

## **Sports Conditioning & Exercise Science**

Sports Conditioning & Exercise Science provides foundational skills and knowledge for students choosing to pursue professional certifications in personal training and further education in athletic training, physical therapy, chiropractic, massage therapy and dietetics. Students learn the science of human health and explore a systematic approach to designing exercise and conditioning programs in an interactive setting. Students study the parameters of fitness including resistance training, fat loss, nutrition, and agility. Additional areas of study include: medical terminology, human anatomy and physiology, fitness and flexibility, injuries and injury prevention, health/sports psychology, applied kinesiology, motivational and teaching techniques, and cardiorespiratory training. Students have the preparation and opportunity to receive Red Cross Certification in First Aid and CPR/AED and are prepared for the ACE Integrated Fitness Training Certification. A one-year "Intro to Human Performance" program is available to seniors.

Students have the opportunity to participate in internships with area gyms, fitness clubs, health clubs, schools, physical therapy providers and athletic programs. This program prepares students for postsecondary education and maintains articulation agreements with the following higher education partners: Erie Community College, Niagara Community College, and Trocaire College.

# Welding/Metal Fabrication

The two-year Welding/Metal Fabrication Program enables students to develop specialized and soughtafter skills for employment in the welding and metal fabrication industry. Students learn up-todate welding and metal fabrication techniques and procedures in a variety of areas, such as electric arc or SMAW (stick) welding, metal inert gas (MIG) welding, tungsten inert gas (TIG) welding, oxy acetylene cutting and welding, flux-cored arc welding, and plasma arc cutting. Students also learn testing and inspection protocols, safety procedures and the appropriate use of safety/protective equipment. Further areas of study to support welding and metal fabrication include: blueprint reading, layout and joint design, and metallurgy. Students in this program develop the skills necessary to be successful in welding/metal fabrication occupations in sectors such as the oil and gas, manufacturing and transportation industries, and all branches of the military.

Students have the opportunity to participate in internships with area welding businesses, manufacturers, and custom vehicle companies. This program prepares students for postsecondary education and maintains articulation agreements with the following higher education partners: Alfred State College, Bryant & Stratton College, SUNY Delhi, and Trocaire College.



www.e2ccb.org



Erie 2-Chautauqua-Cattaraugus BOCES Ormsby Educational Center offers 14 half-day, two-year Career & Technical Education Programs. Career & Technical Education (CTE) provides: marketable job skills, development of work ethic and professional attitudes, internships for job references and employment. Many of our CTE students benefit from articulation agreements with colleges in their fields of study. Our students gain valuable skills and career experiences while earning a high school diploma.





### **Automotive Body Repair**

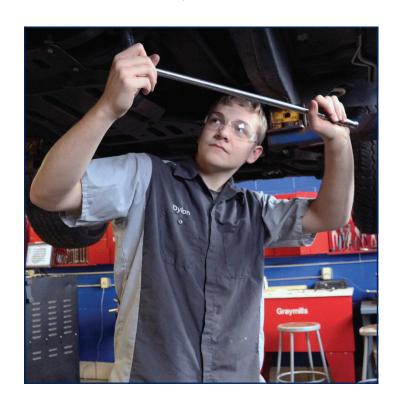
Students enrolled in Automotive Body Repair develop entry-level skills in a shop setting similar to commercial auto collision repair shops. Students hone their skills in metal straightening, aligning, replacing, MIG welding, body filling, painting, buffing, and detailing. Students practice their skills in the paint spray booth as well as with equipment and tools used in the collision repair industry. Areas of study include: cooling and electrical systems, sheet metal/glass replacement and repair, plastic repair, paint equipment and spray technologies, tool and equipment use, vehicle buffing, detailing, custom painting, and safety. This program also focuses on material usage, record-keeping, damage estimation, and job costs as students write their own collision estimates as well as order and manage supplies. Students enrolled in this program may work on their own vehicles after developing their skills on an assortment of assigned projects.

Students participate in internships with industry professionals near the center they attend including car dealerships, detail shops, collision shops, custom fabrications shops and retail part sellers. This program prepares students for postsecondary education and maintains articulation agreements with the following higher education partners: Alfred State College, Bryant & Stratton College, Erie Community College, Morrisville State College, and Trocaire College.

## **Automotive Technology**

Automotive Technology provides students with real-world work experience in automotive service and repair shops. Students work with power tools, electronic diagnostic equipment, computerized front-end machinery, and emissions test equipment. Students study fuel injection systems, computer control systems, and all aspects of vehicle repair. Other jobs performed in the shop involve tire, wheel, and alignment servicing; steering systems and suspension servicing; repairing/maintaining electrical, brake, exhaust, air conditioning, and powertrain systems; and participating in all aspects of engine diagnosis and repair.

Students participate in internships with industry professionals near the center they attend including car dealerships, automotive repair shops, and retail parts companies. Upon completion of this program, students are eligible to take the National Institute for Automotive Service Excellence (ASE) tests in several different areas. This program prepares students for postsecondary education and maintains articulation agreements with Alfred State College, Bryant & Stratton College, Erie Community College, SUNY Delhi and the University of Northwestern Ohio.





## **Power Equipment Technology**

The curriculum of this program includes heavy equipment safety/maintenance; basic shop and safety skills; welding and metal fabrication; hand and power tool skills; small engine/outdoor power equipment fundamentals; heavy equipment operation; introduction to diesel engine terminology, compression, intake, fuel, exhaust, cooling and emission systems. Students in the Power Equipment program re introduced to electrical systems, power trains, hydraulics and air conditioning systems. Precision measuring and the use of specialized tools are taught throughout the course. Brake and suspension systems, electrical systems, engine component repair, and electrical arc welding are incorporated into the curriculum.

The program at Ormsby has an agricultural focus which includes study of the use, maintenance or adjustment of construction and agricultural equipment; small engine design and repair; and GPS and precision farming use and design.

Students have the opportunity to participate in internships with local highway departments, area service stations, retail sales outlets and local school districts. This program prepares students for postsecondary education and maintains articulation agreements with the following higher education partners: Alfred State College, Bryant & Stratton College, Nashville Auto-Diesel College, SUNY Delhi, Trocaire College, and University of Northwestern Ohio.

#### **Small Animal Science**

Small Animal Science teaches students specialized and advanced skills in areas such as veterinary assistance, the care and handling of animals in a laboratory or veterinary setting, and kennel and pet shop management. Students learn animal care clinical skills; caging and bedding procedures; animal first aid, wound healing and surgical nursing; and animal training/positive reinforcement techniques. In addition, they study internal and external parasites, zoonotic diseases, animal nutrition, exotic animals, biology and genetics, pharmacology, and animal husbandry.

Students develop basic and advanced dog grooming skills through in-class "doggie day care" programs where dogs are brought to the centers for grooming appointments. Students work with a wide variety of animals, such as rabbits, cats, dogs, mice, hamsters, gerbils, guinea pigs, chinchillas, ferrets and rats. Students also have the option of enrolling in an Animal Science Program that includes working with large animals, such as horses, cows, and alpacas.

Students have the opportunity to participate in internships with local animal hospitals, veterinary clinics, kennels, pet shops, humane societies, and farms. This program prepares students for postsecondary education and maintains articulation agreements with the following higher education partners: Alfred State College, Bryant & Stratton College, Medaille College, SUNY Cobbleskill, and Trocaire College.





# **Emergency Medical Services (EMS)**

The EMS program prepares students for a wide variety of careers in the emergency response and healthcare sectors. The two-year program provides students a foundation in emergency response methods and functioning as part of a health care team. In addition, students earn credit in applied English Language Arts, math and science. A oneyear Emergency Medical Technician option is available for students in either their junior or senior year. It provides instruction found in the two-year program, but not applied academics. Students in both programs are prepared for the Certified First Responder program and receive American Red Cross Certifications in First Aid, CPR, and Responding to Emergency. Students in the EMS Program study patient assessment, treatment and transportation; multiple casualty responses; emergency dispatch procedures; medical terminology and emergency communication protocols.

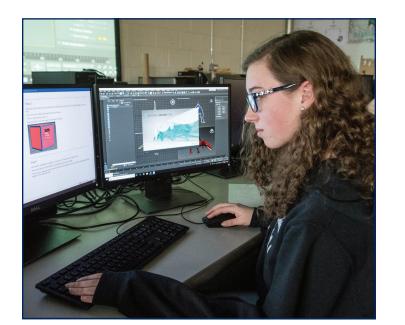
Students have the opportunity to participate in internships with local hospitals, medical centers, emergency response providers, and physical therapy providers. This program prepares students for postsecondary education and maintains articulation agreements with the following higher education partners: Bryant & Stratton, Erie Community College, and Trocaire College.

#### **Health Careers**

The Health Careers Program provides students with entry-level skills, valuable industry certifications and the opportunity to have first-hand experience working in a variety of healthcare-related fields. Students study basic anatomy and physiology, diseases and disorders, medical terminology, medical ethics, nutrition, geriatrics, child development, infection control, maternal/child health, first aid, physical therapy, and pharmacology. Students practice performing basic nursing procedures and function as part of a health care team. Clinical experiences allow students to explore different areas of the healthcare field. Students receive Red Cross Certification in First Aid and CPR and have the preparation and opportunity to sit for the NYS test for licensure as a Certified Nurse's Assistant (CNA).

Students have the opportunity to participate in internships with local hospitals, assisted living centers, and child and adult daycare centers. This program prepares students for postsecondary education and maintains articulation agreements with the following higher education partners: Bryant & Stratton, E2CCB LPN Program, Erie Community College, Pittsburgh Technical Institute, and Trocaire College.





## Computer-Assisted Design & Drafting

Computer-Assisted Design and Drafting is designed for students with interests in architectural applications, mechanical drawing, engineering, or graphic design. Students use state-of-the-art industry software applications such as AutoCAD 2000, Pro/Desktop, 3-D Studio Max, and SolidWorks. An emphasis is placed on the development of advanced computer drafting skills, such as coordinate drafting and 3D modeling. Areas of study include: geometric construction, dimensioning, orthographic construction, geometric dimension and tolerance.

Students have participated in internship opportunities at Moog Inc., architectural design firms, and Fisher Price. This program prepares students for postsecondary education and maintains articulation agreements with the following higher education partners: Alfred State College, The Art Institute of Pittsburgh, Bryant & Stratton College, Erie Community College, Pittsburgh Technical Institute, and Trocaire College.

## Conservation/Natural Resource Management

Conservation prepares students for a wide variety of careers involving the development and protection of natural resources. Instruction takes place both inside the classroom, in greenhouses and in outdoor labs that include areas for heavy equipment operation and practice. Students enrolled in the program will learn about forestry, wildlife, and watershed management; landscaping principles and design; tree and shrub identification; hydroponics; parks and recreation planning and operation; plant identification and propagation; and greenhouse management. Additional areas of study include: soil and fertilizer analysis, chemical safety, soil and land classification, Geographic Information Systems, and conservation practices. Students will also learn to operate and maintain heavy equipment, vehicles, power tools, and machinery used in the conservation field.

Students have opportunities for internships with contractors using heavy equipment, paving and landscaping companies, greenhouses and nurseries, town highway and water departments; NYS DEC wildlife and fisheries departments; and heavy equipment/diesel truck mechanic shops. This program prepares students for postsecondary education. Students can earn 3 college credits for Introduction to GIS from SUNY Fredonia. Additionally, the program maintains articulation agreements with the following higher education partners: Alfred State College, Bryant & Stratton College, Erie Community College, SUNY Cobleskill, SUNY Delhi, and Trocaire College.





# **Construction Technology**

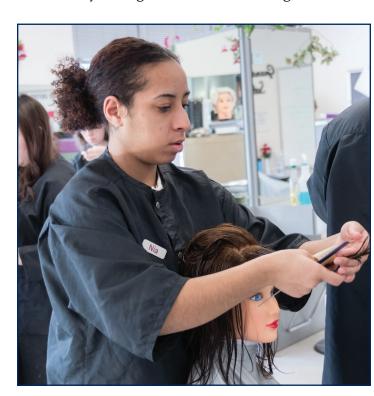
Students enrolled in Construction Technology gain a background in carpentry, electrical work, plumbing, masonry, and blueprint reading which prepares them for a variety of construction-related occupations. Students will learn proper use of hand/power tools, safety procedures, construction procedures, and blueprint reading. Areas of study include: framing and stair construction, roofing and siding, plumbing and heating systems, residential wiring, rough and finished masonry, footings and foundations, and interior/exterior finishing. Students also take a 10-hour safety course through OSHA.

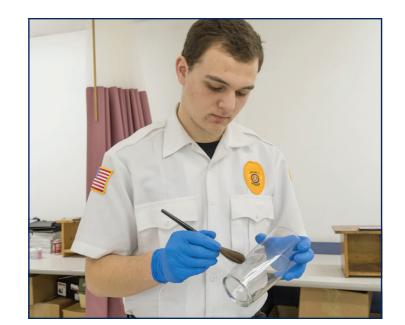
Students are able to develop their skills through community building projects and internship opportunities at local construction, electrical, concrete, and lumber companies. Students are prepared to earn a variety of certifications and licenses, such as: the Power-Actuated Tools Operator license from Hilti Tools and the Insulated Concrete Form Installation certification through LOGIX ICF. This program prepares students for postsecondary education and maintains articulation agreements with the following higher education partners: Alfred State College, Bryant & Stratton College, Erie Community College, SUNY Delhi, and Trocaire College.

### Cosmetology

Students enrolled in the Cosmetology Program learn a variety of hair and makeup techniques and beauty treatments. Areas of study include: hair coloring, perming, cutting, and styling and nail care including pedicures, manicures, and artificial nail application. All instruction emphasizes safety and sanitation. Students also learn customer service skills and business planning and practices. Students develop and practice their skills during regular weekly clinics where the public is invited to make appointments for services.

The course of study is designed to teach students the theory and practical skills necessary to prepare them for the New York State Cosmetology Licensing Exam. Students have internship opportunities in local salons. To become licensed, students must acquire 1,000 hours of instruction and practical experience and may seek employment immediately upon graduation or pursue more advanced levels of training. This program prepares students for postsecondary education and maintains articulation agreements with the following higher education partners: Bryant & Stratton College, Erie Community College, and Trocaire College.





## Criminal Justice/ Crime Scene Investigation-Forensics

Criminal Justice is designed for students interested in the areas of criminal justice, law enforcement or public/private security. This program provides students with a foundation in legal theory and the enforcement of criminal law. All aspects of police work are thoroughly explored, from the identification and apprehension of offenders to the trial system and corrections. Areas of study include all phases of the criminal justice process, forensics, firearms safety, first aid, and community service. Students will learn patrol functions, motor vehicle stops, insurance fraud and loss prevention, safety precautions and hazardous material handling, and fire protection.

Students have opportunities for internships with local police and sheriff's departments, village and town courts, and private security firms. This program prepares students for postsecondary education. Students can earn 3 college credits for Introduction to GIS from SUNY Fredonia. Additionally, the program maintains articulation agreements with the following higher education partners: Bryant & Stratton College, Erie Community College, Herkimer College, Hilbert College, Pittsburgh Technical Institute, and Trocaire College.

## **Culinary Arts**

Students enrolled in Culinary Arts learn essential components of the foodservice and hospitality industry including menu planning, food preparation, cutting techniques, recipe conversion, equipment operation, baking, and ice carving. In addition, students develop their understanding of cost analysis, dining service, and banquet and buffet skills. The program is designed to prepare students for a variety of careers, from the short-order cook and specialty chef to the restaurant or banquet manager. The curriculum emphasizes sanitation training, Hazard Analysis and Critical Control Points (HACCP) principles and kitchen safety.

Students have the opportunity to pursue internships with area bakeries, restaurants, artisanal food shops, grocery stores, and food service industry businesses. This program prepares students for postsecondary education and maintains articulation agreements with the following higher education partners: Alfred State College, Bryant & Stratton College, The Art Institute of Pittsburgh, Erie Community College, Johnson and Wales University, Morrisville State College, Niagara County Community College, Pittsburgh Technical Institute, SUNY Cobleskill, and Trocaire College.

