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ERIE 1 BOCES

# **INSTRUCTIONAL PROGRAMS CATALOG**

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**CAREER AND TECHNICAL EDUCATION  
EXCEPTIONAL EDUCATION  
WORKFORCE DEVELOPMENT**



.....OUR.....  
**PURPOSE**

*is to*

**PROVIDE STUDENTS  
WITH A  
UNIQUE REAL-WORLD  
Interactive  
EXPERIENCE**

State-of-the-Art FACILITIES

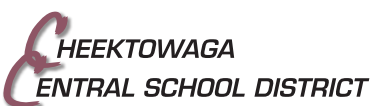
**HIGH QUALITY INSTRUCTION  
*and* A FOUNDATION FOR  
CAREER PATHWAYS**



# *Our Mission*

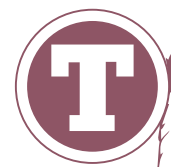
**We're committed to those we serve  
- students, staff and communities -  
by understanding, anticipating and responding to their needs.**

# COMPONENT DISTRICTS



Akron Central School District  
 Alden Central School District  
 Amherst Central School District  
 Cheektowaga Central School District  
 Cheektowaga-Sloan Union Free School District  
 Clarence Central School District  
 Cleveland Hill Union Free School District  
 Depew Union Free School District  
 Frontier Central School District  
 Grand Island Central School District  
 Hamburg Central School District  
 Kenmore-Town of Tonawanda Union Free School District  
 Lackawanna City School District  
 Lancaster Central School District  
 Maryvale Union Free School District  
 Sweet Home Central School District  
 Tonawanda City School District  
 West Seneca Central School District  
 Williamsville Central School District

*Thank you for your continued support!*



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# ACADEMIC CREDITS AND SERVICES

Erie 1 BOCES Career and Technical Education programs are built on core academics enhanced by emerging technologies. Credit bearing academic services are available at Harkness, Kenton, and Potter. Each 2-year CTE program offers a 4th unit in English, 3rd unit in math and/or 3rd unit in Science.

Requirements	CTE Pathway	CDOS 4+1 Pathway	CDOS Credential
Exit Award	Regents Diploma	Regents Diploma	CDOS Credential (exiting credential or in addition to Regents or Local Diploma)
ESSA Score	2.0	1.5	0.5
Eligibility	All Students	All Students (Non-NYSAA)	All Students (Non-NYSAA)
Required Credits	22 Credits	22 Credits	None
Required Regents Exams	Pass 4 required Regents: <ul style="list-style-type: none"> <li>• ELA</li> <li>• Math</li> <li>• Science</li> <li>• Social Studies</li> </ul>	Pass 4 required Regents: <ul style="list-style-type: none"> <li>• ELA</li> <li>• Math</li> <li>• Science</li> <li>• Social Studies</li> </ul>	No Regents exam requirements but students must have access to Regents coursework.
CTE Requirements	Successful Completion of an SED Approved CTE Program: <ul style="list-style-type: none"> <li>• Min. 3 credits of CTE</li> <li>• WBL Experiences</li> <li>• Employability Profile</li> <li>• National Technical Assessment</li> </ul>	Erie 1 BOCES can fulfill the following CDOS components: <ul style="list-style-type: none"> <li>• 216 Hours of CTE aligned to Commencement Level CDOS Standards</li> <li>• 54 Hours of Work-Based Learning Experiences</li> <li>• Development of an Employability Profile</li> <li>• Erie 1 BOCES does not complete the Career Plan</li> </ul>	

## Important Notes for Schools:

- The District, not Erie 1 BOCES, issues the CDOS Credential.
- Erie 1 BOCES is not responsible for the completion of a Career Plan.
- CDOS is embedded in ALL CTE and Career Exploration programs. However, CDOS components are fulfilled only when students complete the training sequence, ie. Building Trades Years 1 and 2, Occupational Education Years 1 and 2. For Career Exploration students in need of CDOS, please speak to an E1B School Counselor.
- Employability Profiles and Work Based Learning hours will be provided to the district upon request.
- All 2-year New York State approved CTE programs offer National Technical Assessments toward a 4+1 Regents Pathway.

## Liaison Teacher Services

Liaison teachers ensure the transition of special education services between the District and CTE. They share student progress with District special education teachers and counselors. Liaison teachers represent CTE teachers at students' CSE meetings and secure student IEPs from the District to assist CTE teachers with their interpretation and implementation. Liaisons provide instructional and behavioral strategies and arrange all testing accommodations.

# INTEGRATED ACADEMIC CREDIT

CTE Program	Integrated ELA Credit	Integrated Science Credit	Integrated Math Credit	CFM Credit	4+1 Pathway	Other Credits Per Year
Animal Science	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Auto Technician Training	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Aviation Technology	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Baking and Pastry Arts	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Barbering	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Building Trades	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Collision Repair	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Connections: Health Related Careers (New Visions)	-	-	-	-	-	ELA 12 (1.0) PIG / Economics (1.0) Anatomy, Physiology and Disease (1.0) Internship (1.0)
Cosmetology	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Criminal Justice	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	PIG (0.5)
Culinary Arts	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Cybersecurity and Networking	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Dental Laboratory Technology	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Digital Media	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Early Childhood Education	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	Integrated Parenting (0.5)
Electrical Systems	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Electronics and Computer Technology	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Emergency Medical Services	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	Integrated Health (.5)
Engineering and Robotics	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Enterprise and Entrepreneurship (New Visions)	-	-	-	-	-	ELA 12 (1.0) PIG/Economics (1.0) Internship (1.0) Public Speaking (1.0)
Fashion Design Technology	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Health Careers	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	Integrated Health (0.5)
Health Careers II (Basic Nursing Skills)	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	Integrated Anatomy and Physiology (0.5)
Legal Academy (New Visions)	-	-	-	-	-	ELA 12 (1.0) PIG / Economics (1.0) Criminal Justice (1.0) Internship (1.0)
Heating, Ventilation and Air Conditioning	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Sports Science Careers	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Video Production and Recording Arts	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Web Technologies and Game Programming	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Welding	0.5/yr	0.5/yr	0.5/yr	0.5/yr	✓	
Zoo Wildlife and Conservation Careers (New Visions)	-	-	-	-	-	ELA 12 (1.0) PIG / Economics (1.0) Internship (1.0) Zoology (1.0)

## Important Notes:

- Academic credit is deducted from the 3.75 CTE credits awarded to CTE students annually.
- A 3rd Unit of Math is contingent upon students earning 2 math credits at their home district and passing the required Regents exam.
- A 3rd Unit of Science is contingent upon students earning 2 science credits at their home school and passing the required Regents exam.
- A 4th unit of English credit is contingent upon students earning 3 English credits at their home district and passing the required Regents exam.



# STUDENT HONORS AND ORGANIZATIONS

## SkillsUSA

Participation in SkillsUSA is open to all students enrolled in a Career and Technical Education program. At the local level, the club arranges various fundraisers to support community service projects and participates in various conferences and competitions at the local, state, and national level.

## National Technical Honor Society

NTHS was established to honor excellence in Career and Technical Education programs. To be considered, students must demonstrate scholastic achievement and skill development in the following ways:

- Good Character, Leadership, Honor and Responsibility
- Maintain 90% Average in CTE program, 85% Average in District
- Maintain 95% Attendance
- Submission of Membership Application, Portfolio, and 2 Letters of Recommendation
- Personal Interview

## Regents Diploma with a Technical Endorsement

The Technical Endorsement Seal is affixed to the high school diploma of students who complete a 2-year NYS approved Career and Technical program and meet the following requirements:

- Passing 5 required Regents exams
- Successful completion of a 3-part Technical Assessment
- Completion of work-based learning experiences
- Completion of a work-skills employability profile

## Completion with Honors

A seal of Completion with Honors is affixed to the diploma of students who complete a CTE program and develop essential skills for college and the workplace.

- Completion of All Program Requirements
- Minimum 90% Program Average
- Good Attendance (no more than 10 days absent per year)
- Punctuality (no more than 10 days late per year)
- Minimum Score of 90% on Career Portfolio
- Successful Participation in a Program Internship



## Job Placement

Erie 1 BOCES Work-Based Learning teachers provide assistance in preparing students with necessary job-seeking and job-keeping skills and help to assist students in meeting their career goals. Work-Based Learning teachers serve as liaisons between employers and Career and Technical Education students to ensure the right internship and/or job placement.

## Work-Based Learning Experiences

A supervised work experience related to instruction in a student's CTE program is offered to enhance classroom skills, knowledge and career readiness.

Internships facilitate the transition from school to work and help to develop career competency, initiative, ability to work with others, and appropriate attitudes and behaviors. This proves advantageous for students, schools, employers, and the community as they work together to meet workplace needs.

## Career Portfolios

The Career Portfolio is a purposeful collection of student work that demonstrates students' personal growth and achievement within their CTE experience. Students complete their program with a comprehensive professional career portfolio to use in their future endeavors. The portfolio requirement is a result of input from industry representatives who value this tool as a way to demonstrate communication and other work-related skills.

## Employability Profiles

The Employability Profile provides a record of students' performance in program specific CTE skills and competencies needed for entry-level employment. It also includes a record of the student's performance in career related skills and provides a potential employer with a snapshot of the student's skills and competencies upon completion of his/her career and technical education program. Each profile is annually approved by the Career and Technical Education Advisory Council to reflect the most current industry standards.

# BUILDING TIMES AND LOCATIONS



## Harkness Career & Technical Center

99 Aero Drive, Cheektowaga, NY 14225 • 716-961-4070

AM Session  
7:45 - 10:00 am

Mid Session  
10:00 - 12:15 pm

PM Session  
12:30 - 2:45 pm



## Kenton Career & Technical Center

151 Two Mile Creek Road, Tonawanda, NY 14150 • 716-961-4010

AM Session  
7:45 - 10:00 am

Mid Session  
10:05 - 12:20 pm

PM Session  
12:30 - 2:45 pm



## Potter Career & Technical Center

705 Potters Road, West Seneca, NY 14224 • 716-821-7331

AM Session  
7:20 - 9:35 am

Mid Session  
9:50 - 12:05 pm

PM Session  
12:15 - 2:30 pm

NYS CIP CODE: 51.0808

## Program Summary

- Practice real world diagnostics, animal restraint, grooming techniques, and assess animal vital signs in our hands-on pet clinic.
- Participate in an internship according to your individual interests at veterinary hospitals, animal training facilities, dairy farms, stables, and grooming salons.
- Meet informative industry professionals such as local wildlife rescue, rehabilitation experts, and representatives from the veterinary and animal care industry.
- Explore a variety of career opportunities including licensed veterinary technicians, laboratory animal technicians, pet grooming, and veterinary science.
- Study small animals, large animals, exotics, wildlife, and more!

## College Credit Connections

- Alfred State College
- Medaille College
- Niagara County Community College
- SUNY Canton
- SUNY Erie
- SUNY Morrisville

## Additional Information

- Updated tetanus vaccine required
- Students with allergies to animals should consult a physician before starting the program

## Career Pathways

### Professional Careers

Agricultural Careers  
Animal Science Instructor  
Biologist  
Holistic Specialists  
Marine Biologist  
Pharmacology Researcher  
Veterinarian  
Zoologist

### Technical Careers

Fisheries and Wildlife  
Game Warden  
Laboratory Animal Technician  
Licensed Veterinary Technician  
Physical Rehabilitation  
Wildlife Rehabilitator

### Entry Level Careers

Animal Production  
Animal Shelter Worker  
Groomer  
Kennel Assistant  
Pet Therapy  
Retail  
Veterinary Assistant



## First Aid

- Handling, Restraint and Transportation
- CPR on Cat and Dog Manikins
- Assessment, Triage and Treatment of Emergencies
- Physical Exams and Methodologies
- Vital Ranges for Dogs and Cats
- Bandaging
- First Aid Performance

## Grooming

- Nail Clipping and Ear Cleaning
- Bathing and Drying
- Scissoring and Clipping
- Identification and Care of Grooming Tools
- Client Interaction
- Records Maintenance

## Surgical Nursing

- Suturing and Wound Healing
- Surgical Gloving, Gowning, and Draping
- Pharmacology and Case Studies

## Clinical Skills

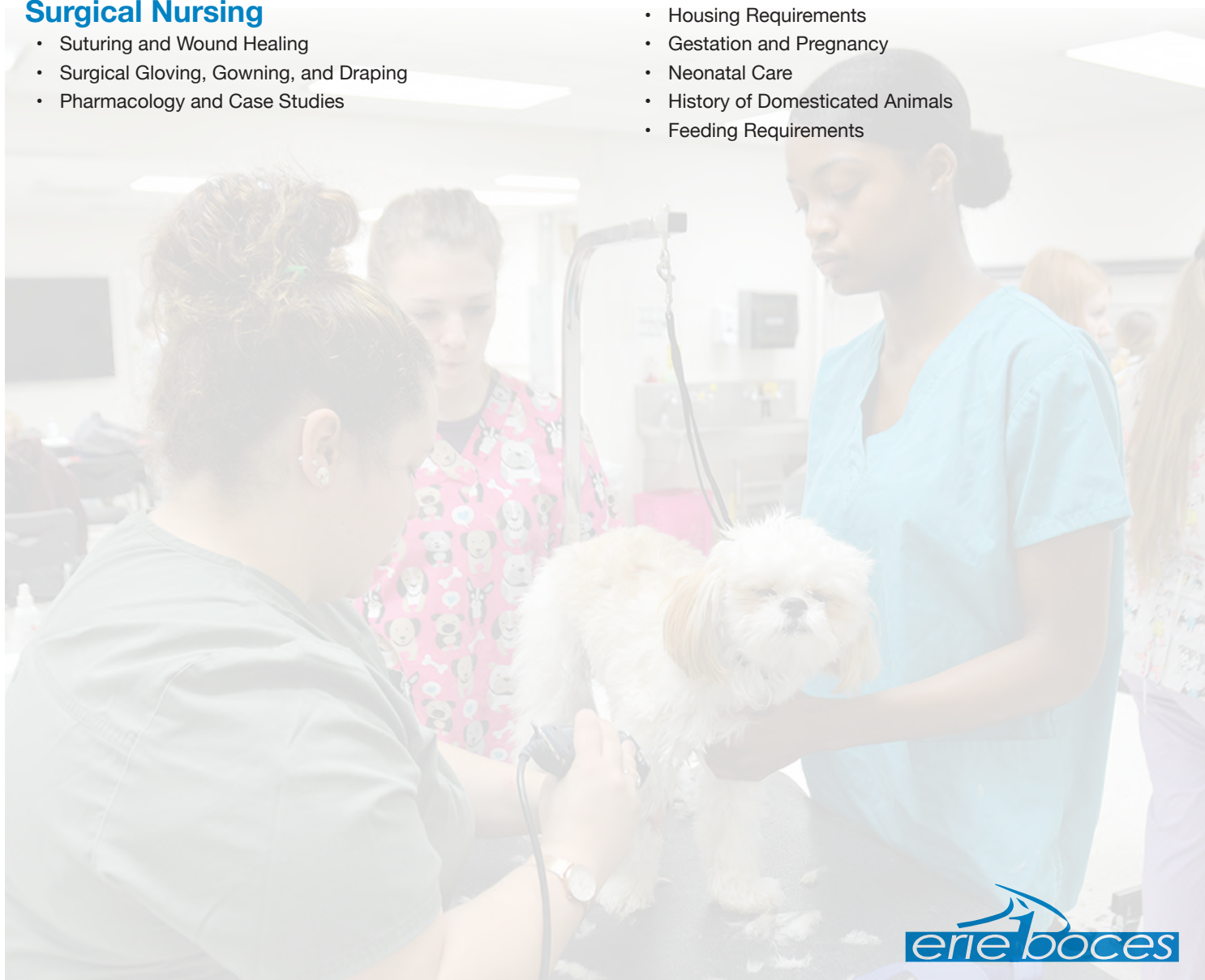
- Microscope
- Ophthalmoscope
- Otoscope
- Stethoscope
- Parasite Identification
- Blood and Fecal Handling and Processing
- Urinalysis
- Syringe Measurements and Injections

## Health and Medicine

- Anatomy and Physiology
- Nutrition for Companion Animals
- Vaccination Protocol
- Zoonotic Diseases and Risks

## Husbandry and Reproduction

- Housing Requirements
- Gestation and Pregnancy
- Neonatal Care
- History of Domesticated Animals
- Feeding Requirements



# AUTO TECHNICIAN TRAINING

NYS CIP CODE: 47.0604

## Program Summary

- Prepare to enter the auto field in a dealership, repair shop, parts facility, and more.
- Operate master level technician equipment to diagnose problems.
- Troubleshoot and repair today's modern vehicles.
- Experience real-world, web-based manufacturer service information.
- Students in this program are eligible to earn their Automobile Service Excellence (ASE) Student Certification.

## College Credit Connections

- Alfred State College
- Lincoln Technical Institute
- Ohio Technical College
- SUNY Canton
- SUNY Erie
- SUNY Morrisville
- University of Northwestern Ohio

## Additional Information

- Students must supply work pants, coveralls, and work boots.

## Career Pathways

### Professional Careers

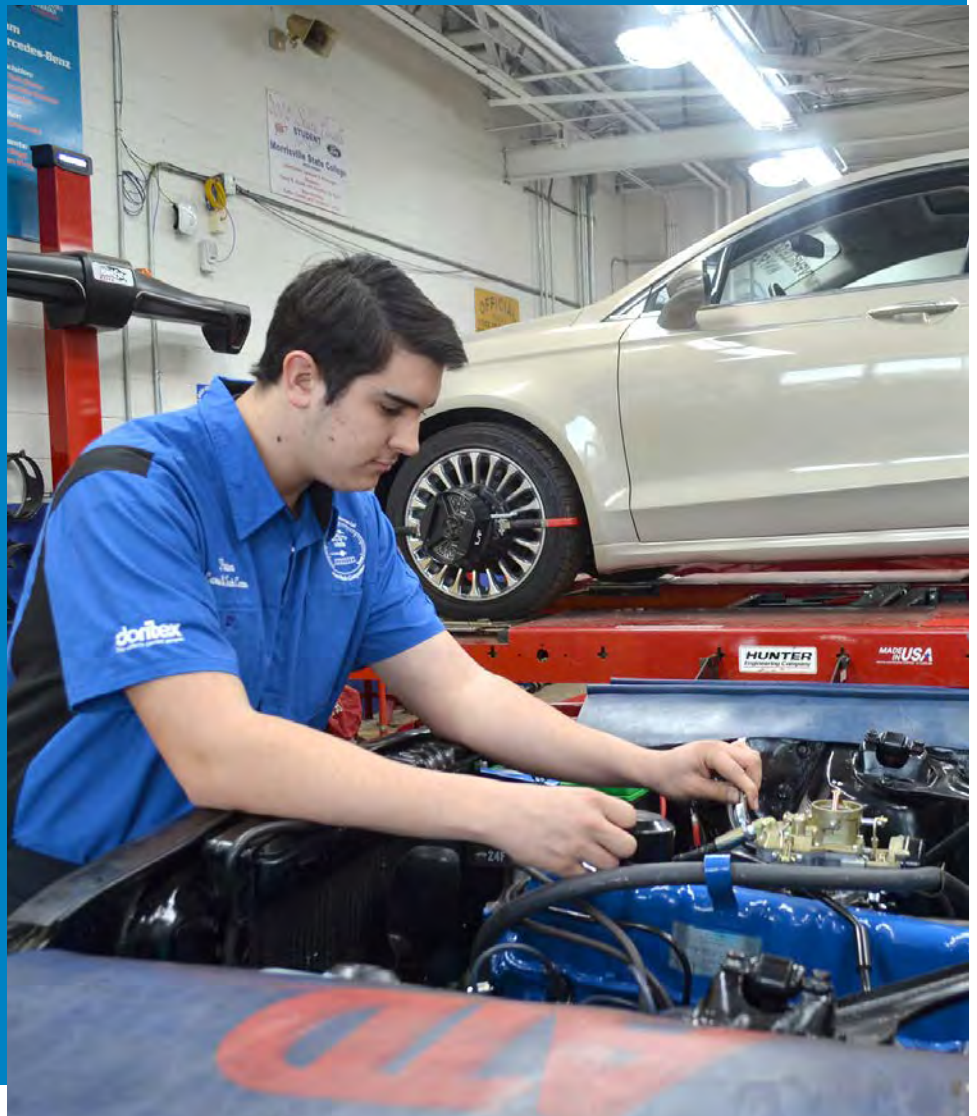
Automotive Engineer  
Automotive School Teacher  
College Recruiter  
Dealership General Manager  
Entrepreneur  
Production Manager

### Technical Careers

Diesel Mechanic  
Equipment Mechanic  
Parts Manager  
Service Manager  
Technician  
Tow Truck Driver

### Entry Level Careers

Detailer  
Lube Technician  
Parts Counter Associate  
Parts / Shuttle Driver  
Service Writer  
Tire Service Technician



# AUTO TECHNICIAN TRAINING

## Engine Repair

- Assembly
- Overhaul
- Remove and Replace

## Computer Diagnostics

- Scan Tool Usage
- Service Information Usage
- Computerized Alignments
- TPMS Reset Equipment
- Computerized Wheel Balance

## Industry Recognized Certification

- Automotive Service Education Foundation - MLR

## Local and National Competitions

- Skills USA
- ASE / Ron Smith Memorial Auto Tech Competition
- Mechanics Competition at the WNY Farm Festival
- National Automotive Technology Competition

## Hands-On, Live Work Training

- School Supplied Vehicles
- Student Vehicles
- Industry Donated Vehicles and Equipment
- Work on Faculty and Privately Donated Vehicles

## Brakes

- ABS Diagnostics
- Trouble Shoot
- Industry Standard Brake
- Hydraulic Brake Repair

## Steering and Suspension

- Tires
- Alignment
- Live Work
- Complete Suspension Repair and Diagnosis
- Complete Steering Repair and Diagnosis

## Engine Performance

- Scan Tool Usage
- Computer Diagnostic Information
- Tune Up Service
- Emission Testing and Service
- Fuel and Exhaust Systems Service

## Auto Electrical

- Wire Repair
- Multi Meter Diagnostics
- Series and Parallel Circuits Diagnostics and Repair
- Vehicle Accessory Installation
- Starting and Charging System Diagnostics and Repair

## HVAC

- A/C Component Identification
- A/C Theory and Operation



**Now Offering A  
Pre-Apprentice Experience!**

- ✓ Job Shadowing
- ✓ Paid Summer Internships
- ✓ Guaranteed Job Interviews



NYS CIP CODE: 49.0101

## Program Summary

- Do you want to become the next NASA astronaut or engineer?
- Experience flight by hands-on operation of a Piper Warrior and take off with a licensed pilot as your teacher.
- Experience maintenance procedures with the aircraft in class.
- Create, develop, and test modifications to aircraft designs in an engineering exploration style.
- Conceptualize unmanned technology and understand applications to current technology.

## College Credit Connections

- Edinboro University
- Mohawk Valley Community College

## Additional Information

- Students are required to have completed 2 credits in Regents level math and 2 credits in Regents level science upon entering this program.
- Additional requirements necessary for FAA license tests.

## Career Pathways

### Professional Careers

Aerospace Engineer  
Aerospace Financial Analyst  
Air Traffic Controller  
Airline Manager  
Airport Manager  
Aviation Professional Pilot  
FAA  
Government Employee  
NTSB  
Test Pilot  
Unmanned Aerial Systems

### Technical Careers

Airline Flight Attendant  
Certified Flight Instructor  
Corporate Pilot  
Maintenance Technician  
Military / National Guard / Reserves  
TSA  
Unmanned Technical Support Staff

### Entry Level Careers

Airline Baggage Handler  
Airline Fueler  
Aviation Mechanic In-Training  
Cargo Handler  
Ground Service Staff  
Ramp Agent  
Ticket Agent





## Aviation History and Evaluation

- History of Aviation
- Aircraft Types
- New Technology in Aviation
- Federal Regulations
- Research and Development

## Flight Principles, Systems and Performance

- Aerodynamics
- Flight Controls
- Airframes / Power Plants
- Weight and Balance

## Navigation and Aviation Weather

- Pilotage
- Ground and Space Based Navigation
- Aviation Meteorology
- Weather Reports and Interpretation
- Current and Emerging Issues

## Aeromedical Factors

- Aviation Physiology
- Decision Making Process
- Human Factors
- Accident Prevention and Investigation
- Current and Emerging Issues

## Piloting Skills

- Pre Flight
- Ground Operations
- Aviation Meteorology
- Weather Reports and Interpretation
- National Aerospace System

## Unmanned Aerial Vehicles

- Systems Integration
- Flight Performance
- License Requirements
- Certification

## Careers in Aviation

- Airline Pilots
- Mechanics (Airframe and Powerplants)
- Corporate Pilots
- Ground Crews
- Engineers
- Air Traffic Controllers

## Aerospace Engineering

- Aircraft Design
- Manufacture Aerospace Vehicles
- Control Systems Integration
- Engineering Process
- Solve Problems with Creative Solutions



NYS CIP CODE: 12.0501

## Program Summary

- Baking and Pastry Arts offers students an opportunity to understand what goes into creating beautiful finished pastries, breads, and cakes.
- Students will not only produce baked goods in both large and small quantities, but understand the science behind them.
- Create beautiful show pieces, plated desserts, chocolates, and individual pastries in extensive hands-on classes.
- If you dream of opening your own bakery or stylish café, creating, and styling spectacular cakes or preparing desserts for elegant events, a career in pastry arts is for you!
- This program is certified by the American Culinary Federation (ACF).

## College Credit Connections

- Niagara County Community College (ACF Accredited)
- SUNY Erie (ACF Accredited)

## Additional Information

- Students are required to wear a professional uniform in class.
- Graduates receive a certificate that they attended an American Culinary Federation Accredited (ACF) Program and a Junior Culinarian certificate.

## Career Pathways

### Professional Careers

Bake Shop Manager  
Event Planner  
Executive Pastry Chef  
Food Writer  
Hospitality Management

### Technical Careers

Artisan Bread Baker  
Chocolatier  
Commercial Baker  
Food Stylist  
Pastry Chef  
Retail Bakery Owner  
Specialty Cake Designer

### Entry Level Careers

Bakery Assistant  
Bread Baker  
Cake Decorator  
Pastry Cook  
Retail Baker



## Baking and Pastry Arts I

- Cookies
- Quick Breads
- Cream Puff Paste Products
- Introduction to Pies and Tarts
- Holiday Baking
- Gingerbread Project
- Yeast Dough
- Introduction to Chocolate
- Breakfast Pastries
- Cakes and Icings
- Bistro-Style Cooking
- Professional Portfolio
- Retail Bake Shop

## Baking and Pastry Arts II

- Advanced Cookies
- Cupcake Wars
- Advanced Pies and Tarts
- Pate Choux
- ServSafe Certification
- Gingerbread Competition
- Internship
- Advanced Cakes and Frostings
- Sugar and Confectionery Techniques
- Laminated Dough
- Artisan Breads
- Frozen Desserts
- Plated Desserts



### Pastry Chef Tina Fago

*Instructor, Harkness Career Center*

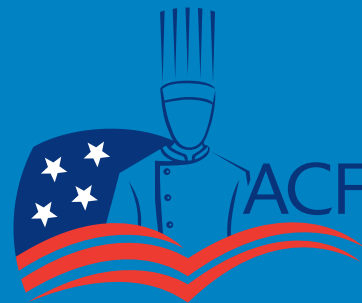
Chef Fago, graduate of the Culinary Institute of America, received a degree in Culinary Arts. She has experience working in both restaurants and bakeries and has participated and placed in several gingerbread competitions.



### Pastry Chef Meg Schaller

*Instructor, Kenton Career Center*

Chef Schaller, graduate of the Culinary Institute of America, has a degree in Baking and Pastry Management. She recently wrote and published, "Become a Candy Maker at Home", a book aimed at teaching home candy makers how to create professional looking treats.



American Culinary Federation  
Education Foundation

**NYS CIP CODE: 12.0402**

## Program Summary

- Leave your mark on the ever changing world of fashion and beauty!
- Prepare for the NYS Master Barber's licensing exam.
- Cut, color, and style male and female clients.
- Choose the work environment that suits you best!
- Learn to communicate effectively with clients and colleagues.
- Master Barbers participate in national organizations and trade shows and many compete in barbering competitions.

## College Credit Connections

- Bryant and Stratton College
- Erie 1 BOCES Workforce Development

## Additional Information

- Students are required to purchase a Barber Kit and uniform.
- Additional steps are necessary for NYS licensing.

## Career Pathways

### Professional Careers

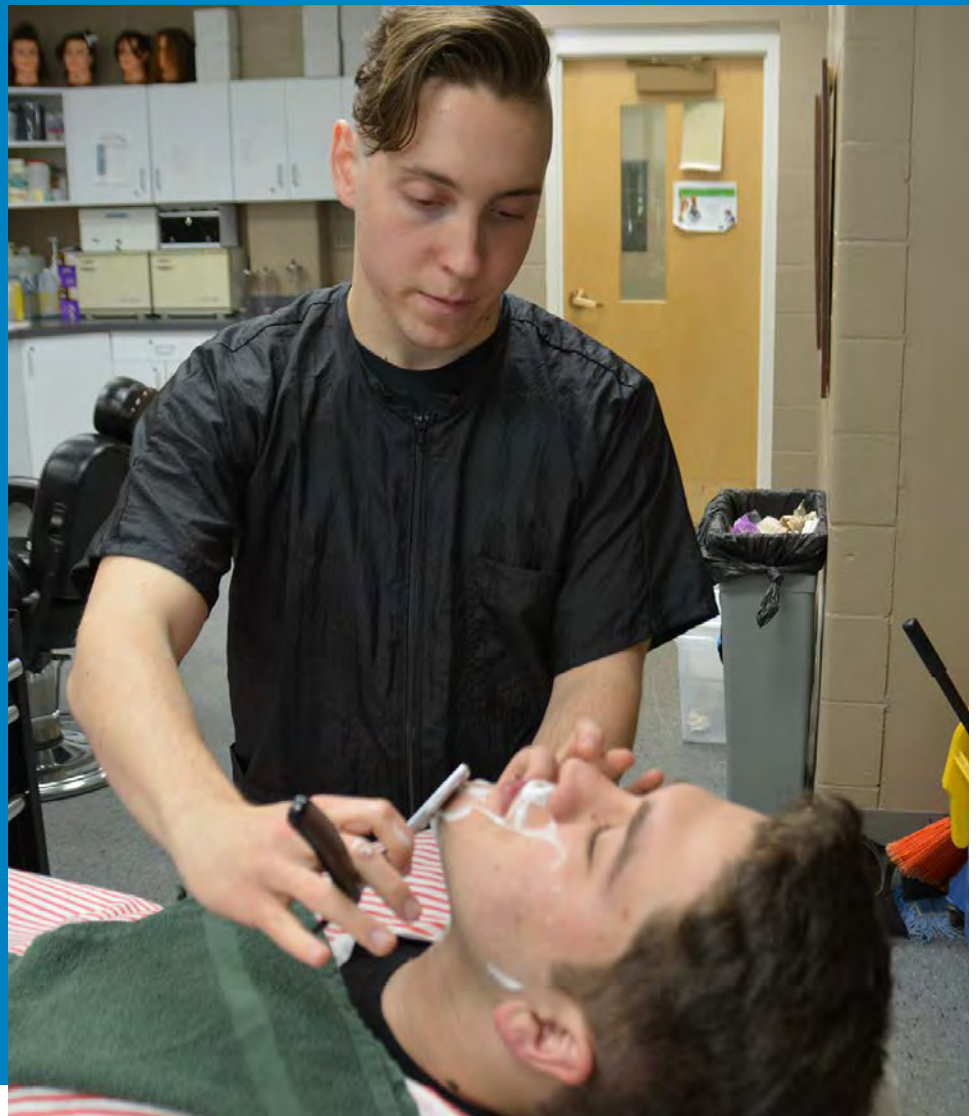
Barber Instructor  
Cosmetic Chemist  
Product Educator

### Technical Careers

Barber Shop Owner  
Master Barber  
Platform Artist  
Product Representative  
Trade Show Organizer

### Entry Level Careers

Assistant  
Barber Apprentice  
Receptionist  
Sales Representative



## The Science of Barbering

- Microbiology
- Infection Control
- Safe Work Practices
- Implements, Tools and Equipment
- Anatomy and Physiology
- Chemistry and Barbering
- Electricity and Barbering
- Properties and Disorders of the Skin and Scalp

## Clipper Cutting

- Clipper - Over - Comb
- Zero Degree and Up Fades
- Edge Ups
- Design Lines with Trimmers

## Shear Cutting

- 0 Degree Haircut
- 90 Degree Haircut
- 45 Degree Haircut
- 180 Degree Haircut
- Shear Over Comb
- Point Cutting

## New York State Board Procedures

- Packing Your Kit and Supplies
- Ideal Live Model Candidates
- Proper Sanitation and Disinfection Technique
- State Board Haircut
- State Board Facial

## School Barber Shop

- Client Consultations
- Execution of Services
- Communicating Effectively with a Client

## Mustache and Beard Design

- Proper Strokes and Direction
- Designed Facial Hair

## Professional Barbering

- Men's Facial Massage
- Shaving and Facial Hair Design
- Basic Principles of Haircutting
- Long and Short Hair Design
- Clipper Cutting
- Basic Tapers
- Line Ups
- Texturizing Techniques
- Blending Techniques
- Men's Hair Replacement
- Women's Hair Design and Style

## Hair Coloring and Lightening

- Basic Hair Color Applications
- Color Theory and Terminology
- Special Effects Hair Coloring
- Coloring Mustaches and Beards

## The Business of Barbering

- State Board Preparation
- Job Search
- Shop Management



**NYS CIP CODE: 46.9999**

## Program Summary

- Develop, design and construct various structures using 21st century tools, and technology.
- Gain skills and certificates that allow you to be employed anywhere in North America.
- Develop skills necessary to use and operate the same tools a master carpenter.
- Experience and manage real life construction projects.
- Discover a variety of careers in the building trades to help make smarter career decisions for your future.

## College Credit Connections

- Alfred State College
- SUNY Erie
- SUNY Morrisville

## Additional Information

- Students are responsible for purchasing work boots and basic hand tools.

## Career Pathways

### Professional Careers

Architect  
Building Inspector  
Company Owner  
Engineer  
Foreman / Superintendent  
Project Manager in Construction

### Technical Careers

Carpenter  
Drafter  
Heavy Equipment Operator  
Home Energy Auditor  
Home Inspector  
Mason  
Surveyor

### Entry Level Careers

Construction Laborer  
Drywall Installer  
Flooring Installer  
Painter  
Roofer / Sider  
Union Apprentice



# BUILDING TRADES

## Construction Safety

- OSHA Compliance
- OSHA 10 Certification
- Ladder, Scaffold Safety
- Safe Tool Use
- Jobsite Safety

## Hand and Power Tools

- Proper Use
- Repair and Maintenance
- Safe Handling and Storage

## Rough Carpentry

- Frame Floors and Walls
- Cut Roof Rafters
- Learn Different Home Building Techniques

## Electrical and Plumbing

- Gain Knowledge and Understanding of Different Careers
- Learn Basic Skills for Future Projects and Applications

## Finish Carpentry

- Trim
- Flooring
- Drywall
- Fine Woodworking

## Common Structures

- Estimating
- Print Reading
- Energy Efficiency
- Interior and Exterior Finishes



# COLLISION REPAIR

NYS CIP CODE: 47.0603

## Pre-Apprentice Partnership

- WNY needs more qualified collision repair technicians!
- Collision Repair students will participate in a 4-week job shadowing experience at a partnering location during their Junior and Senior years.
- Paid internships are available throughout the summer.
- Upon graduation, students are guaranteed a job interview for applicable openings.
- Apprenticeship opportunities are available to successful graduates.

## College Credit Connections

- Alfred State College
- Lincoln Technical Institute
- Ohio Technical College
- SUNY Erie
- SUNY Morrisville
- Universal Technical Institute

## Additional Information

- This program aligns with I-CAR curriculum and standards.
- Students will work toward I-CAR industry Non-Structural Technician and Refinish Technician certifications.
- Students are responsible for purchasing work pants, coveralls, and work boots.

## Career Pathways

### Professional Careers

Shop Owner / Manager  
Teacher

### Technical Careers

“A” or “B” Level Technician  
Estimator  
Painter

### Entry Level Careers

“C” Level Technician  
Detailer  
Tear Down / Dismantler  
Vehicle Preparation





# COLLISION REPAIR

## Auto Technology Core

- Orientation
- Introduction to Technology
- Introduction to Hardware
- Safety
- Hand Tools
- Power Tools
- Lifts and Jacks
- Lubrication
- Introduction to Cooling Systems
- Introduction to Detailing
- Welding and Cutting
- Introduction to Electrical Systems
- Leadership
- Wheels and Tires

## Detailing

- Tools and Equipment
- Safety
- Detailing Before Collision Repair
- Detailing After Collision Repair
- Independent Detailer
- Auto Dealership Detailer
- Internships

## Non-Structural Repair

- Damage Repair and Estimating
- Sheet Metal Repair and Roughout
- Plastic Body Filler
- Panel Replacement
- Bumpers and Plastic Repair
- Corrosion Protection
- Measure System and Damage Analysis

## Metal Inert Gas Welding (MIG)

- Introduction to MIG Welding
- MIG Welding Equipment and Techniques
- Constructing MIG Welds
- Welding Aluminum
- Resistance Spot Welding

## Painting and Refinishing

- Introduction to Painting and Refinishing
- Equipment and Safety
- Spraying Techniques
- Surface Preparation and Undercoats

## Advanced Painting and Refinishing

- Equipment and Safety
- Spraying Techniques
- Surface Preparation and Undercoats
- Introduction to Top Coats
- Introduction to Base Coats and Clear Coats

## Specialty Painting

- Top Coats
- Tri-coats and Refinishing
- Typical Paint Problems
- Custom Paint
- Airbrushing

**Now Offering A  
Pre-Apprentice Experience!**

- ✓ Job Shadowing
- ✓ Paid Summer Internships
- ✓ Guaranteed Job Interviews



NYS CIP CODE: 12.0401

## Program Summary

- Do you want to change people's lives and make them feel good about themselves?
- As a cosmetologist, you will have the luxury to choose which work environment suits you best.
- The cosmetologist is an outgoing person with a flair for creativity.
- Today's beauty professional is a member of the expanding and ever changing world of fashion and design.
- If you are innovative and ambitious, there is no limit to your potential!

## College Credit Connections

- Bryant and Stratton College
- Erie 1 BOCES Workforce Development

## Additional Information

- Students are responsible for purchasing a Cosmetology Kit and uniform.
- Additional steps are necessary for NYS licensing.

## Career Pathways

### Professional Careers

Artistic Director for Salons or Brands  
Celebrity or Personal Stylist  
Cosmetology School Teacher  
Franchise Owner or Manager  
State Board Examiner  
Trade Publication Writer

### Technical Careers

Editorial or Advertising Stylist  
Hair Color Specialist  
Makeup Artist  
Platform Artist  
Salon or Spa Owner or Manager  
Salon Stylist  
Stylist for Film and Theater

### Entry Level Careers

Assistant Stylist  
Cosmetic Sales  
Fashion or Cosmetic Retail Sales  
Marketing and Merchandising  
Salon Receptionist



## Hair Color

- Dimensional Hair Color Using Foils
- Permanent and Semi-Permanent Hair Coloring Products
- Color Consultations and Analysis
- Color Formulation and Application
- Highlighting and Lowlighting Techniques
- Hair Color Correction

## Hair Cutting

- Basic and Advanced Hair Cutting Procedures
- Texturizing Hair Using Scissors
- Clipper Cutting
- Cuts for Men, Women and Children

## Hair Design

- Braiding
- Updos and Special Occasion Designs
- Finger Wave Designs
- Pin Curl Sets and Styling
- Methods of Extensions
- Temporary and Permanent Hair Straightening

## Nail Care

- Manicures (Natural)
- Pedicures
- Nail Care
- Nail Art and Enhancements

## Skin Care

- Foundational Skin Care
- Skin Tone Analysis and Consultation
- Facials and Massage
- Spa Techniques
- Makeup Applications

## State Exam Preparation

- Salon Operations
- Review of NYS Licensing Procedures
- Presentation of Portfolios



NYS CIP CODE: 43.0107

## Program Summary

- Network and interact with criminal justice professionals at the local, county, state, and federal agencies. This includes guest speakers, field trips and internships.
- Graduate from the program with the traits needed to be a criminal justice professional, including discipline, integrity, and professionalism.
- Develop a career plan for your area of interest, including college, and career planning.

## College Credit Connections

- Bryant and Stratton College
- Canisius College
- Hilbert College
- Medaille College
- Niagara County Community College
- Niagara University
- SUNY Canton
- SUNY Erie

## Career Pathways

### Professional Careers

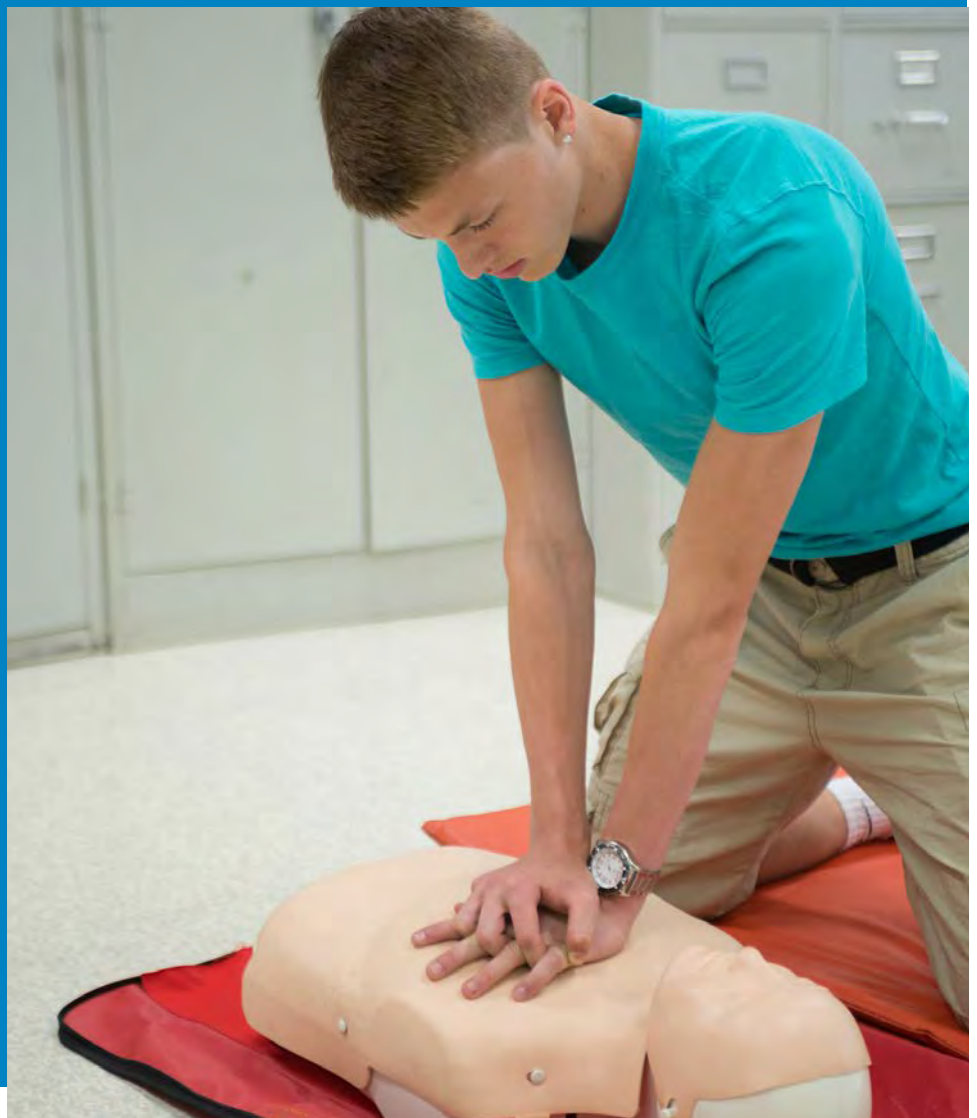
ATFE  
CIA  
DEA  
FBI  
Lawyer  
Parole Officer  
Probation Officer  
U.S. Marshal

### Technical Careers

Border Patrol  
DEC  
Emergency Medical Technician  
Municipal Police  
NFTA  
Park Police  
State Police  
Uniform Division Secret Service  
Paralegal

### Entry Level Careers

Armored Car Delivery Service  
Corrections Officer  
Loss Prevention  
Private Security  
Military Police  
TSA



## Emergency Response

- AED
- Advanced First Aid
- Adult / Child / Infant CPR AED

## Police Practical Skills

- Handcuffing
- Body / Building Search
- Auto Felony Stop
- Field Sobriety
- Self Defense

## Career Development

- Civil Service Testing
- Police Physical Fitness
- NYS Security Officer Certification

## Criminal Investigations and Forensics

- Evidence Preservation and Collection
- Recording the Crime Scene
- Analysis of Evidence

## Criminal Minds

- Violent Crime
- Serial Spree and Mass Murder
- Why People Commit Crime

## Courts and Corrections

- Mock Trials
- Pre Trial Procedures
- Probation
- Punishment and Sentencing
- Prison and Jails



## NYS CIP CODE: 12.0599

### Program Summary

- Work in a high energy, fast paced environment.
- Learn about the latest food trends.
- Create and taste new and exciting foods!
- Prepare food for actual catered affairs.
- Experience Work Based Learning at leading restaurants, country clubs, and corporations.
- Employment opportunities while enrolled in the program, **EARN WHILE YOU LEARN!**
- This program is certified by the American Culinary Federation (ACF).

### College Credit Connections

- Alfred State College
- Culinary Institute of America (ACF Accredited)
- Niagara County Community College (ACF Accredited)
- SUNY Erie
- Trocaire College

### Additional Information

- Graduates receive a certificate that they attended and American Culinary Federation Accredited (ACF) program and a Certified Fundamentals Cook (CFC) designation.
- Students are required to wear a professional uniform.

## Career Pathways

### Professional Careers

Banquet Manager  
Cookbook Editor  
Culinary Arts Instructor  
Culinary Journalist  
Food Chemist  
Food Research and Development Chef  
Food Stylist  
Head Chef  
Restaurant Owner

### Technical Careers

Banquet Facility Manager  
Chef  
Food / Equipment Sales  
Health Care Chef  
Health Inspector  
Line Cook  
Restaurant Manager  
Sous Chef

### Entry Level Careers

Customer Service Representative  
Food Service Representative  
Hospitality Service Worker  
Host / Hostess  
Prep Cook  
Sanitation Assistant  
Wait Person



# CULINARY ARTS

## Culinary Basics

- Professionalism
- Chef Uniform
- Career Opportunities

## Safety and Sanitation

- Foodborne Illness
- Equipment Management
- Receiving and Storage of Food

## Knives and Small Equipment

- Safety and Storage
- Proper Handling and Sharpening
- Culinary Terms and Knife Cuts
- Mise en Place

## Stocks, Soups, and Sauces

- Prepare Stocks Using Fresh Ingredients
- Soups made from Scratch
- Learn and Prepare the 5 Mother Sauces with Accompaniments

## Quickbreads

- Measurement Fundamentals
- Baking Equipment Usage
- Cookies
- Muffins
- Biscuits and Scones

## Garde Manger (Cold Food Preparation)

- Salads and Dressings
- Cold Appetizers
- Sandwiches
- Vegetable, Herb and Spice Identification

## Starches

- Potatoes
- Pasta
- Rice
- Grains

## Cakes and Pies

- Frostings
- Decorating Basics
- Crust Production
- Pie Fillings

## Yeast Doughs

- Breads and Rolls
- Pizza

## Breakfast

- Egg Cooking Techniques
- Meats
- Breakfast Breads

## Poultry

- Chicken and Turkey
- Variety of Cooking Methods
- Fabrication Techniques
- Safe Cooking and Handling Procedures

## Meat

- Beef, Pork, Lamb, and Veal
- Variety of Cooking Methods
- Fabrication Techniques
- Safe Cooking and Handling Procedures

## Fish and Seafood

- Fish Selections, Shrimp, Clams, and Oysters
- Variety of Cooking Methods
- Fabrication Techniques
- Safe Cooking and Handling Procedures

## Front of the House

- In School and Community Catering Functions
- Large Quantity Cooking
- Service Basics

## FAQ's

- 4 out of 5 Days a Week are Spent Cooking in the Kitchen
- 1 Day a Week Learning Theory
- 60 Hours of Work Based Learning Experience (Culinary Arts II)
- Multiple Occasions for Community Service Work
- Employment Opportunities



American Culinary Federation  
Education Foundation



NYS CIP CODE: 11.1002

## Program Summary

- Use the latest software to analyze data traffic on a network.
- Design computer networks, program routers, and switches.
- Troubleshoot PC hardware and operating systems.
- Get industry standard Network+ and Cisco CCNA certifications while still in high school.

## College Credit Connections

- Alfred State College
- SUNY Canton
- SUNY Erie
- Trocaire College

## Additional Information

- Graduates are eligible to take the Cisco Certified Network Associate (CCNA) certification licensing exam as well as the Comptia A+, Network+, and Security+ certifications.

## Career Pathways

### Professional Careers

Cyber Threat Analyst  
Ethical Hacker  
Penetrating Tester  
Security Administrator  
Security Engineer  
Vulnerability Assessor

### Technical Careers

Local Area Network Administrator  
Network Security Technician  
Network Software Support  
Network Systems Engineer  
Specialist

### Entry Level Careers

CERT Member  
Computer Repair Technician  
Help Desk Technician  
Law Enforcement  
Network Installation Technician  
Network Support Specialist  
Technician  
Telecommunications Technician  
Wiring and Cabling Installation





## Digital Forensics

- Analyze Computer Data and Hardware for Evidence Collection and Criminal Prosecution

## Wireshark

- Analyze Network Traffic to Identify Vulnerabilities and Monitor Network Activity

## Back Track and Kali Utilities

- Utilize Suite of Utilities to Find Flaws in Network Security

## Intro to Network Security

- Design and Build Networks Using the Latest Tools to Analyze and Enhance Network Security

## Cyber Terrorism

- Research Ethics and Morals in Relation to Cyber Attacks on Society and the Mentality of a Cyberterrorist

## Firewall Configuration

- Configure Hardware Firewalls from Various Vendors for Added Network Security

## Wireless Configuration

- Configure and Setup Secure Wireless Devices for Home and Business

## Steganography

- Use Various Programs to Hide Data Within Pictures, Videos and Music Files



# DENTAL LABORATORY TECHNOLOGY

NYS CIP CODE: 51.0603

## Program Summary

- It's an exciting time to enter the dental field with new digital techniques, materials, and equipment!
- Dental laboratory technology is the art and science of the fabrication of corrective devices and replacements for natural teeth.
- Learn five specialties of dental laboratory technology: complete denture, partial denture, crown and bridge restoration, porcelain and ceramics and orthodontics.
- A combination of science, art, skill and craftsmanship along with a complete comprehension of basic techniques, materials, anatomy and terminology will enable the students to fabricate an appliance from beginning to end.

## College Credit Connections

- SUNY Erie

## Additional Information

- Students are responsible for purchasing a lab coat.

## Career Pathways

### Professional Careers

Dentist  
Oral Surgeon  
Orthodontist

### Technical Careers

Dental Hygienist  
Dental Lab Technician  
Research and Development

### Entry Level Careers

Dental Assistant  
Dental Office  
Dental Supply Company



# DENTAL LABORATORY TECHNOLOGY

## Intro to Dental Lab, Anatomy, and Terminology

- SkillsUSA
- Laboratory Safety
- Oral Anatomy
- OSHA - Infection Control
- Tooth Morphology
- Dental Terminology

## Complete Dentures

- All Phases of Complete Dentures
- Denture Repairs
- Denture Border Anatomy
- Interim Partial / Flipper
- Interim Denture / Jiffy Denture
- Introduction to Orthodontics

## Orthodontics and Restorations

- Orthodontic Appliances
- Hawley Retainers
- Two Pour Models
- Crown and Bridge Restorations
- Waxing Inlays and Onlays
- Investing and Casting Inlays and Onlays
- Finishing / Polishing
- Temporary Crown
- Full Cast Gold Crown

## Restorations and Partial Denture Framework

- Crown and Bridge Restorations
- Waxing 3-Unit Bridge
- Investing / Casting
- Finishing / Polishing
- Partial Denture Frameworks
- Introduction to Dental Laboratory Porcelains
- Introduction to Porcelain Fused to Metal

## Dental and Oral Anatomy

- Dental Anatomy
- Oral Anatomy
- Complete Dentures II
- Characterization
- Light Curing Materials
- Success Injection System

## Complete Denture II

- Complete Dentures II
- Immediate Dentures
- Reline and Rebases
- Intro to Dental Implants
- Orthodontics II
- Soldering
- Removable Alignment Appliance
- Custom Mouth Guards
- Bleaching Trays

## Ceramics and Orthodontics

- Crown and Bridge
- Disposable Articulation System
- Single Tray Impression System
- Waxing Copings
- Induction Casting
- Lite-Cast Coping
- Preparation of Coping
- Ceramics / Porcelain

## Shape Digital Design/Scanning and Milling

- Ceramics
- Addition of Porcelain
- Cosmetic Dentistry
- Intro to CAD / CAM
- Professional Interview
- Internship (3 Weeks on Site)
- 3 Shape Digital Design / Scanning and Zirconia Milling System



**Great Lakes**  
DENTAL TECHNOLOGIES  
GREAT PEOPLE • GREAT PRODUCTS • GREAT LAKES



NYS CIP CODE: 09.0702

## Program Summary

- Create impressive graphics, stunning video, and eye-popping animation alongside industry professionals.
- Develop design skills for digital screens and print layouts, YouTube videos, photography, and animation.
- Operate software and hardware used by today's digital media workforce.

## College Credit Connections

- Canisius College
- Hilbert College
- Medaille College
- Mohawk Valley Community College
- Niagara County Community College
- Villa Maria College

## Career Pathways

### Professional Careers

- Animator
- Digital Media Specialist
- Graphic Designer
- Illustrator
- Package Designer
- Photographer
- Production Manager
- Video Producer
- YouTube/Social Media Content Producer

### Technical Careers

- Advertising Copywriter
- Associate Media Producer
- Digital Artist
- Event Manager
- Layout Designer
- Multimedia Editor

### Entry Level Careers

- Assistant Copywriter
- Assistant Layout Designer
- Event Coordinator
- Film Grip
- Production Assistant



## Photoshop

- Understanding Raster Images
- Starting a Project / Program Interface
- Working in Layers
- Selection / Move / Crop Tools
- Scaling / Skewing / Rotating: Free Transform
- Filters and Effects
- Working with Text

## Digital Photography

- Basic DSLR Operation
- Lighting for Photography
- Framing and Composition
- Video Recording

## Premiere Pro

- File Management
- Capturing and Importing Files
- Editing: Insert, Overwrite, Roll, Ripple
- Composite Video / Creating Titles
- Transitions / Effects / Coloring
- Editing Audio / Recording Voiceovers
- Exporting Client Ready Files

## Sound Design

- Multitrack Recording in Audition
- Recording Foley and ADR
- Layering Sound Effects

## Project Examples (Year 1)

- Movie / Concert Poster
- Magazine Layout
- Photo Restoration
- Printing and Mounting Work for Display
- Mini Documentary / Interview
- Product Commercial
- Short Film Production
- Animatic Production

## Illustrator

- Understanding Vector Graphics
- Program Interface / Working with Documents
- Selecting and Transforming Objects
- Working with Paths
- Fills and Strokes
- Creating Shapes
- Using Type
- Drawing with Digital Tablets
- Exporting Client Ready Files
- Working with Color: RGB vs CMYK
- Typography
- Printing Vector Graphics

## Animate

- Setting Up Project / Interface / Import Files
- Working within a Timeline and Frame Rates
- Frames and Key Frames
- Drawing Shapes / Using Symbols
- Applying Motion Tweens
- Inverse Kinematics: Bone Systems
- Using Effects / Masks / Text
- Incorporating Audio and Video
- Publishing Client Ready Files

## Project Examples (Year 2)

- Logo Design
- Package Design and Construction
- Creating a Font
- T-Shirt Design
- Animated Logos
- Animated Web Banners
- Titles for Video and Film
- Character Animation
- Digital Portfolio

# EARLY CHILDHOOD EDUCATION

NYS CIP CODE: 19.0709

## Program Summary

- Work side-by-side with a certified teacher in a daycare or elementary classroom.
- Participate in work-based learning experiences with the YMCA, Children's Hospital, the Buffalo Zoo, UB Childcare and more.
- Create and teach your own lessons in a preschool program run right out of our school.
- Re-experience the fun of your early childhood years through art, music, and storytelling.

## College Credit Connections

- Herkimer County Community College
- Medaille College
- Niagara County Community College
- SUNY Canton
- SUNY Erie

## Additional Information

- Current physical and PPD required.
- This program is eligible for post-secondary dual enrollment opportunities.

## Career Pathways

### Professional Careers

Child Life Specialist  
Child Psychologist  
Children's Librarian  
Elementary School Teacher  
Office of Child and Family Services  
Pediatric Nurse or Pediatrician  
Play Therapists  
School Administrator  
Social Worker  
Speech and Language Pathologist

### Technical Careers

Children's Author  
Children's Museum Educator  
Day Care Director / Owner  
Lead Teacher - Daycare  
Teacher Aide

### Entry Level Careers

Before / After School Care  
Coach  
Dance Instructor  
Nanny  
Preschool Aide  
Recreation Programs



# EARLY CHILDHOOD EDUCATION

## Intro to Early Childhood Education

- Opportunities in Early Childhood
- Your Role in Careers with Children

## Using Technology

- Educational Apps
- Photography in the Classroom

## Literature

- Methods of Storytelling
- Choosing Children's Books
- Children's Authors

## Health and Safety

- Guidelines for Promoting Children's Safety
- Health Guidelines for Working with Children
- Indicators of Child Abuse
- Special Health Concerns

## Guidance and Discipline

- Direct and Indirect Guidance
- Appropriate Social-Emotional Skills

## Curriculum

- Daily Routines
- Program Goals
- Use of Themes
- Choosing DAP Activities
- Block Plans/Lesson Plans

## Brain Development

- Brain Development
- Developmental Theorists

## Birth to School Age

- Physical, Social-Emotional, and Intellectual Development
- Appropriate Teaching Materials
- Special Concerns

## Music and Art

- Music and Movement Activities
- Music and Language Skills
- Art and Sensory Experiences
- Stages of Art Development

## Math and Number Readiness

- Math and Number Readiness
- Assessing Math Readiness
- Math Learning Centers

## Science

- Science Themes
- Experiments
- Science Learning Centers

## Value of Play

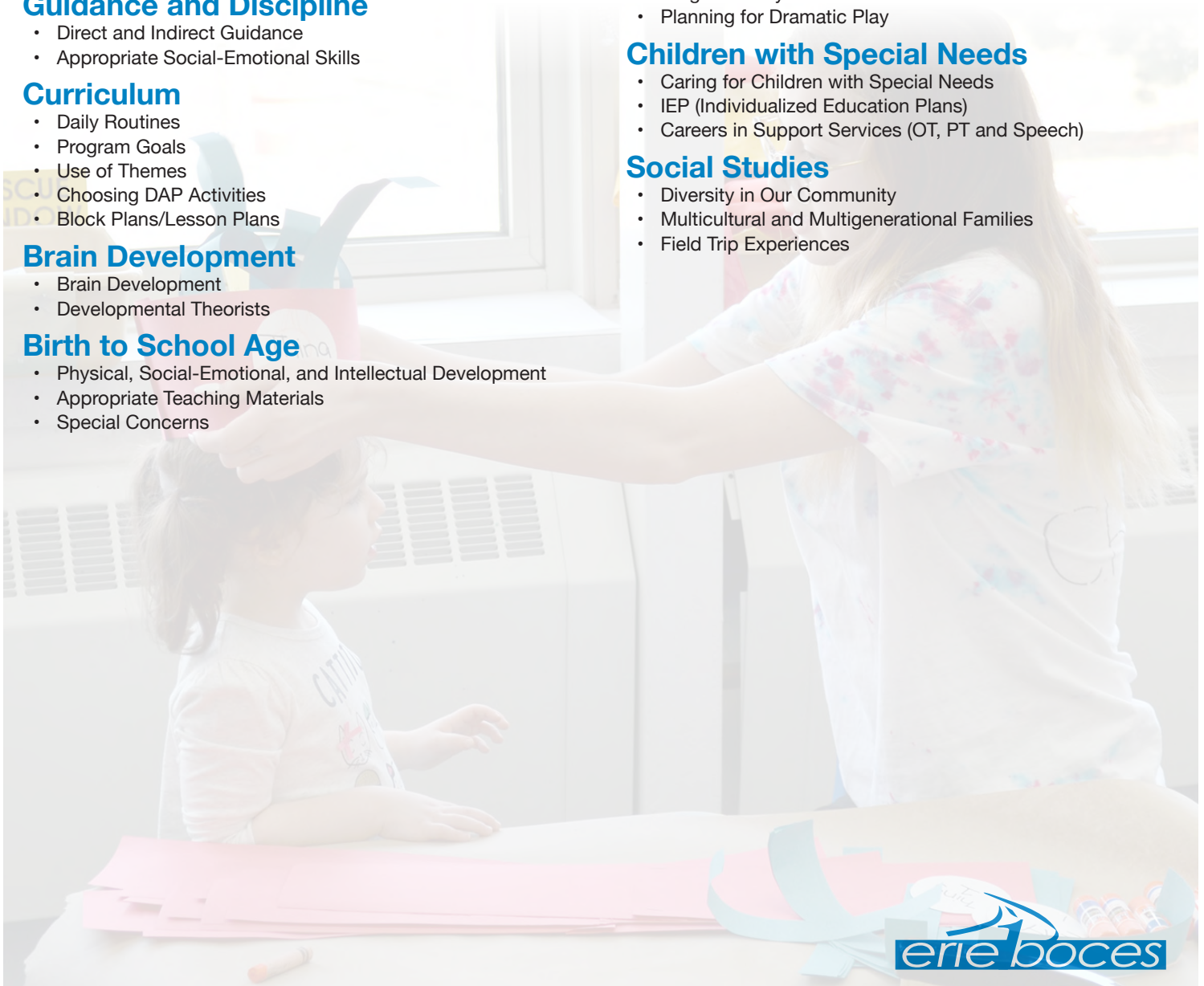
- Guiding Play and Puppetry Experiences
- Stages of Play
- Planning for Dramatic Play

## Children with Special Needs

- Caring for Children with Special Needs
- IEP (Individualized Education Plans)
- Careers in Support Services (OT, PT and Speech)

## Social Studies

- Diversity in Our Community
- Multicultural and Multigenerational Families
- Field Trip Experiences



NYS CIP CODE: 46.0302

## Program Summary

- This program focuses on the importance of safety, theory, and application of all facets of the electrical industry.
- Students have the opportunity to complete a 30-hour internship with electricians in the field.
- Students will learn the codes associated with the electrical industry.
- Solar and wind technology is an emphasis of this program.

## College Credit Connections

- Alfred State College
- Lincoln Technical Institute
- SUNY Erie

## Additional Information

- Boots or safety shoes are required for this program.

## Career Pathways

### Professional Careers

Electrical Construction & Maintenance Management  
Electrical Engineer  
Electrical Inspector  
Maintenance Technician  
Solar Technician (Photovoltaics)  
Utility Scale Worker  
Wind Turbine Technician

### Technical Careers

Audio Service Technician  
Automotive Electrician  
Commercial Electrician  
Electrical Sales Representative  
Residential Electrician

### Entry Level Careers

Apprentice  
Electrician Helper





# ELECTRICAL SYSTEMS

## The Basics

- Electrical Safety
- Trade Measurements
- Hand Tools
- Technical Calculations
- Basic Equipment and Procedures
- Wiring Methods

## Electrical Circuits I

- Power Calculations
- Specialized Tools and Equipment
- Circuit Fundamentals
- Magnetism
- Raceways and Fittings

## Electrical Circuits II

- Combination Circuits
- Trouble Shooting Methods
- Electrical Testing
- Cable
- Proper Enclosure Installation
- Ohm's Law

## Residential and Blue Print Reading

- Electrical Construction Drawings
- Overcurrent Protection
- Lighting
- Residential Service Installations
- Load Center Calculations
- Commercial and Industrial Services

## A/C Theory

- Single / Three Phase Distribution
- Transformers
- A/C Theory
- OSHA 10 Safety Certification

## Motor Controls

- Conductor Terminations and Splices
- Control Circuit Fundamentals
- Motor Controls
- Motor Theory and Application

## Renewable Technologies

- Renewable Energy
- Photovoltaic Systems
- Wind Technology
- Battery Technology
- Inverters and Application

## Control Systems and Internships

- Circuit Breakers and Fuses - Calculations and Applications
- Three Phase Motors
- Contractors and Motor Starters
- Financial Literacy
- Internship



**NYS CIP CODE: 47.0104**

## Program Summary

- Do you want to learn about the latest technology in personal computing, cellular communications, HDTV, virtual reality, Bluetooth, game machines, and car audio / video systems?
- Use soldering irons, hand tools, meters, and oscilloscopes to build computers, robots, amplifiers, speakers, wireless devices, power supplies, and other “high tech” projects.
- Can you picture yourself working with...
  - ✓ Personal and high performance gaming computers?
  - ✓ Robots on a factory production floor?
  - ✓ Drone planes for the government?
  - ✓ X-ray machines, MRI, and CAT scanners in a medical facility?
  - ✓ Cellular and fiber optic communications networks?
  - ✓ Sound, lighting, and special effects equipment on a major concert tour?

## College Credit Connections

- Bryant and Stratton College
- SUNY Canton
- SUNY Erie

## Additional Information

- Students are eligible to take the Federal Communications Commission (FCC) certification exam upon successful completion of this program.

## Career Pathways

### Professional Careers

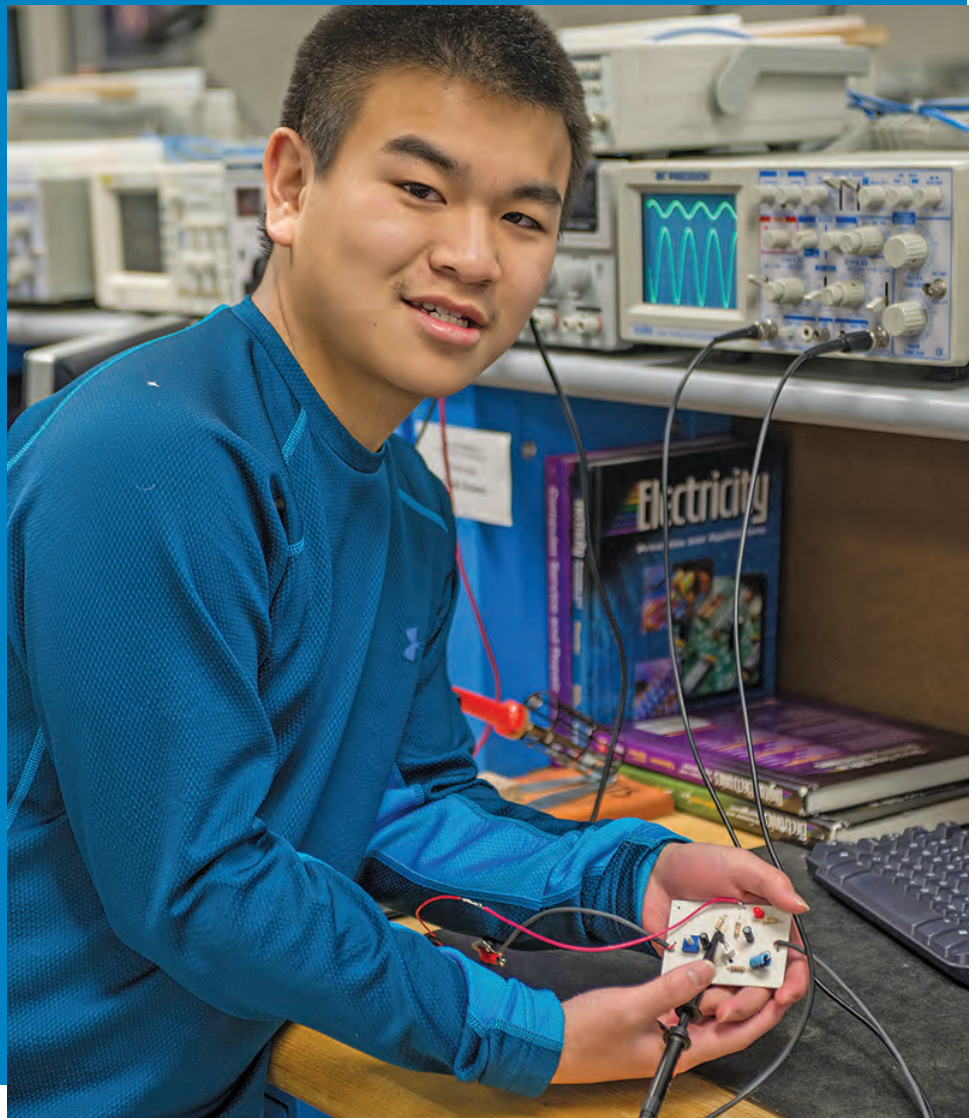
Biomedical Engineer  
Computer Engineer  
Design & Test Engineer  
Digital or RF Circuit Engineer  
Electrical Engineer  
Electrical Power Engineer  
Robotics Engineer  
Sales Engineer  
Software Engineer

### Technical Careers

Audio - Video Equipment Installer  
Avionics Technician  
Broadcast Electronics Technician  
Electro - Mechanical Technician  
Electronics Technician  
Medical Electronics Technician /  
Equipment Repairer  
Repairer  
Robotics Technician

### Entry Level Careers

Cable Television Technician  
Electronic Sales Representative  
Electronics Assembler  
Electronics Bench Tester  
Satellite Systems Technician  
Security Alarm Installer  
Solar Panel Installer  
Telecommunications Installer



## Microcomputer Systems

- I/O Peripheral Devices
- Central Processing Unit (CPU), Motherboard and Chip Sets
- RAM, ROM, BIOS, Magnetic and Optical Memory
- Power Supply Operation, Testing and Wattage
- Operating Systems (OS) Software Installation and Upgrades
- Processor Installation, Clock Speed, Overclocking and Cooling

## Amplification

- Gain and Frequency Response
- Bandwidth and Decibels
- Small Signal Amplifiers (Preamplifiers)
- Large Signal Amplifiers (Power Amplifiers)
- Amplifier Construction, Testing Troubleshooting and Repair
- Car and Home Theater Audio Systems

## Digital Electronics

- Binary Number System
- Logic Gates, Boolean Algebra and Combinational Logic
- ASCII Code, Short Message Service (SMS)
- Text Message Protocol
- Counters, Registers and Sequential Logic
- Logic Families (TTL, CMOS)
- Troubleshooting Digital Circuits (Logic Probe, Oscilloscope, DMM)

## Soldering, Desoldering and PCB Repair

- Metallurgy, Alloys, Eutectic Melting Point, and Lead Free Solder
- Soldering Safety and Use of Personal Protective Equipment (PPE)
- Selection and Care of Soldering Irons
- Through Hole and Surface Mount Devices (SMD)
- Component Removal Using Solder Pump and Braid

## Semiconductor Electronics

- Conductors, Insulators and Semiconductors
- Chemical Doping and Production of P & N Type
- Semiconductor Material
- PN Junction Diode Constriction and Biasing
- Light Emitting Diode (LED)
- Bipolar Junction Transistor (BJT)
- Integrated Circuit Design, Construction, Packaging and Pin Identification

## DC Electronics

- Sources of Electricity
- Voltage, Current and Resistance
- Ohm's Law
- Series, Parallel and Compound Circuits
- Voltmeter, Ohmmeter and Ammeter Measurements
- Power

## AC Electronics

- Frequency, Period and Wavelength
- Frequency Spectrum, Audio Frequency (A.F.), Radio Frequency (R.F.) and Microwave
- Inductance and Capacitance
- Transformers, Step-Up, Step-Down, Isolation
- Tesla Coils
- Three Phase AC Power Systems, Delta, Wye

## Analog/Digital Conversion

- Analog to Digital Converter (ADC 0802)
- Digital to Analog Converter (DAC 0802)
- Sampling Rate, Resolution (8 and 24 bit), File Size
- Audio Conversion Formats (PCM, WAV, FLAC, MP3, MP4)
- Video Conversion Files (AVI, WMV, MPG)
- Video File Formats, Compression, CODEC

## Telephone and Cellular Communications

- Duplex, Simplex and Half-Duplex Transmission
- Line, Trunk and Central Office (CO)
- Cordless Telephone (902-928 MHz, 2.4 GHz ISM)
- Wireless Telephone, Spread Spectrum (1850-1990 MHz)
- 1G (AMPS), 2G (PCS), 3G and 4G (LTE) Wireless
- Cellular and Personal Communications Systems (PCS)

## Radio Communications

- Oscillators, Hartley, Colpitts, Crystal, Microwave
- Transmitters, RF Frequency Spectrum, Federal Communications Commission (FCC), International Telecommunications Union (ITU)
- Modulation, Amplitude (AM), Frequency (FM), Pulse Width (PWM)
- Antennas and Transmission Lines, Microwave, RADAR and Satellite Communication Systems
- History of Radio, Nikola Tesla, Lee DeForest, Howard Armstrong, Guglielmo Marconi
- Receivers, Crystal and "Foxhole", Heterodyne, Superheterodyne, Block Diagrams

NYS CIP CODE: 51.0904

## Program Summary

- Imagine life in the exciting world of EMS!
- Explore the wide variety of career opportunities available today in Emergency Services and Health Care.
- Build a foundation in medical terminology, anatomy and physiology, and pathophysiology.
- Practice hands-on emergency care skills such as patient assessment, treatment, team communication and patient transportation.
- Gain skills necessary for firefighting, auto extrication, and mass casualty incidents.

## College Credit Connections

- Bryant and Stratton College
- SUNY Erie
- Trocaire College

## Additional Information

- Students will gain certification in:
  - CPR (National)
  - First Aid (National)
  - EMT-B (State, National)
  - ICS 100, 200, 700, 800

## Career Pathways

### Professional Careers

Physician's Assistant  
Physician  
Public Health Official  
Registered Nurse

### Technical Careers

Advanced Emergency Medical Technician  
Certified Nursing Assistant  
Firefighter  
Licensed Practical Nurse  
Paramedic  
Phlebotomist  
Medical Assistant  
Surgical Technician

### Entry Level Careers

Camp Counselor  
Certified Nursing Assistant  
Community Medicine  
Emergency Medical Dispatcher  
Emergency Medical Technician (EMT)  
Emergency Room Technician  
Lifeguard  
Medical Assistant  
Special Event Medical Staff  
Ski Patrol



## Anatomy and Physiology

- Biological Chemistry and Atomic structure
- Cellular Structure and Processes
- Tissue
- All 11 Body Systems

## Medical Terminology

- Basic Medical Abbreviations
- Define Prefixes, Suffixes, and Word Parts
- Spell and Pronounce Medical Terms Accurately

## Medicine

- Medical Overview
- Neurology
- Immunology
- Diseases and Disorders
- Basic Medical Abbreviations
- Define Prefixes, Suffixes, and Word Parts
- Spelling and Pronunciation

## Preparatory

- EMS Systems
- Research
- Workforce Safety and Wellness
- Documentation
- Therapeutic Communication
- Medical/Legal and Ethics

## Pharmacology

- Principles of Pharmacology
- Medication Administration
- Emergency Medications

## Patient Assessment

- Scene Size Up
- Primary Assessment
- History Taking
- Secondary Assessment
- Monitoring Devices
- Reassessment

## Mathematics

- Weight Conversions
- Concentration Calculations
- Cardiac Output
- Minute Respiratory Volume
- Drug Administration Calculations

## Trauma

- Bleeding
- Special Considerations in Trauma
- Environmental Emergencies
- Multisystem Trauma

## Special Patient Populations

- Obstetrics
- Neonatal Care
- Pediatrics
- Geriatrics
- Patients with Special Challenges

## EMS Operations

- Principles of Safely Operating a Ground Ambulance
- Incident Management
- Multiple Casualty Incidents
- Air Medical
- Vehicle Extrication
- Hazardous Materials
- Terrorism and Disaster

NYS CIP CODE: 15.0405

## Program Summary

- Through hands on learning projects and skill based competitions, Engineering and Robotics students prepare for the future by learning how to develop their ideas from concept to reality.
- Throughout the Design Process, we can take an idea and create just about anything you can conceptualize.
- Spend some time with us and learn how to build a trebuchet, help us to develop the technology necessary to create a 3D printed “bobblehead”, or create 3D printable parts and artwork from black and white pictures.
- Utilizing classroom technology, we build a pumpkin-throwing trebuchet for annual competition, and a variety of robots for competitions within the classroom, at Tech Wars.
- Learn how to be productive in all work situations. Whether working alone, within a group, or leading a team of professionals in order to solve real-world problems in real-world situations.

## College Credit Connections

- Bryant and Stratton College
- Rochester Institute of Technology - PLTW
- SUNY Canton
- SUNY Erie
- University of Northwestern Ohio

## Career Pathways

### Professional Careers

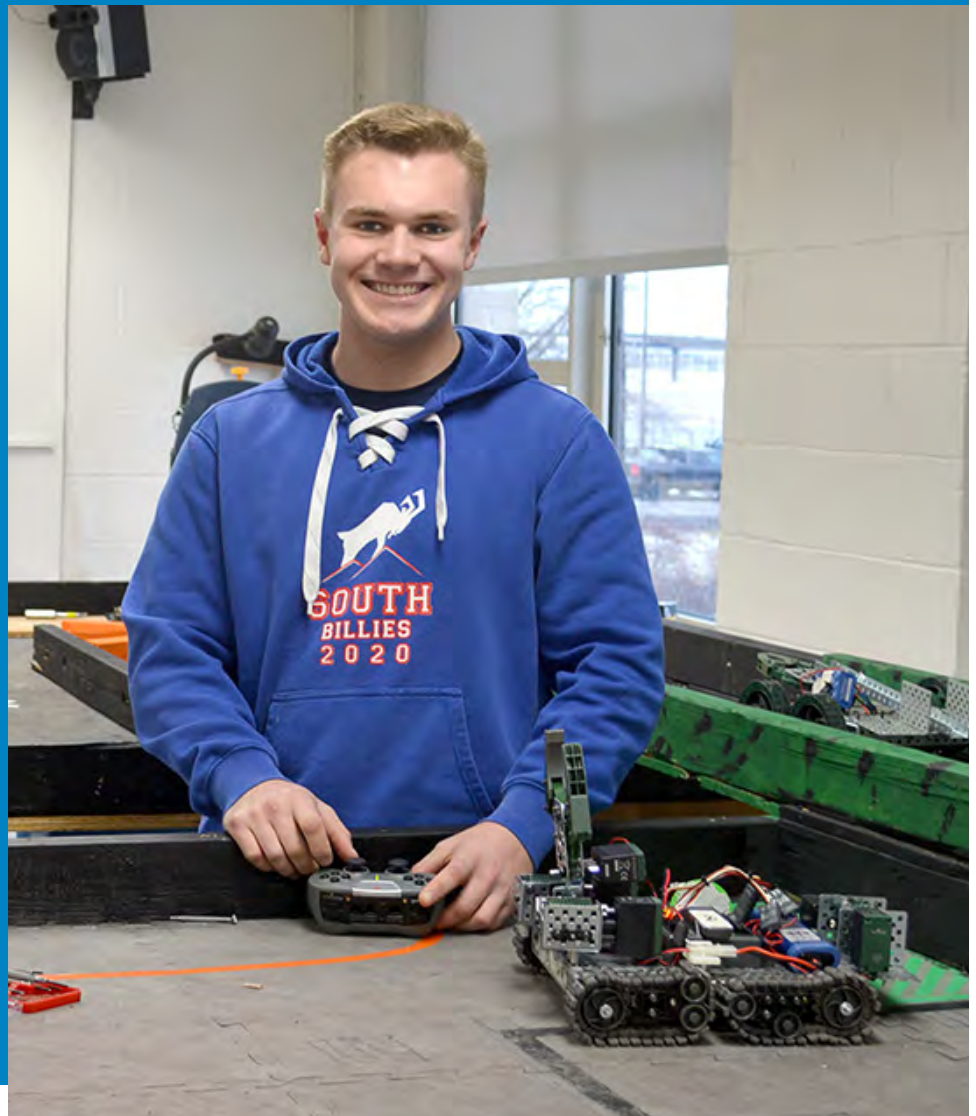
Aerospace Engineer  
Architect  
Chemical Engineer  
Civil / Structural / Environmental Engineer  
Computer Science Engineering  
Design Engineer  
Electrical Engineer  
Engineering Manager  
Industrial Engineer  
Mechanical Engineer  
Manufacturing Engineer  
R&D Engineer  
Robotics Engineer  
Stationary Engineer

### Technical Careers

Application Developer  
Computer-Control Programmers  
and Operators  
Data Analyst  
Database Administrator  
Electrical Engineering Technologist  
Electrical Technologist  
Manufacturing Technologist  
Mechanical Engineering Technologist  
Technology Project Manager

### Entry Level Careers

Advanced Manufacturing  
CAD Designer  
CNC Programmer  
Production Scheduler  
Repair Technician  
Robotics Programmer  
Software Developer  
Web Developer



## Engineering Essentials

- Students explore the breadth of engineering career opportunities and experiences as they solve engaging and challenging real-world problems like creating a natural relief center system or creating a solution to improve the safety and well-being of citizens.

## Introduction to Engineering Design

- Students dig deep into the engineering design process applying math, science, and engineering standards to hands-on projects like designing a new toy or improving an existing product.

## Principles of Engineering

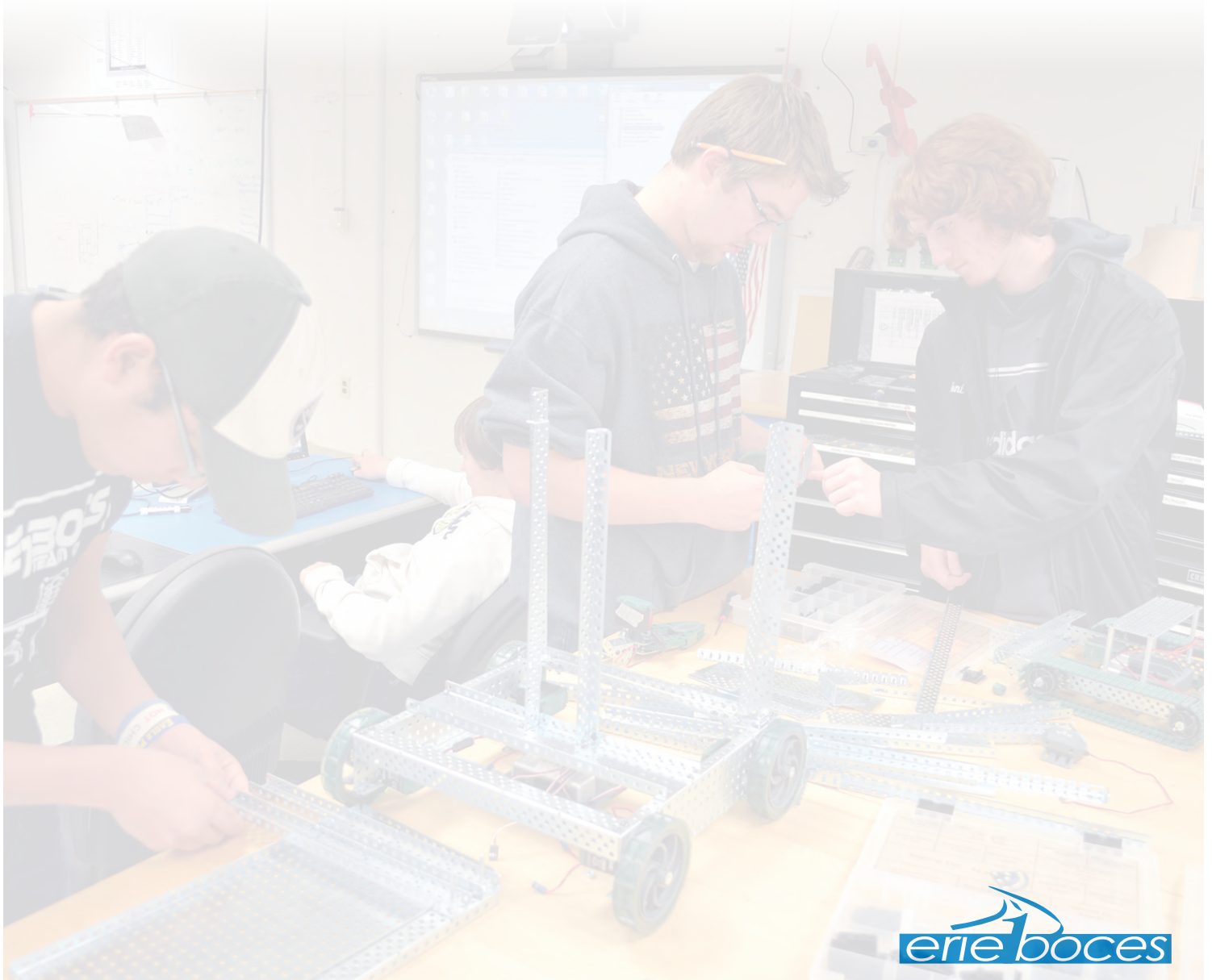
- Students explore a broad range of engineering topics including mechanisms, strength of structure and materials, and automation, then apply what they know to take on challenges like designing a self-powered car.

## Computer Integrated Manufacturing

- Students discover and explore manufacturing processes, product design, robotics, and automation, and then apply what they have learned to design solutions for real-world manufacturing problems.

## Engineering Design and Development

- Students identify a real-world challenge and then research, design, and test a solution, ultimately presenting their unique solutions to a panel of engineers.



NYS CIP CODE: 50.0407

## Program Summary

- Experience what it's like to produce a "NYC Fashion Week" style show exhibiting original student designs and styled merchandise selections from WNY Fashion boutiques.
- Meet new friends with similar interests in the fashion industry.
- Learn to dress, style, and create trends based on design elements and the fashion cycle.
- Get to know the movement of popular fashion by forecasting fashion trends while applying real world fashion skills.
- Create a successful business plan for a fashion boutique combining your design aesthetics with merchandising concepts.

## College Credit Connections

- Bryant and Stratton College
- Genesee Community College
- LIM College
- SUNY Buffalo State College

## Additional Information

- Students in this program are eligible for post-secondary dual enrollment.

## Career Pathways

### Professional Careers

Buyer  
Costume Designer  
Creative Director  
Fashion Editor  
Graphic Design Artist  
Market Research Director  
Marketing Manager  
Resourcing Agent  
Retail Operations Manager  
Senior Fashion Designer  
Style Director  
Textile Developer  
Wardrobe Stylist

### Technical Careers

Assistant Graphic Designer  
Fashion Designer  
Fashion Merchandiser  
Fashion Show Coordinator  
Illustration Artist  
Personal Shopper  
Retail Manager  
Social Media Manager  
Stylist Assistant  
Window Display Artist

### Entry Level Careers

Assistant Fashion Show Coordinator  
Fashion Designer Assistant  
Retail Sales Associate  
Seamstress





## Fashion Show Production

Starting with mood boards and work room sketches, students plan, create and style a line of clothing that is showcased center stage at our yearly fashion show. Students plan every aspect of the show from designs to music to posters to choreography to invitations. This real-world experience is incredibly valuable for all!

## Sewing

Basic sewing skills are used to create interesting projects that reflect student inspirations. Once basic sewing skills are mastered, you can create any designs exhibiting your inspiration.

## Graphic Design

PhotoShop and Illustrator programs are used to create fashion magazine layouts that express current fashion trends and create unique digital pieces of art.

## Fashion Trend Forecasting

Learn how to predict the next big fashion trend! We locate trends using global resources following fashions in many areas of the industry.

## Fashion Psychology

Why do we wear what we wear? Successful fashion professionals know the spending habits of their customers. This unit helps in figuring out the priorities of consumers and why they wear and buy certain clothing styles paving the way for success in the business of fashion.

## The Business of Fashion

Merchandising, marketing, and advertising are the keys to success in the fashion industry. Students will create a working business plan to use when opening up their own business.

## Fiber, Yarn, Fabric, and Garment Production

How do clothes end up in the local mall? This unit follows a garment through all the steps of the production process from fiber to yarn to fabric to garment design to apparel sales. Students learn to appreciate how the clothes they wear everyday are manufactured and the impact of the fashion industry on the environment.

## Fashion History

Before we can forecast future fashion trends, we need to appreciate how fashion has changed over time. This unit explores fashions and their influences from ancient worlds and American history during the 1900's to the present.

## Analyzing Fashion Collections

Designers find inspiration just about anywhere. Learn how inspirations are the foundations for fashion collections and how a design aesthetic is a common thread in all their collections.

## Illustrating

Learn how to creatively illustrate fashion designs using a croquis that professional fashion designers use. This skill gives you the freedom to draw anywhere. Then digitize your artwork using PhotoShop and Illustrator.

## Technology

From wearable lights to digital designs in manufacturing, technology is impacting the fashion industry. Learn how to incorporate technology into your fashions from design to manufacturing to merchandising.

## NYS CIP CODE: 51.1614

### Program Summary

- Health care professionals touch lives and make a difference.
- According to a recent Gallup Poll, nursing is one of the most trusted professions in America.
- Get hands-on experience in a variety of health care environments including long term care facilities, hospitals, and an internship during your senior year.
- Develop personal and professional growth in an engaging environment.
- The need for health care professionals will allow you to live or travel wherever you desire while helping others.
- Tour acute care facilities, hospitals, UB's Gross Anatomy Lab, colleges, and the Gates Vascular Institute Brain Museum.

### College Credit Connections

- Bryant and Stratton College
- SUNY Canton
- SUNY Erie

### Additional Information

- Uniforms are required during on-site clinical experiences.
- Current physical require in fall of Junior year and must maintain updated physical for the entire two years.
- Additional steps are necessary to become a Certified Nursing Assistant.
- Certifications in BLS, First Aid, Blood Borne Pathogens, Stop the Bleed, Narcan Administration, and a CNA opportunity at the end of Senior year.

### Professional Careers

Nurse Practitioner  
Paramedic  
Pharmacist  
Physical Therapist / Occupational Physi-  
cian  
Physician's Assistant  
Registered Nurse  
Therapist

### Technical Careers

Emergency Medical Services  
Laboratory Technician  
Licensed Practical Nurse  
Massage Therapist  
Medical Assistant  
Medical Billing  
Occupational Therapist Assistant  
Phlebotomist  
Physical Therapist Assistant  
Radiology Technician

### Entry Level Careers

Central Supply Aide  
Certified Nursing Assistant Medical Dietary  
Aide  
Home Health Aide  
Medical Supply Company Service  
Personal Care Aide  
Pharmacy Technician  
Receptionist



## Origins and History of Nursing

- History and Trends of Health Care
- Health Care Systems
- Careers in Health Care
- Personal and Professional Qualities of Health Care Workers

## Anatomy and Physiology

- Major Organs and Systems of the Human Body
- Functions of Each Body System
- Compare Interrelationships of Body Systems
- Basic Diseases Affecting the Body Systems

## Medical Terminology

- Basic Medical Abbreviations
- Define Prefixes, Suffixes and Word Parts
- Spell and Pronounce Medical Terms Correctly

## Infection Control

- Microorganisms and their Classifications
- Six Components of the Chain of Infection
- Antisepsis, Disinfection and Sterilization
- Bioterrorism
- Aseptic Handwashing
- Standard Precautions
- Sterile Techniques for Gloving and Dressing

## Legal and Ethical Responsibilities

- Situations that Might Result in Legal Action for Malpractice, Negligence, Assault and Battery, Invasion of Privacy, False Imprisonment, Abuse and Defamation
- How Contract Laws Affect Health Care
- Rights of the Patient Receiving Health Care
- Professional Standards to Meet Legal/Ethical Requirement
- Legal Regulations that Apply to Health Care Records
- HIPAA
- Basic Rules of Ethics for Health Care

## Vital Signs

- Identify the Four Main Vital Signs
- Convert Fahrenheit to Celsius or Vice Versa
- Read a Clinical Thermometer
- Measure and Record Vital Signs Accurately
- Identify Normal Ranges for Vital Signs
- Include Pain as a 5th Vital Sign to be Assessed and Recorded

## Communication

- Factors that Interfere with Communication
- Importance of Listening, Non-Verbal Behavior
- Reporting and Recording Processes
- Benefits of Teamwork
- Characteristics of Leaders

## Personal Health and Wellness

- Nutrition
- Cultural Diversity
- Stress Reduction
- Emotional Response to Positive and Negative Stress
- Time Management and Problem Solving
- Depression

## Personal Care Skills

- New York State Department of Health CNA Skills
- Therapeutic Diets
- Assistive Devices for Ambulation / Transfer of Patients
- Measure and Record Height and Weight
- Basic Identification of Medication and Administration
- Geriatric Care
- Pre / Post Operative Care
- Specimen Collection

## Growth and Development

- Physical, Mental, Emotional and Social Developments
- Eating Disorders and Chemical Abuse
- Methods to Prevent Suicide and Common Warning Signs
- Stages of Grieving
- Maslow's Hierarchy of Needs
- Real Care Baby Project

# HEATING, VENTILATION & AIR CONDITIONING

NYS CIP CODE: 47.0201

## Program Summary

- Gain an understanding of the fundamentals of residential and light commercial plumbing, heating, and air conditioning installation, service and repair.
- You'll interpret blueprints, drawings, and schematics and be able to assemble, prepare and install piping and HVAC equipment for a variety of residential and light commercial applications.
- Be part of the team that constructs a modular home in conjunction with the Building Trades and Electrical classes.
- Get training on the latest green and solar technologies.
- Careers in the heating and air conditioning installation industry are growing rapidly each year.

## College Credit Connections

- Alfred State College
- SUNY Canton
- University of Northwestern Ohio

## Additional Information

- Students are responsible for purchasing leather gloves, work shoes, a tool belt, and basic hand tools.

## Career Pathways

### Professional Careers

Building Inspector  
Building Superintendent  
Contractor  
Mechanical Engineer  
Operations Manager  
Plumbing / HVAC Educator

### Technical Careers

Estimator  
HVAC Technician  
Industrial Plumbing Technician  
Master Plumber  
Pipe Fitter  
Union Steamfitter

### Entry Level Careers

Appliance Repair Technician  
Building Maintenance Technician  
Counter Sales Technician  
Handyman  
HVAC Installer  
Plumbing Apprentice  
Service Technician



# HEATING, VENTILATION & AIR CONDITIONING

## Drainage, Waste and Vents

- Learn to properly size, layout, and install DWV for both residential and commercial applications.

## Potable Water Systems

- Learn to properly size, layout, and install potable water systems.

## Forced Air Heating Systems

- Learn to properly size, install, troubleshoot, and repair all types of residential forced air furnaces.

## Steam and Hydronic Heating Systems

- Learn to properly size, install, troubleshoot, and repair all types of residential boiler systems.

## Central Air Conditioning Systems

- Learn to properly size, install, troubleshoot, and repair all types of residential central air systems.

## Soldering and Brazing

- A “must have” skill for all plumbers and HVAC techs! Students will learn a variety of methods for joining pipes and fittings.

## Fixture and Faucet Service and Installation

- Students will gain “real world” experience working on and installing a variety of plumbing fixtures.

## Blue Print Reading and Plumbing Drawings

- Students will learn how to quickly and accurately read and interpret blueprints and isometric drawings.

## Trade Related Certifications

- EPA608 (required to work with refrigerants)
- OSHA10



**NYS CIP CODE: 39.9031**

## Program Summary

- Do you want to change people's lives and make an impact on their physical health?
- The fitness and wellness industry is one of the fastest growing in the country.
- If you are outgoing and active, this is a rewarding career choice.
- Internships will expand your occupational knowledge and help you explore your field of study.
- Get real world experience working with allied health care continuum professionals.
- Students are taught by Certified Personal Trainers and Strength and Conditioning Coaches.

## College Credit Connections

- Bryant and Stratton College
- Canisius College
- Niagara County Community College
- SUNY Canton
- SUNY Erie

## Additional Information

- Students are responsible for purchasing a uniform for the fitness lab.
- Students will be prepped for a Personal Training Certification (NASM, ACE, NETA).
- Students in this program are eligible for post-secondary dual enrollment opportunities.

## Professional Careers

Athletic Trainer  
Chiropractor  
Exercise Physiologist  
Nutritionist / Registered Dietitian  
Physical Education Teacher  
Physical Therapist  
Strength and Conditioning Coach

## Technical Careers

Certified Personal Trainer  
Cross Fit Level 1 Coach  
Group Exercise Instructor  
Gym Manager  
Massage Therapist  
Physical Therapist Assistant  
Yoga / Pilates Instructor

## Entry Level Careers

Desk Receptionist  
Fitness Club Front  
Fitness Coach  
Health Sales Associate  
Lifestyle Coach  
Professional Bodybuilder  
Recreation Coordinator  
Sports Coach



## Fitness Safety

- CPR First Aid
- Proper Form
- Equipment Maintenance
- Spotting Techniques
- Injury Prevention
- Proper Warm-Up and Cool Down Techniques

## Functional Movement Screening

- 5 Major Movements
- Posture
- Stability
- Mobility
- Balance
- Flexibility

## Health Fitness Trends

- Social Media
- Research Based CEC's
- Allied Health Care

## Human Anatomy Physiology

- Muscle Origins and Insertions
- Joint Actions / Movement
- VT1 and VT2 Thresholds

## Nutrition and Weight Management

- Metabolic Syndrome
- Basal Metabolism
- Caloric Education
- Body Composition

## Special Program Design

- Special Population and Needs
- Older Adults / Special Needs
- Chronic Illness and Needs
- Youth Clientele

## Starting a Fitness Business

- Marketing of a Big Box Gym and Training Studio
- Legal and Ethical Implications
- Fitness Programs and Class Instruction
- Nutrition, Weight Loss, Energy and Sports Performance
- Risk Management

## Sport Specific Training

- Utilize the Same Equipment and Technology as Professionals
- Employment Opportunities in Strength and Conditioning
- Injury Prevention
- Sport Skill Assessments

## Cardiovascular and Resistance Training Program Design

- Design a Structured Exercise Routine for Client Goals
- Weight Loss
- Muscle Building / Assessments
- Cardiovascular Endurance / Assessments
- Exercising to Benefit Chronic Diseases and / or Avoid Risk Factors



# VIDEO PRODUCTION & RECORDING ARTS

NYS CIP CODE: 10.0202

## Program Summary

- Are you a creative person who loves video, film, sound, and music?
- Learn to create and produce your own original films and music with the guidance of industry professionals.
- Careers in video production and recording arts are very exciting, social, and creative.
- The video and recording industry is always changing and a VPRA student will have the opportunity to gain experience with cutting edge technology and network with industry professionals.
- If you are social, creative, and love film or music, then the Video Production and Recording Arts program is for you!

## College Credit Connections

- Canisius College
- Hilbert College
- Niagara County Community College
- SUNY Erie
- Villa Maria College

## Additional Information

- Students will be able to earn ProTools User, ProTools Operator Music, and ProTools Game Audio certifications as well as a Sibelius User certification.

## Career Pathways

### Professional Careers

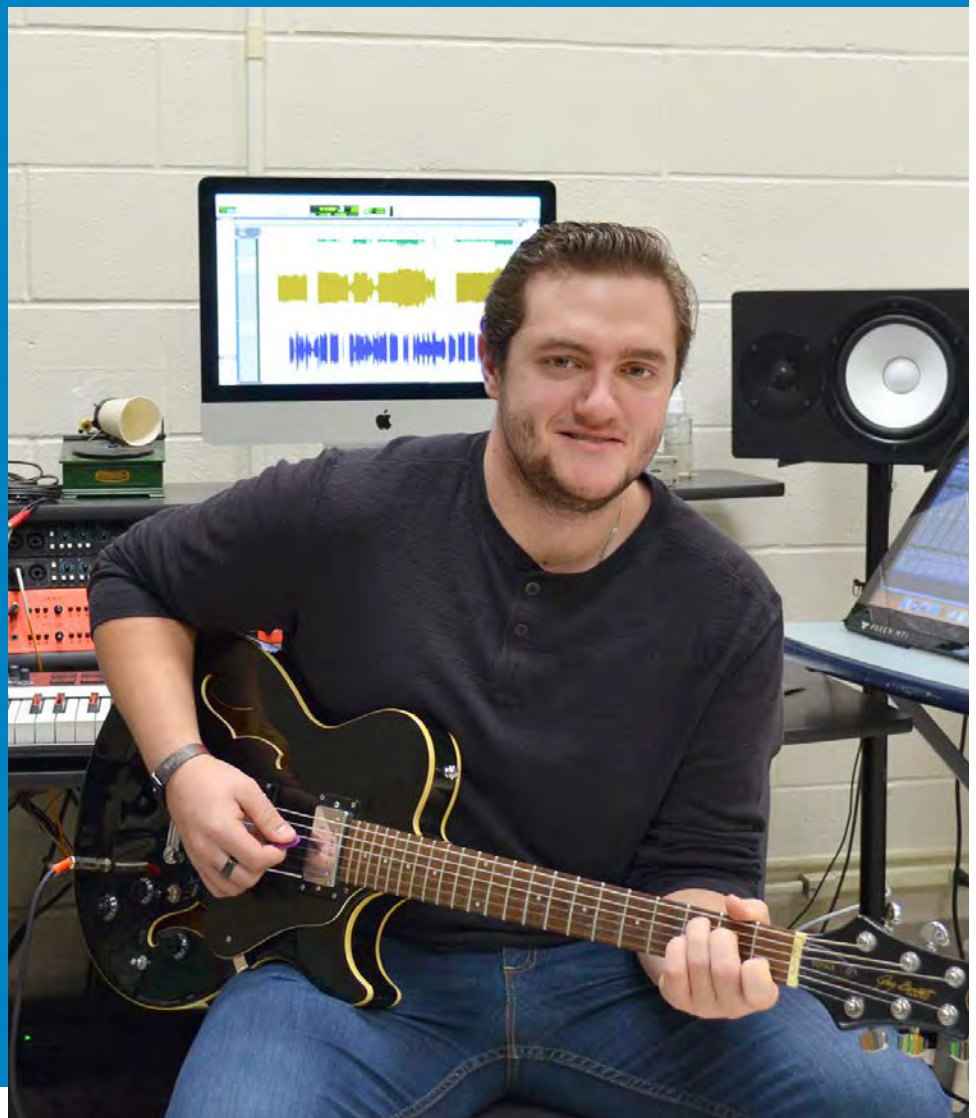
College Professor  
Director of Photography  
Film Director  
Film Editor  
Recording Studio Owner / Manager  
Sound Designer  
Tour Production Manager

### Technical Careers

Editing Room Assistant  
Live Sound Engineer  
Music Producer  
Recording Engineer  
Technical Director  
Video Editor  
Videographer

### Entry Level Careers

Assistant Audio Engineer  
Assistant Camera Operator  
Movie Set Grip  
Production Assistant  
Stage Hand





# VIDEO PRODUCTION & RECORDING ARTS

## Video Production Basics

- Equipment Basics
- Camera Operation
- Video and Audio Quality

## Video Language

- Camera Angle Names
- Creating Continuity
- Making Transitions

## Video Project Development

- Defining a Project
- Preparing a Treatment
- Creating a Storyboard
- Writing a Script

## Video Program Creation

- Story Videos
- Nonfiction Programs
- Instructional Programs
- News Reports
- Documentaries

## Introduction to Sound

- The Recording Studio
- Live and On-Location Recording
- Careers in Audio
- The Recording Process
- Copyright in Music

## Microphone Design & Application

- Microphone Design
- Microphone Characteristics
- Microphone Techniques
- Microphone Selection

## Digital Audio Technology

- Digital Audio Basics
- Digital Audio Recording Process
- Digital Audio Recording Systems

## Digital Audio Workstation

- DAW Hardware and Software
- Sound File Formats
- DAW Controllers
- System Interconnectivity

## Art of Mixing

- Process of Mixing
- Concept of Mixing
- Digital Console and DAW Mixer Technology
- Mixing Basics
- Automation



NYS CIP CODE: 15.1202

## Program Summary

- Bring your ideas to life by writing your own software.
- Like playing games? Design and code your own!
- Be a bigger part of the web by creating web pages and sites.
- Be a part of the virtual world.
- Become a leader in game design!

## College Credit Connections

- Bryant and Stratton College
- Canisius College
- Villa Maria College

## Additional Information

- Students in this program are eligible for post-secondary dual enrollment opportunities.

## Career Pathways

### Professional Careers

Computer Programmer  
Computer Systems Administrator  
Computer Systems Analyst  
Game Production and Management  
Information Security Analyst  
IT Manager  
Software Developer  
Web Developer & Project Engineer

### Technical Careers

3D Game Programmer  
Beta Tester  
Computer Support Specialist  
Technical Product Manager  
Think Tank Analyst  
Web Application Developer  
Web Developer

### Entry Level Careers

Coder  
Data Entry / Database Design  
Entrepreneur  
Game Interface Design  
Systems Analysis  
Web Design and Maintenance Entrepreneur



# WEB TECHNOLOGIES & GAME PROGRAMMING

## Web Design

- Creating Dynamic Web Sites
- Working with Video, Sounds, and Images
- Designing Small Web Files (SWF) Games and Movies

## Web Development Applications

- Adobe Software
- Interactive Game Development
- Cascading Style Sheets (CSS)
- Design Your Own Website

## Programming

- Basics of Programming
- Game Programming Languages
- 3D Game Programming

## Game Development Applications

- Program Graphical Computer Programs
- Learn Programming and Have Fun
- Virtual Learning Activities
- Design Your Own Game

## Databases

- How Internet Buying and Selling Works
- Organizing Customer Information
- Creating Forms and Reports



**NYS CIP CODE: 48.0508**

## Program Summary

- Welding holds much of our world together, from buildings and bridges to airplanes and equipment.
- Take a drawing or blueprint and breathe life into it by fabricating a life size creation.
- Know you have a future with many different job skills that will drive you down the road of success towards manufacturing, field work, or owning your own company.
- Skilled Welders Needed! There is a large shortage of welders in the United States with great opportunities for employment.

## College Credit Connections

- Alfred State College
- Lincoln Technical Institute
- Niagara County Community College
- Ohio Technical College

## Additional Information

- Students in this program are eligible for post-secondary dual enrollment opportunities.
- Steel/Composite toed work boots and appropriate dress are required to participate in shop activities.

## Career Pathways

### Professional Careers

Building Superintendent  
Certified Welding Inspector  
Engineer  
Mechanical Engineer  
Welding School Teacher

### Technical Careers

Boilermaker  
Fabricator  
Ironworker  
Machinist  
Millwright  
Pipeliner  
Robotics Technician  
Shipwright  
Steamfitter  
Underwater Welder  
Welding Fabricator

### Entry Level Careers

Apprenticeship Opportunities  
Shop Helper  
Sheet Metal Workers  
Welder  
Welding Associate  
Welding Apprentice  
Welding Supervisor



## Welding Safety

- Personal Protective Equipment (PPE)
- Burn Classification
- Face, Eye, and Ear Protection
- Ventilation
- Handling and Storing Cylinders
- Electric Hand Tool Safety and Operation
- Equipment Maintenance and Care

## Metal Working Safety

- Grinding
- Preparation
- Shearing
- Machine Cutting
- Hand Cutting

## Oxy-Fuel Cutting

- Equipment Set Up
- Cylinder Handling
- Regulator Safety
- Torches / Gases
- Hand Cutting
- Track Cutting
- Hand Auto Cutting

## Shielded Metal Arc Welding (SMAW)

- Equipment Set Up
- Basic Operations
- Types of Electrodes
- Multiple Position Welding
- Out of Position
- Operating Equipment

## Gas Metal Arc Welding (GMAW)

- Spray Transfer
- Globular Transfer
- Short Circuit Transfer
- Pulse Transfer
- Equipment Setup and Operation
- Machine Parts
- Welding Defects

## Gas Tungsten Arc Welding (GTAW)

- Equipment Set Up
- Gases / Flowmeter
- Equipment Operator
- Ferrous Metals
- Non-Ferrous Metals
- Torches and Machine Types
- Pulse TIG Welding

## Plasma Arc Cutting

- Equipment Set Up
- Safety
- Types
- Gases
- Torches

## Light Manufacturing

- Drill Press
- Sheet Metal Bending
- Machining Lathe
- Bridge Port Drill
- Hydraulic Shear
- Hydraulic Band Saw
- Iron Worker





**CTE Programs**

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## Half or Full Year Program

### Program Summary

- Experience a variety of programs in pursuit of your passion.
- Full year students will experience 8 different programs for 5 weeks at a time.
- Half year students will experience 4 programs for 5 weeks at a time.
- Time is spent shadowing the program and completing various projects designed for the Career Explorer.

### Additional Information

- Career Exploration is available as a whole or half year option.
- CDOS tracking and eligibility for full year students only.
- Available to students in grades 10, 11, and 12.
- Work-based learning hours are not provided in this curriculum.

## Exploration Opportunities

Animal Science  
Auto Technician Training  
Aviation Technology  
Baking and Pastry Arts  
Barbering  
Building Trades  
Collision Repair  
Cosmetology  
Criminal Justice  
Culinary Arts  
Cybersecurity and Networking  
Dental Laboratory Technology  
Digital Media  
Early Childhood Education  
Electrical Systems  
Electronics and Computer Technology  
Emergency Medical Services  
Engineering and Robotics  
Fashion Design Technology  
Health Careers  
Heating, Ventilation and Air Conditioning  
Sports Science Careers  
Video Production and Recording Arts  
Web Technologies and Game Programming  
Welding







**“We are very proud of the work we’ve done with the BOCES program over the last 16 years. The students we have worked with in your program have been nothing less than exceptional. We look forward to continuing our work with you.”**

**AMANDA LANYZS | NORTHEAST COLLISION**

## 2 (or more) Year Program

### Program Summary

- Occupational Education (OE) offers supportive career development programs for students with learning or management needs who require small classes and individually modified curricula.

### Additional Information

- CDOS Credential or Pathway Program (with successful completion of standard state assessments and OE II).

### OE I (One School Year)

- Students will explore career modules in Automotive Services, Building Maintenance, Food Service, and Human Services. Student performance is evaluated at the end of each five-week period. Evaluations from OE I are used as a guide to help choose an appropriate training area for OE II.

### OE II (Two or More Years)

- Students will choose one of four strands in which to continue skill development. These include Automotive Services, Building Maintenance, Food Service, and Human Services. Curriculum activities relate to entry level employment skills necessary for successful performance. Internships are available for those students ready to work in the community.

## Career Pathways

### Automotive Services

Auto Detailer  
Lubrication Services  
Parts Counter Worker  
Service Center Assistant  
Tire/Brake Services

### Food Service

Dishwasher  
Line Cook  
Prep Cook  
Server / Busser

### Building Maintenance

Construction Laborer  
Custodial Assistant  
Home Improvement Staff  
Maintenance Worker

### Human Services

Dietary Assistant  
Housekeeping / Laundry Staff  
Hospitality Worker  
Resident Aide



## Automotive Services

- Tire / Brake Service
- Interior / Exterior Detailing
- Lubrication Service
- Engine Performance
- Exhaust Service
- Suspension and Steering
- Vehicle Maintenance
- Electrical Systems
- NYS Inspection

## Building Maintenance

- Electrical Repair
- Painting and Staining
- Drywall
- Plumbing Repair
- Window Glazing
- Carpentry
- Lock Replacement

## Food Service

- Breakfast, Lunch and Dinner Service
- Baking Basics (i.e. Cookies)
- Cooking Techniques
- Real Work Internship Experience
- Knife Skills
- Soups
- Yeast Breads (i.e. Pizza)

## Human Services

- Hands-On Community Work Experiences in Hospitality, Health Care and Retail Service Fields
- Teamwork and Personal Skills
- Responsible Pet Ownership
- Job Preparation and Retention Skills
- Interview Skills
- Leadership and Self Advocacy



# CONNECTIONS: HEALTH RELATED CAREERS

Buffalo General Medical Center | Millard Filmore Suburban Hospital | Oishei Children's Hospital

## Program Summary

- The medical professional of today is a member of the ever evolving world of health care. It demands creative critical thinking to deliver high quality and state-of-the-art patient care.
- Experience a day in the life of a practicing medical professional as they interact with colleagues, patients and families.
- Students directly observe professionals while providers care and treat a variety of patient conditions.
- Correlate concepts of government and economics as they relate to today's unique health care challenges.

## Annual Credits

- 1 Credit ELA 12
- 1 Credit PIG/Economics
- 1 Credit Anatomy, Physiology and Disease
- 1 Credit Internship

## Additional Information

- New Visions program require an application and an interview for admission.
- Current immunization, PPD, and physical exam are required prior to the start of class.
- Students must provide their own transportation to class and clinical.
- Professional dress is required daily.
- Students are responsible for purchasing a lab coat at the beginning of the school year.

## Career Pathways

### Professional Careers

Biomedical Engineer  
Chiropractor  
Dentist  
Hospital / Nursing Home Administrator  
Lab Technologist  
Nurse Practitioner  
Paramedic  
Pharmacist  
Physical / Occupational /  
Speech Therapists  
Physician Assistant  
Physician / Medical Specialties  
Registered Dietitian  
Registered Nurse

### Technical Careers

Emergency Medical Technician  
Imaging Technician  
Licensed Practical Nursing  
Medical Assistant  
Medical Records: Biller & Coding  
Mortician  
Physical Therapy Assistant  
Respiratory Therapist

### Entry Level Careers

Activity Aide  
Central Supply Aide  
Certified Nursing Assistant  
Home Care Aide  
Medical Secretary / Receptionist  
Phlebotomist



# CONNECTIONS: HEALTH RELATED CAREERS

## Anatomy and Physiology

- Structure and Function of Body Systems
- Medical Terminology
- Observe Normal Anatomy and Physiology Through Clinical Observation

## Pathophysiology

- Disease as it Affects Individual Health
- Observe Disease Process and Treatment Through Clinical Observation

## Possible Clinical Rotations

- Medical and Surgical Acute Care
- Infection Control
- Diagnostic Imaging
- Primary Care Clinics
- Critical Care
- Pharmacy
- Research

## English

- Health Care Subject Novels which Correlate to Anatomy, Physiology and Disease
- Documentation of Clinical Experience and Observation
- Healthcare Topic Case Presentations
- Topic Specific Research Paper and Debate
- Debate/Presentation

## Participation in Government

- Governmental Control and Laws as they Pertain to Health Care, Licensure, Insurance and Privacy
- Public Debate on Current Healthcare Topic
- Topic Specific Research Paper

## Economics

- Financial Implications for the Practicing Professional and Medical Decisions
- Personal Finance for College and Career Readiness
- Final Project on Global Health

## Health Care Internships

- Observing Diverse Medical Professionals While Participating in Clinical Setting
- Apply Theory to What is Observed in the Facility and Community Venues



## Program Summary

- Customize your education to prepare yourself for the future of your dreams!
- Strengthen transferable professional skills and communication while networking with peers and local industry professionals.
- Internships will cater to student interests and aspirations through hands-on learning experiences.
- Consider a multitude of pathways by engaging with guest speakers and presentations by industry professionals.
- Correlate concepts of ELA, government, and economics as they relate to professional fields.
- Writing-intensive course will have you prepared with the communication skills necessary to succeed.
- Prepare yourself for college and careers with personalized resumes, cover letters, portfolios, and more.

## College Credit Connections

- SUNY Erie

## Annual Credits

- 1 Credit ELA 12
- 1 Credit PIG/Economics
- 1 Credit Internship
- 1 Credit Public Speaking

## Additional Information

- New Visions programs require an application and interview for admission.
- Students must provide their own transportation to internship sites.

## Career Pathways

### Professional Careers

Business Administration  
Journalist  
Human Resource Officer  
Educator  
Strategist  
Marketing Professional  
Business Executive  
Consultant  
Communication Specialist  
Media / Public Relations  
International Business

### Technical Careers

Business / Account Manager  
Advertising Agent  
Analyst  
Coordinator  
Project / Office Manager  
Account Executive  
Compliance Officer  
Content Writer  
Digital Marketing

### Entry Level Careers

Salesperson  
Entrepreneur  
Customer Relationship Specialist  
Data Entry



## Professional Communication and Composition

- Build resume, e-Portfolio, cover letter, etc
- Email writing and business correspondence
- Strengthen literacy skills through various writing tasks
- Develop clear and effective oral communication
- Business and Technical Report Writing
- Bibliographic instruction
- Academic policies and procedures

## Internships

- Observe professionals in diverse career pathways and participate in organizational functioning
- Apply theory and to practice and showcase professional skills
- Multiple opportunities for diverse experiences

## Human Resources

- Understand the interview and hiring process from the business perspective
- Policies and Procedures
- Cultural Diversity in the Workplace

## Marketing and Personal Branding

- Learn about demographics and advertising approaches for a variety of business models.
- Develop a professional e-Portfolio showcasing learning experiences and professional documents
- Logos, jingles, and brand recognition
- Psychology of advertising
- Demographic factors shaping marketing strategies

## Management

- Organizational Behavior
- Power Dynamics
- Public Policy and Law
- Consumer Relations

## Public Speaking

- 7 Elements of Public Speaking
- Strategies for Effective Communication
- Overcoming internal and external interference

## Personal and Professional Development

- Goal-setting and personal growth
- Problem Solving and Creativity
- Time/Task management
- Methods of inquiry and critical thinking

## Entrepreneurship

- Study types of business and start-ups
- Writing a comprehensive business plan



In Partnership With Canisius College and The University at Buffalo

## Program Summary

- The Legal Academy program offers an exciting opportunity for selected students to experience a unique alternative to the traditional classroom setting.
- Develop a network of professional connections through extensive field experiences across WNY.
- Create resumes superior to those of many college students.
- Shadow college level legal courses.
- Participate in the Erie County Bar Association's Mock Trial Competition.
- Mock trial at UB School of Law and Class Shadowing
- Internship Intensive Program
- Sites include political offices, courts (county, city and federal), law offices and transportation security administration

## Annual Credits

- 1 Credit ELA 12
- 1 Credit PIG/Economics
- 1 Credit Criminal Justice
- 1 Credit Internship

## College Credit Connections

- Bryant and Stratton
- Canisius College
- Hilbert College
- Medaille College
- SUNY Erie

## Additional Information

- New Visions programs require an application and interview for admission.
- Students are responsible for their own transportation to Canisius College and internship sites.

## Career Pathways

### Professional Careers

Attorney  
Forensic Agent: FBI, ICE, DEA  
Intelligence Agent  
Investigator  
Judge  
Probation / Parole Officer  
Social Worker

### Technical Careers

Corrections Officer  
Crime Scene Investigator  
Detective  
Law Enforcement Officer  
Legislative Analyst  
Paralegal

### Entry Level Careers

Bailiff  
Dispatcher  
Legal Secretary  
Legislative Assistant  
Lobbyist  
Politician  
Report Writer





## Criminal Law

- The Criminal Trial
- NY State Penal Law
- Violent Crimes
- Property Crimes
- The Court System
- Sentencing and Corrections

## Family Law

- Law and the American Family
- Marriage
- Parents and Children
- Foster Care and Adoption
- Separation, Divorce and Custody
- Juvenile Delinquency

## Mock Trial

- Steps in a Trial
- Jury Selection
- Opening Statements
- Closing Arguments
- Rules of Evidence and Procedure
- Witness Examinations

## Lawmaking

- Advocacy
- Settling Disputes
- Lawyers

## Torts

- Civil Law
- Civil vs. Criminal Action
- Negligence
- Strict Liability
- Torts and Public Policy

## Consumer Law

- Contracts
- Warranties
- Credit and Other Financial Services
- Deceptive Sales Practices
- Major Purchases

## Individual Rights

- Freedom from Unreasonable Search and Seizure
- Freedom of Speech
- Double Jeopardy
- The Right to an Attorney / Jury Trial
- 8th Amendment and Capital Punishment

## Policing

- Article 35: Use of Force
- NY State Safe Act
- The Crime Scene
- Forensic Techniques

## Contemporary Issues in Law

- Immigration Law
- Intellectual Property
- Law and Terrorism

## Internship Rotations

- Four Internships per Year
- One Internship per Quarter
- Sites include political offices, courts (county, city and federal), law offices and transportation security administration

# ZOO WILDLIFE & CONSERVATION CAREERS

In Partnership with the Buffalo Zoo

## Program Summary

- Consider the 23-acre Buffalo Zoo your new home!
- The Zoo Wildlife and Conservation Careers program allows highly motivated, college bound seniors the opportunity to explore options in the many areas related to wildlife, conservation and zoo-based careers.
- This exciting program includes daily access to zoo grounds, internships with keepers, behind the scenes tours, and diverse guest speakers.
- Students will get to experience the zoo's day to day operations and learn how to incorporate conservation into their daily lives and help spread the message to others.
- The school year will culminate with a project in which students research and design their own animal exhibit with input from the Buffalo Zoo's animal experts.
- Correlate concepts of ELA, government and economics as they relate to animal and conservation topics.

## College Credit Connections

- Canisius College

## Annual Credits

- 1 Credit ELA 12
- 1 Credit PIG/Economics
- 1 Credit Internship
- 1 Credit Zoology

## Additional Information

- New Visions programs require an application and interview for admission.
- Students are responsible for their own transportation.
- Students are required to have completed 2 academic credits in Regents level science and 2 academic credits in Regents level math upon entering the program.
- Current immunizations, PPD, and physical exam are required.

## Career Pathways

### Professional Careers

Curator  
Ecologist  
Environmental Scientist  
Fish and Game Warden  
Marine Biologist  
Veterinarian  
Wildlife Biologist  
Wildlife Enforcement Officer  
Zoologist

### Technical Careers

Animal Nutritionist  
Animal Trainer / Behaviorist  
Animal Welfare Agent  
Aquarist  
Habitat Specialist  
Licensed Veterinary Technician  
Wildlife Rehabilitator  
Wildlife Technician  
Zookeeper

### Entry Level Careers

Animal Care Specialist  
Animal Shelter Worker  
Farm Hand  
Humane Educator  
Kennel Assistant  
Stable Worker  
Veterinary Assistant  
Wildlife Rehabilitation Assistant  
Zoo Program Assistant



# ZOO WILDLIFE & CONSERVATION CAREERS

## Conservation

- Habitat Loss
- Invasive Species
- Climate Change
- Biodiversity
- Conservation Education
- Species Survival Plans

## Animal Husbandry

- Zoo Animal Care
- Diet and Nutrition
- Population Management
- Record Keeping and Transportation

## Evolution of Zoos

- Zoo History
- Today's Zoos
- Professional Zookeeping
- Animal Ethics and Welfare
- Safety

## Zoology & Animal Science

- Reptiles
- Amphibians
- Birds
- Fish and Marine Life
- Mammals
- Invertebrates
- Anatomy and Physiology

## Behavior

- Basic Animal Behavior
- Animal Observations
- Enrichment
- Positive Training Methods
- Husbandry Training

## Veterinary Care

- Zoonotic Disease
- Safety
- Handling and Restraint
- Preventative Care and Maintenance
- Directional Terminology

## Exhibit Design

- Planning an Exhibit
- Plant Selection
- Exhibit Considerations and Safety
- Needs of the Animals
- Life Systems Maintenance
- Public Education Signs and Interactive Displays

## Horticulture

- Native Plants
- Identifying Plants
- Botany
- Zoo Horticulture

## Zoo Operations

- Mission and Purpose
- Educational Displays
- Zoo Events
- Volunteer Opportunities
- Marketing and Business





## MORE CTE OPPORTUNITIES

### The P-TECH R.A.C.E. Program offers:

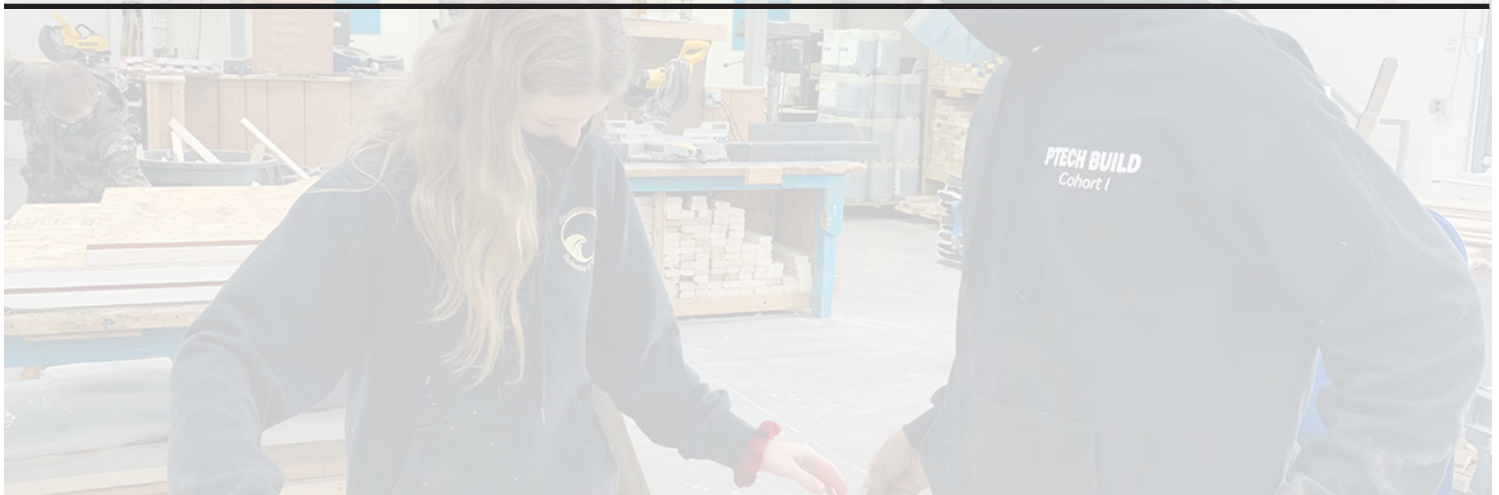
- A FREE Associates Degree from SUNY Erie.
- Graduate with industry credentials.
- Rigorous Technical Endorsed Regents Diploma and college coursework.
- Opportunities to career pathways in highly-demanded STEM fields.
- Preparation for careers with strong earning potential.
- Relationship building with industry professionals.



## MORE CTE OPPORTUNITIES

### The P-TECH B.U.I.L.D. Program offers:

- A FREE Associates Degree from SUNY Erie.
- Graduate with industry credentials.
- Rigorous Technical Endorsed Regents Diploma and college coursework.
- Opportunities to career pathways in highly-demanded STEM fields.
- Preparation for careers with strong earning potential.
- Relationship building with industry professionals.



ERIE 1 BOCES

# MIDDLE SCHOOL INITIATIVE

Providing opportunities for the next generation to explore all that is possible in Career and Technical Education.



## MORE CTE OPPORTUNITIES

Erie 1 BOCES is committed to expanding opportunities for all WNY students to experience high quality career and technical education. Early access and exposure to career exploration, STEM, and application-based learning is critical to this effort. To support this, Erie 1 BOCES has developed a series of enrichment activities for middle school aged students. Most activities are FREE of charge and include transportation.



# MINECRAFT MADNESS

## MINECRAFT OBSTACLE COURSE TEAM COMPETITION

Minecraft Madness is an annual team competition hosted by the Web Technology and Game Programming Department. Teams of 8th grade students travel to an Erie 1 BOCES Career and Technical Center to compete against rival middle schools in the design and completion of an obstacle course they create. Students are tasked with building their best obstacle to stump their rivals and take home the trophy! Participation in this event includes a Minecraft.edu license for use in the classroom!

# “TASTE OF TECH”

Every January during Regents Week, the Harkness, Kenton and Potter Career and Technical Centers open their doors to local 8th graders for a 3-hour, interactive career exploration experience.



## MORE CTE OPPORTUNITIES



Campers spend a week at the Career and Technical Centers and participate in a series of 4 camps of their choosing. From Animal Science and Camp Culinary to the 7-Hour Movie Challenge, camps are designed to engage students in exciting and interactive activities that make learning fun!

[www.e1b.org/summercamp](http://www.e1b.org/summercamp)

# Middle School MODS

 <i>Heart Healthy</i>	 <i>Cupcake Wars</i>
 <i>Pizza Palooza</i>	 <i>Pet Purr-Suit</i>
 <i>Movie Poster Design</i>	 <i>Theatrical Makeup</i>
 <i>Runway to Fashion</i>	

This unique collaborative experience builds a direct partnership between a middle school Family and Consumer Science, Health, Art or Technology teacher and an Erie 1 BOCES CTE Teacher. Teachers from both the component middle school and E1B will collaborate to enhance high-interest lessons with a CTE flare. Participating students will have direct access to an E1B CTE Center for a hands-on culminating activity that builds upon the interactive lessons.

# G.R.I.T.



## Girls Rising Interest in Technology

Erie 1 BOCES is proud to offer this STEM and industry-based field trip exclusively for Middle School girls. The day includes several stops at well-known Western New York STEM based industry partners where the girls will tour, interact and hear from female leadership, participate in hands-on activities and build an understanding of available career pathways.



# Middle School in Motion.

More than 4,000 Students Participate Annually.

## GET INVOLVED!



Website  
[www.e1b.org](http://www.e1b.org)


















Email  
[atrautman@e1b.org](mailto:atrautman@e1b.org)



Phone  
(716) 821.7076



# EXCEPTIONAL EDUCATION PROGRAMS AND SERVICES

<p><b>CCRA</b></p>	<p><b>eAcademy</b></p>	<p><b>EDGE</b></p>	<p><b>Extended School Year</b></p>
			
<p>College and Career Readiness Academy Grades 9 – 12 6:1:1 Classes</p>	<p>100% Virtual Learning Option General Education Students Grades K-12</p>	<p>Regents Bound Academics Grades 9 - 12 CCRA, Twilight, and Long Term Suspension offered here</p>	<p>Self-Contained Classes Grades K - 12</p>
<p>Located at EDGE</p>		<p>1635 East Delevan Avenue Cheektowaga, NY 14215</p>	<p>Various Locations Across WNY</p>
<p><b>Home Hospital Instruction</b></p>	<p><b>Integrated Special Classes</b></p>	<p><b>Maryvale Academy</b></p>	<p><b>MiddleTech</b></p>
			
<p>All Grade Levels</p>	<p>Academic and Functional Classes All Grade Levels</p>	<p>Functional and Regents Bound Academics High School</p>	<p>CTE and Project-Based Curriculum Grades 7 - 8</p>
	<p>Various Locations Across WNY</p>	<p>1050 Maryvale Drive Cheektowaga, NY 14225</p>	<p>Located at Winchester Academy</p>
<p><b>Northtowns Academy</b></p>	<p><b>Project Search</b></p>	<p><b>Related Services</b></p>	<p><b>RISE</b></p>
			
<p>Middle School Grades 6 - 8, 6:1:1 Classes RISE and Long Term Suspension Offered Here</p>	<p>Functional Classes Work-Based Learning Ages 18 - 21</p>	<p>All Grade Levels</p>	<p>Reaching Individual Student Excellence Grades K – 8, 6:1:2 Classes</p>
<p>333 Dexter Terrace Tonawanda, NY 14150</p>		<p>Various Locations Across WNY</p>	<p>Located at Northtowns Academy</p>
<p><b>Twilight</b></p>	<p><b>Winchester Academy</b></p>	<p><b>WNY Children's Psychiatric Center</b></p>	
			
<p>Evening Academic Options Grades 9 – 12</p>	<p>Functional and Academic Grades 9 - 12 MiddleTech offered here</p>	<p>Intensive Day Treatment Grades 6-12</p>	
<p>Located at EDGE</p>	<p>650 Harlem Road West Seneca, NY 14224</p>	<p>575 Alberta Drive Amherst, NY 14226</p>	



# TRAINING THE WORKFORCE



## Adult Career Training in One Year or Less

Short-term training programs to meet your needs.  
Register early to save your spot!

- Day and Evening Classes Available
- Convenient Locations
- Job Placement Assistance
- Affordable Tuition, Financial Assistance
- Industry-Experienced Instructors



 [www.e1b.org/wfd](http://www.e1b.org/wfd)

 (716) 821-7500

 [wfd@e1b.org](mailto:wfd@e1b.org)

# ADULT WORKFORCE TRAINING



Automotive



Barbering



Building Trades



Certified Nursing Assistant



CNC Machining



Cosmetology



Electrical



Electro Mechanical Maintenance



HVAC



Licensed Practical Nurse



Medical Billing Clerk



Medical Office Assistant



Phlebotomy



Welding

## Contact Us

### Workforce Development Center

1526 Walden Ave., Suite 200, Cheektowaga, NY 14225  
www.e1b.org/WFD • WFD@e1b.org • (716) 821-7500

LOCATIONS ACROSS WNY!

## Affordable Tuition and Financial Assistance

On average, Erie 1 BOCES' job training tuition costs 50% less than similar programs offered by local colleges. Students may be eligible to receive funding through: ACCES-VR, Buffalo Employment and Training Center (BETC), CSEA, ECC One Stop, Niagara Employment and Training, SEIU Local 1199, and Veterans Benefits. Various State and Federal grants are also available as well as Direct or Private Student Loans.

## Literacy Services

High School Equivalency and ESL (English for Speakers of Other Languages) courses are available across Western New York. Remedial courses are available for students who need support in Math or English.

## Student Services

Erie 1 BOCES supports its students successful transition into permanent employment with:

- Career Counseling
- Job Readiness Training
- Resume Writing Workshops
- Interview Preparation
- Job Placement





erie boces



*Ignite Your Inner Spark.*

Erie 1 BOCES does not discriminate on the basis of race, color, national origin, creed, religion, political affiliation, marital status, sex, sexual orientation, age, or disability as defined by law and is in compliance with Title IX of the Education Amendments of 1972 and with Section 504 of the Rehabilitation Act of 1973. The compliance officer for Title IX and Section 504 is the Assistant Superintendent of Instructional Services. The compliance officer is available from 8:00 a.m. - 4:00 p.m. at Erie 1 BOCES, 355 Harlem Road, West Seneca, NY 14224. (716) 821-7100 [www.e1b.org](http://www.e1b.org).

Updated 2022