

Erie 1 BOCES

2020-2021

Career and Technical

*education programs*



HARKNESS • KENTON • POTTER

*Ignite Your Inner Spark!*



# Programs



## Barbering and Cosmetology

**Barbering** students learn the art of barbering from experienced instructors, guest speakers and Master Barbers who currently work in the industry. Students as young as 17 can obtain a Master Barber's license by learning the NYS Board techniques and passing the NYS Master Barber's practical exam.

**Cosmetology** students are part of the exciting and fashionable world of beauty. Students hone their skills in the art and science of cutting, styling, and coloring hair in our live clinic, which is open to the public.

## Career Exploration

**Career Exploration** allows students the opportunity to "test drive" up to 8 different programs over the course of the year. Throughout the journey, teachers will help you navigate your next steps for college and career.

## Computers and Web Based Technologies

**Cybersecurity and Networking** prepares students for the Network+ and Cisco CCNA certification exams while teaching network design, hardware programming and network security. Students will learn penetration testing and packet sniffing as a way to prevent unauthorized access to networks (hacking).

**Electronics and Computer Technology** students explore the latest technology in personal computing, cellular communications, HDTV, virtual reality, Bluetooth, game mechanisms, and car audio/video systems. Students use soldering irons, hand tools, meters and oscilloscopes to build computers, robots, amplifiers, speakers, wireless devices, power supplies and more.

**Engineering and Robotics** students learn how things work and build real mechanisms and components formulated from their own ideas to fulfill a need or concept. Students explore many areas of robotics manufacturing and engineering design using state-of-the-art computers, software, modeling, and prototyping.

**Web Technologies and Game Programming** is a fun and creative program that teaches students of all skill levels how to create dynamic Web sites. The foundations of programming are also covered as students learn how to plan the logic of game design.

## Good Eats

**Baking and Pastry Arts** students discover all that goes into creating beautiful plated desserts as well as pastries, breads, cakes, cookies and more.

**Culinary Arts** brings new tastes and worldly adventures to the classroom every day. Students will spend their days preparing and serving meals that look as good as they taste.

## Health and Wellness

**Animal Science** exposes students to careers in the veterinary and animal management fields. This program teaches basic and advanced skills in nutrition, health and disease, animal handling and restraint, grooming, pet first aid and medical terminology.

**Dental Laboratory Technology** offers a complex combination of science, art, and craftsmanship while producing dental restorations that replace natural teeth.

**Health Careers** students devote their first year to the study of all that is possible in the health care fields. The second year, known as Basic Nursing Skills, is focused on the practice of clinical skills required in the profession.

**Sports Science Careers** students turn their love of health and fitness into a career in one of the fastest growing industries in the country with careers in physical therapy, sports medicine, and personal training.

## Music, Media and Design

**Digital Media** students create amazing graphics, stunning video and eye-popping animation alongside industry professionals.

**Fashion Design Technology** students learn how to dress, style, and create current trends for clients based on design elements and the fashion cycle.

**Video Production and Recording Arts** is for creative students who love video, film, sound, and music. Students will learn to create and produce original films and music in our state-of-the-art lab.

## People to People

**Criminal Justice** students explore the major areas of the field including law enforcement, courts, corrections, investigations and forensics, homeland security and private security.

**Early Childhood Education** students run their own preschool and playgroups and participate in programs with the Buffalo Zoo, Children's Hospital, and the YMCA.

**Emergency Medical Services** provides a foundation in emergency medical response methods and how to function as part of a health care team.

## Skilled Trades

**Building Trades** students learn all aspects of the trade, from using hand and power tools, reading and understanding blue prints, rough framing and both interior and exterior finish.

**Electrical Systems** covers the principles of electricity, reading of blueprints and wiring diagrams, proper use of tools and equipment, basic principles of motor controls with ladder logic and emerging renewable technologies such as wind and solar power.

**Plumbing, Heating, and Air Conditioning** is a lucrative, high demand trade. Students will learn the fundamentals of residential and light commercial plumbing, heating, and air conditioning installation, service, and repair.

**Welding** students know that they hold much of the world together. From buildings and bridges to airplanes and equipment, this career path is full of opportunities.



## Transportation

**Auto Technician Training** is now offered in partnership with Basil, NFADA, Northtown Automotive, Towne Automotive and West Herr for an exciting pre-apprentice experience. Students will partake in extended job shadowing, paid summer internships, and be guaranteed a job interview upon completion.

**Aviation Technology** students experience flight firsthand along with the necessary maintenance procedures for today's aircrafts. Students will delve into the technology behind unmanned aircrafts as the world of aviation continually evolves.

**Collision Repair** is now offered in partnership with Auto Collision and Glass, iCar, Gerber Collision, Collision Masters, Gabe's Collision, Basil and West Herr. Together with these partners, the program now offers an exciting pre-apprentice program for students.

## New Visions (Senior Options)

**Connections: Health-Related Careers** gives honors-level seniors the opportunity to observe all aspects of the medical field in action. Students spend the year at either the Buffalo Niagara Medical Campus, Millard Fillmore Hospital or Oishei Children's Hospital working with medical professionals in the areas of their interest.

**Legal Academy** gives honors-level seniors the opportunity to experience criminal justice and law-related fields while on campus at Canisius College and UB. Students will also develop a network of professional connections through extensive field experiences across Western New York.

**Zoo Wildlife and Conservation Careers** is a new program for honors-level seniors. Students in this program consider the 23-acre Buffalo Zoo their home and explore the many career possibilities in animal care, wildlife conservation, and zoo operations.



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