of Design. This program teaches students the essential skills needed to begin a career in design. Students will work with professionals from the Syracuse University School of Design and Syracuse-based technology companies.

Natural Resources

Career Opportunities

- Environmental
 Engineer/Scientist/Specialist
- Natural Science Manager
- Wildlife Biologist
- Soil Science
- Hydrologist
- Waster Management
- Urban Planner



Students will develop an integrated view of the biological, ecological and social dimensions of the environment.

Skills acquired will include planning and design, conservation management, bio-processing engineering, chemistry, land surveying and park maintenance.



Regional STEAM High School

Animation and Game Design **Business Entrepreneurship Construction Management Data Analytics**

Entertainment Engineering Performing Arts Robotics and Automation Semiconductor Manufacturing Technology **Visual Arts**



Animation and Game Design

Career Opportunities

- Webmaster and Developer
- Video Game Designer
- Animator
- Multimedia
- Application Developer
- Streaming Video and Digital Film Producer

- Art Director
- Film and Video Editor
- Graphic Artist
- Digital Media
- Photographer
- Social Media Specialist
- Pro Gaming Player
- Esports Attorney
- Public Relations
- Network Engineer



Students will have the opportunity to earn micro credentials in digital applications, such as Adobe Certified Associate (ACA), App Development with Swift Certification, Avid Pro Tools Certifications, AWS Certified Cloud Practitioner, Certified Internet Web (CIW) Certifications, and Microsoft 365 Certifications to add to interactive digital portfolios of their work.



Business Entrepreneurship

Career Opportunities

- Entrepreneur
- Intrapreneur
- Chief executive officer
- General managers
- Business and development manager
- Operations managers

- Management analysis
- Public organization manager
- Manufacturing manager
- Purchasing manager
- Small business owner



The Business Entrepreneurship program will prepare students for careers and further education and training in the world of business. Students will learn concepts and techniques for planning entrepreneurial ventures, using design thinking and business model development.

Construction Management

Career Opportunities

- Project Manager
- Building Inspector
- Code Enforcement Officer
- Construction Manager
- Contractor
- Cost Estimator
- Field Engineer
- Heavy Equipment Operator



Students in our program are prepared for careers and further education and training in the construction industry, It provides a balanced focus on technical construction knowledge, such as methods, materials, systems, and layouts, as well as managerial, financial, and planning skills necessary to complete construction projects successfully.



Data Analytics

Career Opportunities

- Data Analyst
- Business Analyst
- Financial Analyst
- Data Scientist
- Data Engineer
- Operations Analyst
- Risk Analyst
- Research Analyst
- Data Journalist
- Business Intelligence Analyst
- Marketing Analyst
- Transportation Logistics Specialist



Students in this program will learn the fundamentals of data science, its currency in the job market, and its applicability to everyday life through hands-on projects with real-world datasets. Students will learn about the reasons why data is collected, and the questions data analytics is used to answer. Students will be introduced to various ways of collecting data and the effect that data collection has on the interpretation of the patterns they discover.



Entertainment Engineering

Career Opportunities

- Set Design and Construction
- Event Production
- Visual Production Engineer
- Lighting Design Engineer
- Audio and Sound Engineer
- Theater Production Manager
- House and Stage Manager
- Costume Designer
- Prop Manager



Students will learn techniques used by industry professionals. Key areas of instruction and experience include elements of design; set design/ dressing and construction; wardrobe and costume design and production; audio and lighting design and implementation; production, stage and front of house management; analysis of technical requirements.



Performing Arts

Career Opportunities

- Actor
- Dancer
- Musical theater performer
- Music therapist
- Teacher
- Theater director
- Screenwriter
- Arts administrator
- Theater stage manager
- Casting director
- Director

Focus of Study

- Band
- Chorus
- Orchestra
- Dance
- Theatre
- Music Theory
- Piano
- Digital Music





Students in our program will work in a professional environment and have opportunities to perform in the historic, fully renovated Lincoln Auditorium. Students will build their technical and expressive skills.



Robotics and Automation

Career Opportunities

- Electromechanical Technician
- Automation Technician
- Mechanical Engineer
- Robotics Operator
- Robotics Engineer
- Aerospace Engineer
- Computer Scientist
- Software Engineer
- Machine Learning Engineer



Students will learn the fundamentals of robotic technologies, its currency in the job market, and its applicability to everyday life. Students will gain an understanding of how robotic technologies impact the environment, society, and the economy.

Semiconductor Manufacturing Technology

Career Opportunities

- Semiconductor Manufacturing
- Technician
- Semiconductor Equipment
- Technician
- Fab Manufacturing Technician
- Semiconductor Engineer
- Test Engineer
- Etch Process Engineer
- Material Handler
- Operations Manager
- General Manager



This program prepares students for careers in the semiconductor manufacturing industry. Students will be trained on state of-the-art industry standard equipment and work in a simulated clean room. The program is orientated for students to learn monitoring, sustaining, and improving equipment.

Visual Arts

Career Opportunities

- Architect
 Graphic designer
- Archivist Photographer
- Art Consultant Sculptor
- Art Editor
 Interior designer
- Art Gallery
 Design assistant
- Director Artist Fashion designer
- CartoonistSet designer
- Cinematographer

Focus of Study

- 2D Art
- Digital Art
- Photography
- Art History
- Portfolio

Preparation



Students in this program learn skills in 2 Dimensional and 3-Dimensional art. They will explore development of various mediums, concepts, and philosophies which include drawing, painting and other creative 2D media, ceramics, sculpture, printmaking and other 3D media.



What pathway will you

