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# Message from the Principal

What can the Career & Technical Education Center offer you?

Businesses today need trained and skilled employees. Universities require students to be educationally prepared. The need for students who are college and career ready is so great that businesses and educational institutions have taken this message to schools everywhere in order to develop graduates with appropriate work skills and knowledge. CTE students follow career pathways linking high school learning with college degrees, industry recognized certifications and connections between what is learned in the classroom and expectations in the employment field.

In 1948, the Oneida-Herkimer-Madison BOCES began its mission to educate students in various pathways for high school graduation. In 2013, we celebrated 65 years of preparing students to become technology leaders of the future. We have maintained active partnerships with the business community through our Advisory Council and program consultant committees. Our educational staff, area businesses, students and parents work together as a team to provide a meaningful educational experience for all of our students. This career and college readiness preparation includes on the job internship experiences, program instruction aligned to college curricula and college credit integration opportunities for students in traditional programs who meet select criteria.

Every year we conduct a student survey to assess where our students are employed or attending college. In the past three years, nearly 96 percent of graduates have reported successful outcomes including gainful employment in their program field or post-secondary studies at a variety of technical schools, colleges and universities.

In addition to the career and technical programs and integrated academic courses that OHM BOCES offers, we also provide New Visions courses that allow seniors to go on-site at participating businesses to learn about the field. More information about New Visions programs can be found in this publication.

If you are interested in a challenging and hands-on education, we invite you to look through these pages to learn how a career and technical education can be the key to your future.



#### Career & Technical Education Center

Career and Technical Education Center programs are offered to high school juniors and seniors and focus on preparing students for employment, careers or post-secondary education through the development of 21<sup>st</sup> century skills. If a student does not wish to enroll in a program for two years, he or she has the option of enrolling in a program for one year.

Students attend one-half day at the Career and Technical Education Center, or internship site, and one-half day at their home schools. Working with state-of-the-art equipment, students apply theory to a wide range of real life work assignments in the Center's shops and laboratories. Positive employment attitudes, job seeking skills and familiarization with related career opportunities are emphasized in addition to college and career readiness.

If you would like more information about Career and Technical Education programs, contact your guidance counselor or the Career and Technical Education Center at 315.793.8666.



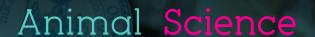
"I like the nature of this program as it's very hands-on and we learn so many skills with various computer programs.

Hayden Smith Whitesboro

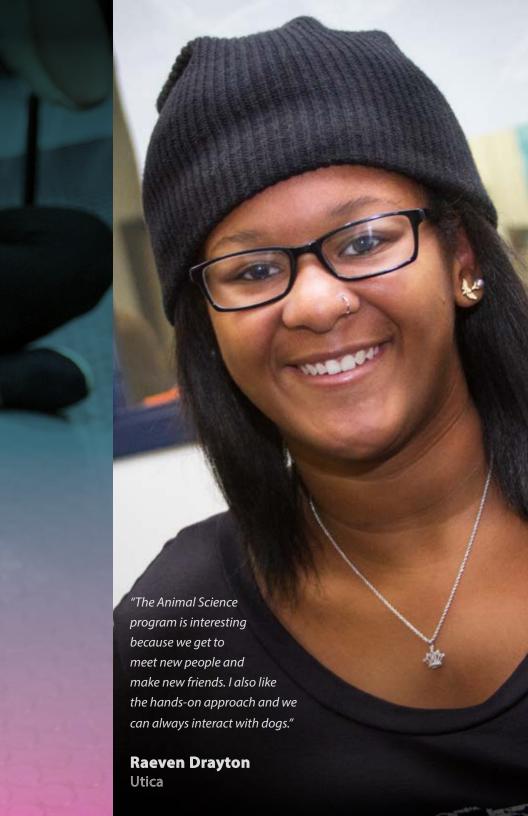
#### Advertising Design & Multimedia Productions

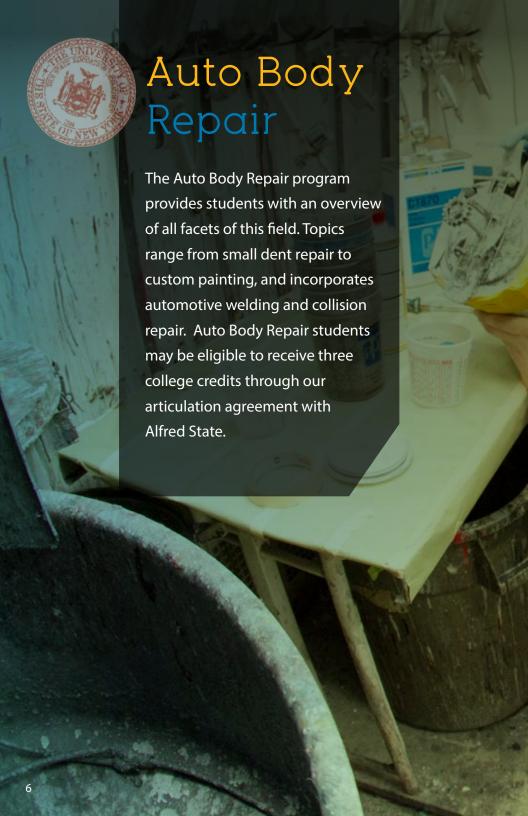
Advertising Design / Multimedia Productions is a two-year course offering an overview of graphic arts fields including advertising, design, illustration, logo and symbol design, computerized graphic design, basic web page design and typography. First-year students learn design principles, advertising and marketing theories, and basic computer operations. Second-year students create independent design projects in areas including audio production, video production, digital photography and web page design. Eligible students in the Advertising Design class may receive three credits of MVCC's Graphic Illustration dual credit upon successful completion of the program and required illustrations.





Students in the Animal Science program study animal behavior, safe handling and restraint, anatomy and physiology, small animal care and management, health and disease, nomenclature and veterinary terminology. The lab setting for the course includes working with dogs and other small animals. Students have hands-on experiences in grooming and visit sites to view first-hand how animal science applies to a variety of careers. The Animal Science program has an articulation agreement with SUNY Cobleskill for three college credits in Small Animal Management.

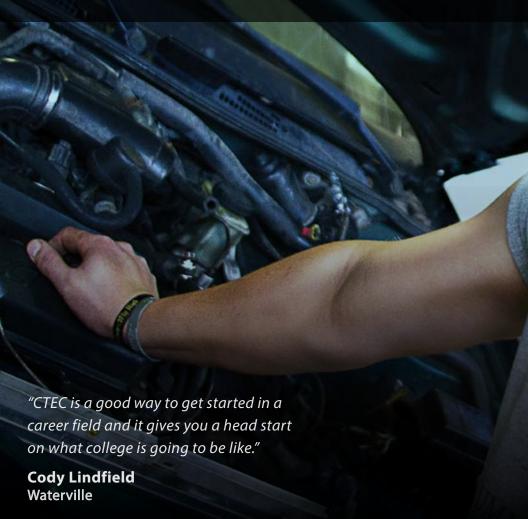






#### Auto Body & Auto Technology Occupations

This non-credit bearing program provides instruction and skills needed to be employed in the automotive industry. Students receive theory instruction as well as hands-on instruction in basic automotive services including auto body. Students work on vehicles as they learn skills that will transfer to a real job setting.







**Colby Wratten**Brookfield



The Conservation program is a blend of classroom instruction and outdoor hands-on learning, with the importance of a favorable work ethic stressed. Students acquire skills in forestry, fish and wildlife management, heavy equipment operation, timber harvesting, chain saw operation and maintenance, tree climbing, map and compass reading, GPS, surveying and more. In our greenhouse, students become skilled in hydroponics, aquaculture and plant propagation. Seniors in Conservation can pay a reduced fee and be eligible to receive three college credits from SUNY Morrisville in their Environmental Science (ENSC 100) course. Additionally, eligible graduates of the program may secure up to six college credits from Bryant & Stratton or SUNY Cobleskill through articulation agreements.

#### Construction Trades

The Construction Trades program teaches basic skills in residential construction as students gain experience in foundation work, rough framing, roofing, siding, drywall, solar panel installation and our newly expanded modules of plumbing and masonry. Students learn how to use and maintain trade tools properly and safely and receive instruction in building codes, blueprint reading and the application of trade math. A great emphasis is placed on hands-on learning through various projects on and off campus. Eligible students may receive up to six college credits through articulation agreements with Alfred State or SUNY Delhi.









This program is designed to provide students with marketable skills in the field of cosmetology. Once the skills are acquired, students perform services for customers in a salon setting. With further training, experience and upon completion of the required 1,000 hours, including a summer session and internships, students are eligible to take the NYS Appearance Enhancement license exam. Eligible students in the Cosmetology program may secure up to nine college credits from USC The Business College through articulation agreements.

> "Coming to CTEC allows me to meet new people and I am learning useful skills that I actually get to use in life."

Lauren Banovic Westmoreland





#### Culinary Arts

This program is designed for students interested in becoming commercial cooks for restaurants, hotels, hospitals or catering services. Cooking, menu planning, management skills, sanitation and safety practices, and table service are covered. Students receive practical experience preparing lunches, dinners and banquets. They also participate in a local internship. The program follows the ProStart curriculum, which is written by the National Restaurant Association. Eligible graduates of the program may secure college credits from institutions including Alfred State, Culinary Institute of America or SUNY Cobleskill through articulation agreements.

Mackenzie Holbert

**New Hartford** 

## Early Childhood Education

First-year Early Childhood Education students operate a laboratory nursery school under the direction of the program's teacher. The on-site nursery school gives students practical experience working with threeand four-year-old children. Second-year students gain practical experience working in two 10-week internships at a local kindergarten classroom, daycare center or special education program. Eligible graduates of the program may secure college credits from Schenectady CCC or SUNY Cobleskill through articulation agreements.



"In Early Childhood
Education, we learn in a fun
way, everyone is respectful
of others, and we all work
together like a family."

**Jelana Frovola** Oriskany





Electricians install, maintain and troubleshoot electrical systems and equipment in homes, offices, institutions and industrial plants. Students learn residential, light commercial and industrial wiring through a variety of hands-on activities and projects. During the second year of the program, students also receive instruction in Heating, Ventilation and Air Conditioning (HVAC). Students in the Electricity & HVAC program may obtain between three and six college credits from SUNY Delhi, Alfred State or Fulton **Montgomery Community** College through articulation agreements.

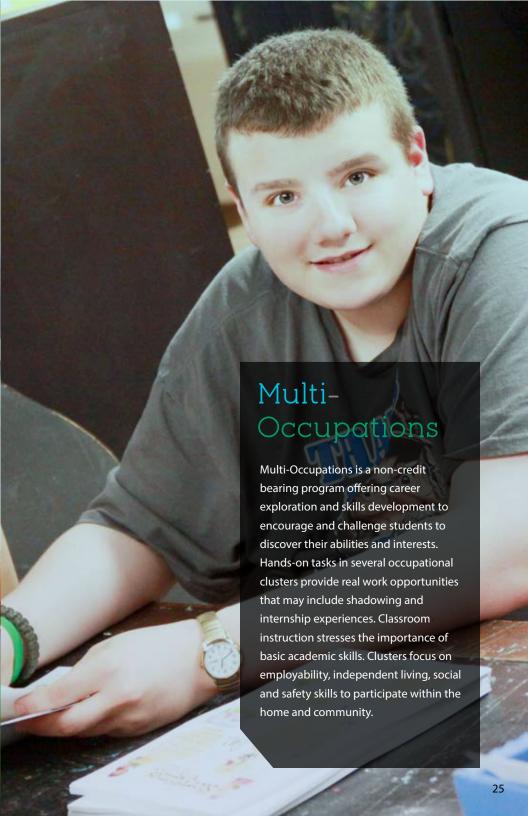


### Emerging Technologies & Cyber Security

This two-year course teaches computer repair and basic networking fundamentals. During the first year, students will learn hardware and software installation, end user support, trouble shooting, telecommunications protocols and network support. Second-year students will learn advanced networking technologies and gain exposure to the field of information system security including issues faced by homes and businesses, the types of damage they may cause and prudent security measures to counteract them. Second-year students work with materials developed in conjunction with Utica College's Cyber Security program. Students will learn basic terminology involved in cyber security, describe various threats and identify potential technologies to combat these threats. With further training and experience, students completing this program have the opportunity to take certification exams in A+, N+ and Security+. Eligible graduates of the program may secure up to nine college credits from USC The Business College through articulation agreements.









The New Visions Business Management program offers college-bound students the opportunity to explore a variety of business professions at local establishments. Students develop competencies useful in a wide range of careers within the business field. This program also integrates English and social studies into the curriculum.





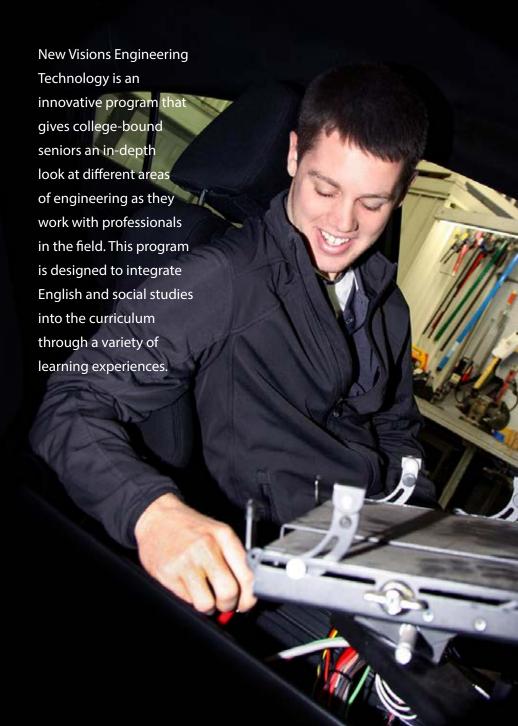
New Visions (Seniors Only)

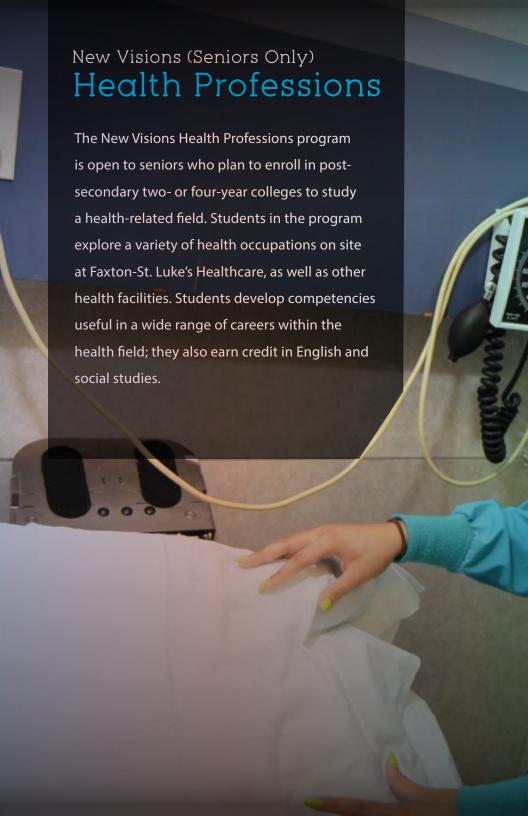
#### Education

The New Visions Education program provides college-bound students avenues to explore all aspects of the education profession. Through internships, students will get to see first-hand what administrators, teachers, social workers, school psychologists, school counselors and other related staff do on a daily basis. Instruction in the history and philosophy of education will be included in the curriculum in addition to English and social studies.

New Visions (Seniors Only)

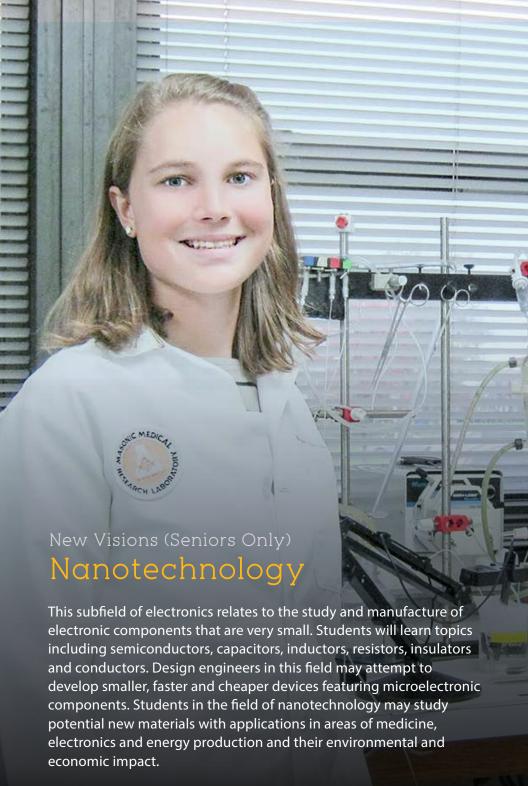
#### Engineering Technology















# Veterinary Science

This is a one-year program for college-bound seniors and offers an opportunity to explore the various aspects of veterinary science and internships. General areas of instruction include animal behavior, animal handling and restraint, species and breed identification, animal anatomy and physiology, basic lab techniques, animal care, animal welfare, animal health and disease. High School Regents Living Environment (Biology) and Chemistry are highly recommended prerequisites for this course.



## Nurse Assistant

This one-year course teaches students basic skills of personal care required for patient comfort through classroom theory and instruction in the work environment, where students spend six weeks (100 clinical hours) gaining valuable experience. Once students complete the class, they are eligible to take the written and performance test offered by the New York State Department of Health to become a Certified Nurse Assistant. Eligible graduates of the program may secure college credits from local institutions including Bryant & Stratton through articulation agreements.

"Our teacher gives us a lot of information to get us ready for a future career."

Victoria Decker

Remsen





STEM Exploration is designed for students interested in learning more about the careers of today and tomorrow. The purpose of the STEM Exploration program is to ignite, excite and prepare students for majors and careers in the highdemand fields of science, technology, engineering and mathematics. Students will be exposed to a wide variety of technology and engineering concepts throughout this course while applying mathematic and scientific principles through project based learning activities. Students will develop innovation, collaboration, cooperation, 21st century and problem solving skills through hands-on projects in which academic concepts are coupled with real world application. In addition to STEM concepts and principles, students will explore STEM related fields and careers.

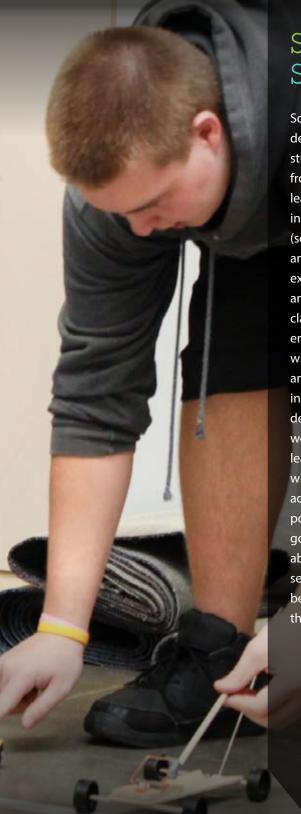




#### Freshman Foundations

Freshman Foundations was developed for ninth grade students who would benefit from a hands-on, experiential learning program. The program incorporates concepts of STEM (science, technology, engineering and math) and students will be exposed to a variety of career skills and content. This project-based class incorporates technology, engineering, and problem solving wherein students apply scientific and mathematic principles in topics including aerodynamics, electronics, alternative energy, and woodworking. Through this unique learning environment students will make connections between academic achievement and their potential career, develop personal goals and a more positive attitude about their success, improve self-esteem and learn appropriate behaviors, and gain credits toward their high school graduation.





#### Sophomore Seminar

Sophomore Seminar was developed for tenth grade students who would benefit from a hands-on, experiential learning program. The program incorporates concepts of STEM (science, technology, engineering and math) and students will be exposed to a variety of career skills and content. This project-based class incorporates technology, engineering, and problem solving wherein students apply scientific and mathematic principles in topics including bridge design, robotics, rocketry and woodworking. Through this unique learning environment students will make connections between academic achievement and their potential career, develop personal goals and a more positive attitude about their success, improve self-esteem and learn appropriate behaviors, and gain credits toward their high school graduation.

# School-to-Career Programs

The School and Business Alliance utilizes several career development strategies to assist students in making successful transitions from school to post-secondary studies to a successful career: career shadowing, business speakers and tours, college tours and summer work opportunities.

The Regional Program for Excellence internships offer highly motivated high school juniors and seniors opportunities to explore their career choices in a work setting with respected professionals. Students complete 75 hours by receiving release time from their classes to meet with mentors for a weekly three-hour block or during summer months.

Tech Prep offers the opportunity for students to take challenging, real-world coursework in high school. By completing a four-unit sequence in technology, business or healthcare, students build the skills needed to be successful in both college and work.



# Work Experience Programs

#### Internships

During school hours, a student may be assigned to observe and participate in a variety of activities related to his/her curriculum at an off-campus site. Students do not receive wages and may not replace a paid employee.

## New Visions Internships

Students in the New Visions program spend four days a week in workplace internships in the business management, communications, education, engineering technology, health, legal, nanotechnology, performing arts and veterinary science fields. One day each week is spent in the classroom working on related curriculum projects, listening to guest speakers, or taking virtual field trips.

#### **Direct Job Placement**

The Career and Technical Education Center works closely with area businesses to identify students who are prepared for direct job placement, for either full- or part-time work, or summer employment.

# Career & Technical Education Program Credits

# Regents Diploma with a Technical Endorsement

Most credit-bearing Career and Technical Education programs at the Oneida-Herkimer-Madison BOCES are approved by the State Education Department. If students successfully complete the CTE program, complete 22 units of high school credits, pass the five required Regents examinations, and pass a technical assessment (which is part of the CTE program), students are eligible to receive the Regents diploma with a technical endorsement.

### High School Credit

For each successfully completed year, you can receive four credits. For a one-year program, you can receive four Career and Technical Education (CTE) credits or three CTE credits and, with home school approval, one credit of English 12. In the one-year Nurse Assistant program, students can also receive a credit in science. For a two-year program, you can receive eight credits. These can be eight CTE credits or (with home school approval) five, six, or seven CTE credits and up to three academic credits including English 12, math, and science. See your high school counselor for more information.



### College Credit Integration

All of the New Visions programs offer three college credits from MVCC for English 101. This is at no cost to students. Seniors in Conservation can pay a reduced fee and be eligible to receive three college credits from SUNY Morrisville in their Environmental Science (ENSC 100) course. Also, students in traditional programs may have the opportunity to obtain six college credits in their junior year (Introduction to Business and Principles of Marketing) and an additional six credits (Computer Applications and Concepts I and Personal Finance) in their senior year.

#### Articulation

Through articulation agreements between a post-secondary institution and the Oneida-Herkimer-Madison BOCES, students may gain advanced standing in certain programs and, for others, actual credit for a college-level course. The terms of the articulation generally include the following: students must have completed the BOCES course within the past school year, maintained a B average or better, demonstrated excellent attendance and received recommendation from the BOCES instructor. For more specific information, contact the BOCES guidance department at 793.8618 or 793.8660. All Career and Technical Education programs have established articulation agreements with local colleges and trade schools.

#### Established articulation agreements exist at:

Baran Institute of Technology  $\cdot$  Bryant & Stratton  $\cdot$  Fulton-Montgomery Community College  $\cdot$  Herkimer County Community College  $\cdot$  Mohawk Valley Community College  $\cdot$  Nashville Auto-Diesel College  $\cdot$  Paul Smith's College  $\cdot$  Schenectady County Community College  $\cdot$  SUNY  $\cdot$  Canton  $\cdot$  SUNY  $\cdot$  Cobleskill  $\cdot$  SUNY  $\cdot$  Delhi  $\cdot$  SUNY  $\cdot$  Morrisville  $\cdot$  The Art Institute of Pittsburgh  $\cdot$  Utica School of Commerce

## Clubs & Activities

#### Skills USA

Skills USA offers leadership and citizenship development to complement the CTE student's skill training. Members may also participate in local, state and national Skills USA competitions.

#### FFA Conservation Club

The National FFA organization is the oldest vocational organization in the United States and is recognized by the federal government as an important part of vocational education. FFA promotes leadership development through activities that benefit students and the community. Students gain valuable leadership experience toward success in the workforce. Membership is open to any BOCES CTE student.

#### Advisory Council Representatives

At the Career and Technical Education Center your opinions count. To make sure student perspectives are heard and considered when important decisions are made, two students are selected each year as members of the Career and Technical Education Advisory Council. These students attend all council meetings and actively take part in all discussions.

#### Honor Society

Each May, outstanding students are inducted into the Career and Technical Honor Society. They are students who have shown excellent academic achievement in their Career and Technical program, good attendance, active participation in organizations, and a serious interest in a vocational or technical field. All students, including adult students, are eligible if they meet the requirements.

## Scholarships & Awards

OHM BOCES Career and Technical Education students are eligible to compete for several scholarship and awards thanks to the generous contributions of the following sponsors:

Airgas East

American Beverage

American Legion Utica Post #229

**Aramark Corporation** 

Babe's

**Bon Appetit** 

BPO Elks Utica Lodge 33 David Beck Auto Body

Burmax Co., Inc.

builliax Co., iiic.

CTEC Honor Society

Cameo Beauty Supply
Carbone Automotive Group

Carlo Masi

Sam Cavo Award

Cazenovia Equipment Co.

Celia Construction

Centrex Clinical Labs

J. S. Chambrone Award

Clinton Tractor

The Computer Room
Michael Duniec Memorial

Duffy's Equipment

ECI

Faxton - St. Luke's Medical Staff
Faxton - St. Luke's Volunteers

First Source Federal Credit Union

40 & 8

The Fountainhead Group, Inc.

Friends of the New Hartford Public Library

Gilroy, Kernan & Gilroy, Inc.

Donna Grippe

Hart's Hill Inn

Heritage Health Care Center

Home Builders Assn. of Mohawk Valley

Hummel's Office Plus

IBEW/NECA

Joseph Flihan Co.

King Refrigeration and Air Co. Kiwanis Club of New Hartford

Koenig & Selzer Asset Management Group

L&A Builders Trade

Leatherstocking Defensive Driving

Looseleaf Law

Cris Lewis

**MVCC** Foundation

McQuade & Bannigan, Inc.

Mohawk Valley Counselors' Association

Mohawk Valley Network

Mohawk Valley School Resource

Officer Coalition

Murnane Building Contractors

NAPA Auto Supply/Volvo Auto Supply New York State Woodsmen's Field Days

Ninety-Nine Restaurant

Northern Safety

OHM BOCES Teachers' Association

OPI

O'Connell Electric

Oneida County Law Enforcement Coalition

**Price Chopper Supermarkets** 

Sally's Beauty Supply

Skills USA

Slocum Dickson Foundation Stiefvater Distributors, Inc.

Symeon's

SYSCO

**UNO Chicago Grill** 

**Upstate Office Equipment** 

Utica School of Commerce Advisory Board

Utica School of Commerce

Utica Valley Electric

Utica Zoo

Walmart

Whitesboro Fire Department

Whitesboro Frame & Body, Inc.

Whitestown Assn. of American Veterans

Whitestown Assn. of American

**Veterans Auxiliary** 

Whitestown Sons of the American Legion

**Wood Creek Reptiles** 

Zebb's Deluxe Grill & Bar





