

ORLEANS AND NIAGARA CAREER AND
TECHNICAL EDUCATION CENTERS

PROGRAM GUIDE

*Career & Technical
Education Program
and Course Catalog*

2022-2023
www.onboces.org



WELCOME



Dr. Michael Weyrauch

The Career and Technical Education (CTE) Centers at Orleans/Niagara BOCES offer innovative and effective programs that will provide students various options for continuing their education or seeking employment in the areas of skilled trades, health sciences and technology. O/N BOCES CTE programs are New York State approved programs that offer attending students the opportunity to earn high school credits towards graduation. Upon successful completion of the CTE course and the national technical assessment, students could be eligible for the NYS Board of Regents Advanced Designation: Technical Endorsement that would be placed on their high school diploma. Additionally, students would be exposed to work-based learning activities that directly relate to the industry they are studying including the possibility for paid and unpaid co-ops with local businesses.

To stay on the leading edge of industry standards, the pursuit and attainment of national certifications/credentials/licenses continue to be a focus for all of our 23 approved programs. Industry recognizes these as being the highest standards for their particular trade. We pride ourselves on maintaining up-to-date advisory councils with local business partners to ensure our educational content and facilities are in line with current industry standards. In addition to national certifications, our Career and Technical Education Programs continue to pursue articulations and dual-credit opportunities with many colleges and universities.

Through rigorous coursework, hands-on application of real-world experiences, and college articulations, students who successfully complete a two-year program of study at either of the two O/N BOCES Career and Technical Education Centers will be better prepared for both college and the 21st Century workforce.

Dr. Michael Weyrauch
Director, Adult Education, Career and Technical Education and Instructional Services
mweyrauch@onboces.org
716-731-6800, ext: 4447

Our Centers

Orleans Career and Technical Education Center (OCTEC)

4232 Shelby Basin Road, Medina, NY 14103

Principal: Mrs. Nicole Goyette
716-731-6800, ext: 2230

Assistant Principal: Mrs. Liz Mastromatteo
716-731-6800, ext: 2234

Niagara Career and Technical Education Center (NCTEC)

3181 Saunders Settlement Road, Sanborn, NY 14132

Principal: Mr. Michael Mann
716-731-6800, ext: 4442

Assistant Principal: Mrs. Maureen Bartlett
716-731-6800, ext: 4423

Assistant Principal: Mr. Robert Robinson
716-731-6800, ext: 4440

District Superintendent: Dr. Clark Godshall
4232 Shelby Basin Road, Medina, NY 14103
716-731-6800, ext: 2201

NOTES:

Leadership Organizations

SkillsUSA – SkillsUSA is a student leadership organization for students enrolled in any career and technical education program. It is a partnership of students, teachers, business and industry working together to ensure America has a skilled workforce. SkillsUSA helps each student excel. The national organization promotes leadership, lifelong learning, and dignity of work. The local chapter focuses on teamwork and character development through skills competitions and community service. There are competitions each spring for selected students to compete against other New York State students in their technical training area of expertise.

National Technical Honor Society – The National Technical Honor Society recognizes, honors and encourages CTE students who excel at their career and technical education studies and who possess good character and attitude. In order to qualify for a nomination, a member in good standing of SkillsUSA or other professional organization, excellent attendance (4 or less unexcused absences), a GPA of 89.5% in their CTE program, exemplary behavior and a nomination from their CTE teacher and a GPA of 84.5% or better in their home school in their junior year. Students who meet the criteria and successfully complete the nomination and evaluation process are inducted in a formal ceremony each fall.

Internships

This program is competitive and require a recommendation from a teacher. Students will participate in a paid or unpaid work experience in their occupational field of interest. They will discover the connection between academics and employment while they work with experienced professionals and learn marketable job skills.

Unpaid Internship – A structured unpaid work-based learning experience which allows students to shadow an employee during a specific timeframe to gain greater awareness of the scope of the job.

Paid Internship – These experiences allow students the opportunity to consolidate and apply the learning from their coursework into meaningful and relevant career-related experience while getting paid by the employer.

Assessments, Licensure and Certifications

NYS Advanced Regents Designation/CTE Endorsement –

Students who successfully complete and pass the designated Technical Assessment and all New York State Education Department (NYSED) Graduation Requirements, including completion of the two-year NYSED Approved CTE Program of Study, may earn an Advanced Regents Designation/CTE Endorsement on their high school diploma.

Industry Certification/Credentials & Licensure – Our programs prepare students to satisfy requirements and earn local, state, and national certification/credentials/licenses in their training field.

TABLE OF CONTENTS

Allied Health	4
Animal Science	6
Animation, Film & Visual Effects	8
Auto Body	10
Automotive Technology	12
Building Maintenance & Management	14
Building Trades	16
Certified Personal Trainer	18
Computer Technology	20
Conservation	22
Cosmetology	24
Culinary Arts	26
Diesel Technology/Heavy Equipment	28
Early Childhood Education	30
Electricity/Electronics	32
Emergency Medical Services	34
Fashion Design and Interior Decorating	36
Graphic Communications	38
Health Occupations Technician	40
Heating/Ventilation/Air Conditioning and Refrigeration	42
Precision Machine Technology/Project Based Engineering/ Advanced Manufacturing and Engineering	44
Security and Law Enforcement	46
Web and Game Development	48
Welding	50
Vocational Individually Paced (VIP) Programs	
Automotive Service	52
Building and Grounds	54
Food Service	56
Horticulture, Landscaping & Small Engines	58

Mission Statement

The mission of the Orleans/Niagara Board of Cooperative Educational Services is to be the premier provider of innovative and effective solutions for the evolving needs of our component districts and other learning collaboratives.

Our School Districts

- Albion Central
- .
- Barker Central
- .
- Lewiston-Porter Central
- .
- Lockport City
- .
- Lyndonville Central
- .
- Medina Central
- .
- Newfane Central
- .
- Niagara Falls City
- .
- Niagara Wheatfield Central
- .
- North Tonawanda City
- .
- Royalton-Hartland Central
- .
- Starpoint Central
- .
- Wilson Central

Possible Career Paths

- Associate's Degree:
Radiologic Technologist, increased demand 9%*,
Surgical Technician, increased demand 9%*
- Bachelor's Degree:
Registered Nurse, increased demand 12%*
- Masters/Doctorate Degree:
Physician Assistant, increased demand 31%*,
Physical Therapists, increased demand 22%*

**Projected national growth for
2018-2028, US Bureau of Labor Statistics*

Contact Information

Orleans Career and Technical Education Center OCTEC

*The Orleans Center program is held at the Medina Memorial Hospital and Eastern Niagara Hospital.

Niagara Career and Technical Education Center NCTEC

*The Niagara Center program is held at the Niagara Falls Memorial Medical Center and Eastern Niagara Hospital.

Teachers

Orleans Community Health
Medina Hospital

Courtney Slack
cslack@onboces.org

Eastern Niagara Hospital -
Lockport

Melissa Loiaco
mloiaco@onboces.org

Niagara Falls
Memorial Medical Center

Lisa Trapasso
ltrapasso@onboces.org

Allied Health

The Health Sciences are currently one of the top three categories that students are declaring as their college major. Our Allied Health Program assists students with an interest in the health sciences in not only gaining real-life experience in health care, but also in making a successful transition to collegiate studies. These students combine one or two years of foundation on which to pursue technical or professional study in college.

Our students gain firsthand knowledge of current and emerging health career opportunities beginning with fundamental knowledge and professional behaviors. They attend hospital-based classrooms located at Eastern Niagara Hospital in Lockport, Niagara Falls Memorial Medical Center and Orleans Community Health Medina Hospital. All Allied Health students are encouraged to experience a variety of health professions through shadowing experience in the hospitals. Once a student identifies a particular area of interest, they are matched with a mentor and assigned an internship. All mentors are practicing health care professionals, who are willing to share their experience and expertise with students. The Allied Health instructor works closely with the student, parents/guardians, home school guidance department, and mentor in tailoring the internship to meet the needs of the student. In addition, students take field trips to local colleges and universities and they are guided through the college selection and application process.

Objectives

1. To develop a knowledge base in basic health care including anatomy and physiology for students to build upon.
2. To develop a familiarity and confidence in the health care field.
3. To develop experience-based decision making to be used in choosing an appropriate health care profession college major.

Units of Study

Career opportunities in Health Care, Medical Ethics, Communication/ Interpersonal Skills, Medical Terminology, Infection Control, Asepsis and Microbiology, Anatomy and Physiology, Patient Care Skills, Public Health Care Policies, First Aid and Emergency Care, Healthcare Technology, Teamwork and Problem Solving.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

This is not an approved CTE program; integrated academic credits are not provided for students attending this program.

CTE and College dual credit is offered for students who attend.



Our students gain firsthand knowledge of current and emerging health career opportunities beginning with fundamental knowledge and professional behaviors. They attend hospital-based classrooms located at Eastern Niagara Hospital in Lockport, Niagara Falls Memorial Medical Center and Orleans Community Health Medina Hospital. All Allied Health students are encouraged to experience a variety of health professions through shadowing experience in the hospitals.

College Articulation Agreements

Bryant and Stratton College

Dual Credit

Genesee Community College (Orleans and Niagara Career & Technical Education Centers)

Niagara County Community College (Orleans and Niagara Career & Technical Education Centers)

Available Certificates

Basic Life Support – CPR & AED

HIPAA Certification

NARCAN Training

Heads Up Concussion Training

Stop the Bleed

Mandated Reporter Training in Child Abuse and Neglect



Possible Career Paths

- Veterinary Assistant, Technician (Veterinary Technicians 15% growth*) or Veterinarian (Veterinarians 17% growth*)
- Laboratory Technician
- Zoologist
- Wildlife Biologist
- Animal Groomer
- Farmer or Rancher

Contact Information

Orleans Career and Technical Education Center OCTEC

4232 Shelby Basin Rd.
Medina, NY 14103

Teacher

Paige Hungerford
phungerford@onboces.org

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Road
Sanborn, NY 14132

Teacher

Seth Muck
smuck@onboces.org

Animal Science

Animal Science is a two-year Career and Technical Education program designed to explore the diverse field of animal science. The Animal Science program is for students who have a desire to work with large or small animals. Throughout the program students will recognize the important roles animals play in society from individual ownership to scientific research with far reaching implications.

This technical course teaches specialized and advanced skills in areas such as veterinary assisting, care and handling of animals in a laboratory or veterinary setting, dog grooming, and kennel/pet shop management. This course provides students with the opportunity to care for and be exposed to a wide variety of animals within the classroom and community setting. This science-based program will teach skills in areas such as animal handling, anatomy and physiology, grooming, pet first aid, health and disease, clinical practices, veterinary terminology, and safety and sanitation. Students will operate a grooming parlor that is used as a learning model for the handling and caretaking of animals. They will use the tools of the trade, including diagnostic and grooming equipment. Upon successful completion of this program, students may receive college credits pending established procedures.

Units of Study

Anatomy and Physiology, Animal Behavior, Animal Handling and Restraints, Animal Medicine, Animal Nutrition, Animal Reproduction, Basic Grooming, Breed Identification, Hospital Procedures, Laboratory Techniques, Pet First Aid and Veterinary Terminology.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Veterinary/Animal Health Technology/Technician & Veterinarian Assistant
– 51.0808

College Articulation Agreement

Alfred State College

Available Certificates

Growing Farms Online: Intro to Pasture & Grazing Management

BQA (Beef Quality Assurance): Biosecurity

S.A.F.E. Disease & Sanitation

(continued on page 7)



Available Certificates *continued*

S.A.F.E. Handling

Confident Puppy Program

Conformation for Beginners

Cat Friendly Veterinary Advocate

Pet CPR

Wildlife Rehabilitator

Horse Sense: Equine Youth Safety



Possible Career Paths

- Associate's Degree or Certification: Broadcast and Sound Engineers, increased demand 8%*
- Bachelor's Degree: Film and Video Editors and Camera Operators, increased demand 11%*
- Bachelor's Degree: Producers and Directors, increased demand 5%*
- Bachelor's Degree: Multimedia Artists and Animators, increased demand 4%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teacher

Jennifer Manning
jmanning@onboces.org

Animation, Film and

This program is comprised of two one-year courses designed to help students gain valuable media production experience, and move to the next stage in their career path. Our media production facilities include digital filmmaking and audio equipment, a green screen studio space, and Macintosh workstations. Students use the same industry-standard software as professional filmmakers and animators, including Adobe Photoshop, Adobe Premiere Pro, Adobe After Effects, Toon Boom Harmony and Autodesk Maya. Students enrolling in this program should have strong communication skills (visual and written), excellent attendance, a strong work ethic, creativity, organizational skills, time management, problem solving skills and the ability to meet deadlines.

Objectives

1. Identify basic terminology, concepts and techniques of animation and film production.
2. Gain hands-on, industry specific experience with current technologies, equipment and methods of 2D and 3D animation, film production and visual effects, both individually and in teams.
3. Utilize the basic principles of animation in the production of a variety of 2D and 3D animated work.
4. Utilize the principles of composition, lighting, color, typography, audio, motion graphics, production planning, and non-linear editing to complete technical exercises and produce short films.
5. Participate in critiques to analyze student work.
6. Create an interactive portfolio of media work which gives students an advantage in their pursuit of a career or further education.

First Year: Animation (afternoon session)

Design Fundamentals, Vector Drawing, Animation History, Principles of Animation, Storyboarding, 2D Animation Techniques, Audio and Lip Sync, 3D Modeling and Animation, and Portfolio Creation.

Second Year: Film and Visual Effects (morning session)

Principles of Composition, Image Editing, Camera Operation, Non-linear Editing, Screenwriting, Storyboarding, Sound Design, Lighting Techniques, Motion Graphics, Visual Effects, Compositing Techniques, and Portfolio Creation.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

Visual Effects



NYS Approved Program Title & CIP Code

Animation, Interactive Technology, Video Graphics and Special Effects – 10.0304

This program is comprised of two one-year courses designed to help students gain valuable media production experience and prepare them to move to the next stage of an exciting career in animation, filmmaking or visual effects.

College Articulation Agreements

Niagara County Community College

Villa Maria College

Software Skills

Toon Boom Harmony

Autodesk Maya

Adobe Photoshop

Adobe Premier Pro

Adobe After Effects

Adobe Audition

Precision Certificates

3D Graphics

Digital Media

Digital Audio



Possible Career Paths

- With a 2 year CTE program: Detail Technician, increased demand 9%*
- Associate's Degree: Collision Center Estimator, increased demand 11%*
- Bachelor's Degree: Industrial Designer, increased demand 4%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Orleans Career and Technical Education Center OCTEC

4232 Shelby Basin Rd.
Medina, NY 14103

Teacher

Tom Struebing
tstruebing@onboces.org

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teacher

Tim Deasy
tdeasy@onboces.org

Auto Body

Auto Body is a two-year program for juniors and seniors. Auto Body is for students who want to learn to repair, refinish and paint automobile bodies, fenders and frames. Students will also learn about auto electric, computer controls, suspensions, brakes and HVAC. This program is I-CAR and ASE certified.

Objectives

1. Understand the basic inspection, estimation and sequential planning of repair work.
2. Learn skills necessary in the repair techniques and procedures for auto body repair and painting.
3. Develop familiarity with parts, tools and equipment common to the auto body repair industry.
4. Learn safe work habits.
5. Develop job seeking employability skills necessary to succeed in the working world.

Units of Study

Safety Procedures, Hand and Power Tools, Automobile Construction, Materials, Fasteners and Equipment, Resistance and Metal Arc Welding, Sheet Metal Work, Vehicle Surface Preparation, Fillers and Body Repairs, Panel Replacement and Adjustment, Refinishing Equipment and Procedures, Final Detailing, Vehicle Damage Estimation, Advanced Spray Techniques and Blending, Remove and Install Auto Body Parts, Principals of Sectioning, Bonding and Adhesive Technology, Plastic Body Panel Welding and Repair, Unibody and Frame Repair Basics, Plastic Repair and Work Experience.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Auto Body/Collision and Repair Technology/Technician – 47.0603



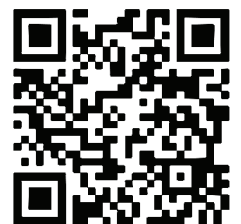
Auto Body is for students who want to learn to repair, refinish and paint automobile bodies, fenders and frames. Students will also learn about body trim, hardware, door locks, remote controls, glass window regulators. I-CAR certification available.

College Articulation Agreements

Alfred State School of Applied Technology

Bryant and Stratton College

Morrisville School of Science & Technology



Available Certificates

I-CAR

ASE (Automotive Service Excellence)

Painting and Refinishing (PR)

Structural Analysis and Damage Repair (SR)

Non-Structural Analysis and Damage Repair (NS)

Mechanical and Electrical (ME)

Possible Career Paths

- With a 2 year CTE program: Automotive Technician, increased demand 6%*
- Associate's Degree: Master Technician, increased demand 6%*
- Bachelor's Degree: Automotive Engineer, increased demand 9%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Orleans Career and Technical Education Center OCTEC

4232 Shelby Basin Rd.
Medina, NY 14103

Teacher

Robert Winters
rwinters@onboces.org

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teachers

Joe Croff
jcroff@onboces.org

John Jeckovich
jjeckovich@onboces.org

Automotive Technology

Automotive Technology is a two-year program open to all students in their junior and senior years. The program is designed to help prepare the student who wants to enter the automotive field in an independent repair facility, a new or used car dealership, a fleet maintenance repair shop or parts distribution facility. This program is ASE certified.

Objectives

1. Prepare students for entry into the automotive field.
2. Develop safe work habits.
3. Orient students in the shop environment.
4. Promote proper use of tools and equipment.
5. Develop the ability to apply technical information to tasks assigned.
6. Attain skills needed for the proper diagnosis of vehicle problems and to make needed repairs.
7. Develop good work habits needed to acquire employment.
8. Help the student acquire job seeking skills needed to find employment within the automotive field.

Units of Study

Safety in the Workplace, Automobile and Auto Systems, Careers and Employment, Tools and Equipment, Measurement, Fasteners, Vehicle Maintenance, NYS Inspection, Gas and MIG Welding, Brake Systems, Suspension, Steering and Wheel Alignment, Basic Engine Theory and Repair, Basic Electrical, Lighting and Accessories, Batteries, Starting and Charging Systems, Computer Systems, Ignition Systems, Fuel Systems and Emission Systems.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Automobile/Automotive Mechanics Technology/Technician – 47.0604



The program is designed to help prepare the student who wants to enter the automotive field in an independent repair facility, a new or used car dealership, a fleet of maintenance repair shops or a parts distribution facility. This program is ASE certified.

College Articulation Agreements

Alfred State School of Applied Technology
Bryant and Stratton College
Morrisville School of Science and Technology
University of Northwestern Ohio

Universal Technical Institute
Monroe Community College
Erie Community College

Available Certificates

The National Institute for Automotive Service Excellence (ASE) -
Engines, Suspension, Electrical, Brakes (4 Areas)
ASE Entry Level Certification



Possible Career Paths

- With a 2 year CTE program:
Roofer, increased demand 12%*, HVAC Mechanics and Installers, increased demand 13%*
- Bachelor's Degree:
Construction Manager, increased demand 10%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teachers

Michael Carney
mcarney@onboces.org

Vincent Piaskowski
vpiaskowski@onboces.org

Building Maintenance &

This program prepares students to assume key positions in fields of general contracting, facility operations and property management. There is a great need for highly-trained individuals to operate, manage and maintain various kinds of facilities both locally and nationally. The curriculum is unique in providing this technical and managerial training. The student will gain knowledge in the following areas: overview of the building trades, operation of a building's mechanical systems, and managerial/supervisory skills and business practices. Our program aims to develop skills that are needed for planning, scheduling and controlling the efficient operation and repair of equipment and buildings. The facilities operations and property management fields will require a thorough understanding of the construction and maintenance process. The curriculum provides hands-on activities to augment and complete the education of the student.

Objectives

1. Operate, maintain and troubleshoot building mechanical systems (HVAC, Electrical, Power Distribution, Plumbing, etc.) and structural systems.
2. Develop operational forms of a facility.
3. Demonstrate knowledge of multiple trades, tool usage, and safety procedures.
4. Develop and implement Standard Operation Procedure (SOP) manual.
5. Develop and implement preventive maintenance program(s).
6. Estimate labor, material and equipment for the maintenance function.
7. Manage a project; renovation, or remodeling for a facility.
8. Supervise the maintenance and functioning of personnel, work, load, balancing, problem solving and scheduling.
9. Develop a training program in various media formats or subordinates.
10. Interpret and use financial and legal documents.
11. Interpret residential and commercial blueprints.
12. Develop hands-on skills with a large variety of hand and power tools essential to contractor requirement.

Units of Study

Workplace Safety, Intro to HVAC, Refrigeration, Air Distribution Systems, Home Performance, Air Conditioning (Install & Maintenance), Estimating, Rough and Finish Carpentry, Plumbing, Interior & Exterior Finishes, Electricity/Control Circuits, Gas Heat, Blueprint Reading, Transformers and Motors. Concrete: flat and form work, roofing, windows and doors, and masonry will also be introduced.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Building/Property Maintenance and Manager – 46.0401

Management



The Building Maintenance and Management curriculum prepares students to assume key positions in fields of contract work, facility operations and property management. Students will gain knowledge in the operation of a building's mechanical system, overview of the building trades, managerial/supervisory skills and business practices. Our program aims to develop skills which are needed for planning, scheduling and controlling the efficient operations and repair of state of the art equipment and buildings. The facilities operations and property management fields will require a thorough understanding of the construction and maintenance process.

College Articulation Agreements

Alfred State School of Applied Technology
Erie Community College



Available Certifications

Occupational Safety & Health Administration (OSHA) 10 Hour Certification
Section 608 EPA Certification
TracPipe Flex Gas Line Certification

Possible Career Paths

- With a 2 year CTE program: Construction Laborers and Helpers, increased demand 11%, Carpenters, increased demand 8%*, Masonry Worker, increased demand 11%
- Bachelor's Degree: Construction Manager, increased demand 10%, Civil Engineer, increased demand 6%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Orleans Career and Technical Education Center OCTEC

4232 Shelby Basin Rd.
Medina, NY 14103

Teacher

Matt Anastasi
manastasi@onboces.org

Building Trades

Building Trades is a two-year program open to all students in their junior and senior year. This program is designed to prepare students to enter directly into the construction field or continue their education at a post-secondary level. Students will be building an entire three bedroom modular home in collaboration with Habitat for Humanity where the home will be completed in class and transported to a building site in Buffalo, NY. Along with this training students also prepare to enter directly into the workforce with the help of partnerships with Be Your Own Hero and the Construction Exchange of WNY. Learn the fundamentals of residential carpentry and learn the skills to rehabilitate an existing house. Gain experience in wall, ceiling and roof framing, exterior finishing, trimming, windows and doors, insulation and floor systems.

Objectives

1. Learn necessary skills in the use of tools and equipment common to a carpenter, mason and plumber.
2. Understanding of common structures, their parts and relationships to each other.
3. Understand the theoretical aspects of carpentry, masonry and plumbing.
4. Successfully develop positive work habits which include responsibility, following instructions and the ability to work with others.
5. Acquire job seeking/employability skills necessary to succeed in the working world.

Units of Study

Rough Framing, Finish Carpentry, Plumbing, Exterior Finishes, Interior Finishes, Energy Efficiency/Home Performance, Insulation and Air Sealing, Jobsite Safety, Power Tools, Estimating, Blueprint Reading, Masonry and Heavy Equipment.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Carpentry/Carpenter – 46.0201



The Building Trades program is designed to prepare students to enter directly into the construction field or continue their education at a post-secondary level. Students build small projects and also work as a team to build full-scale projects in the career center. Students will also use their skills to work on service projects in the local community.

College Articulation Agreements

Alfred State School of Applied Technology
Fulton-Montgomery Community College
SUNY College of Technology at Delhi

Dual Credit

Erie Community College



Available Certifications

Home Energy Analyst and Technician (H.E.A.T.)
Occupational Safety & Health Administration (OSHA)
The United Brotherhood of Carpenters and Joiners of America (UBC) - OTMC, I, II
Bobcat Safety

Possible Career Paths

- With a 2 year CTE program: Fitness Trainers and Instructors, increased demand 13%*, Recreation Workers, increased demand 8%
- Associate's Degree: Physical Therapist Assistant or Aide, increased demand 22%*
- Bachelor's Degree: Athletic Trainers, increased demand 19%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Orleans Career and Technical Education Center OCTEC

4232 Shelby Basin Rd.
Medina, NY 14103

*The Orleans Center program is held at the Royalton Hartland High School.

Teacher

Joseph Wilkie
jwilkie@onboces.org

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teacher

Jared Karas
jkaras@onboces.org

Certified Personal Trainer

The Certified Personal Trainer program is a two-year program for juniors and seniors in high school. This course is designed for the individual seeking competency in health, fitness and exercise instruction. Students will perform fundamental health and fitness assessments and learn to design and implement fitness programs for the healthy population. During the course, students are provided with the most relevant scientific information regarding the assessment, design and implementation of safe, effective and efficient personal exercise instruction.

Upon completion of this program, students will be academically prepared to take the American Council of Exercise Certification Examination (ACE) or The National Academy of Sports Medicine Certification Examination (NASM), and enter related college programs such as: Physical Therapy, Athletic Training, Exercise Science, Physical and Health Education, Dietetics as well as Nutrition.

Objectives

1. To learn anatomy.
2. Perform CPR and AED.
3. Develop a knowledge of health and fitness.
4. Learn about health screening and evaluation.
5. Study nutrition and weight management.
6. Develop proper training techniques.
7. Help clients with meeting their health and fitness goals.

Units of Study

Careers in Health and Fitness, Health and Wellness, Nutrition, Anatomy and Physiology, Anaerobic versus Aerobic Training Techniques, Screening and Evaluations, Fitness Training, Personal Training Techniques, Exercise Program Design, and Starting Your Own Personal Training Business.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Athletic Training/Trainer – 51.0913



This course is designed for the individual seeking competency in health, fitness and exercise instruction. Students will perform fundamental health and fitness assessments and learn to design and implement fitness programs for the healthy population.

College Articulation Agreements

Bryant and Stratton College
Erie Community College



Available Certifications

CPR
National Academy of Sports Medicine - Certified Personal Trainer (NASM-CPT)
HIPAA Training
Group Fitness Instructor Certification (AFAA-CGFI)

Possible Career Paths

- With a 2 year CTE program: Computer Support Specialist, increased demand 10%*
- Associate's Degree: Computer Programmer and Computer Systems Analyst
- Bachelor's Degree: Computer and Information Systems Manager, increased demand 11%*, Information Security Analysts, increased demand 32%

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Orleans Career and Technical Education Center OCTEC

4232 Shelby Basin Rd.
Medina, NY 14103

Teacher

Paul Herrmann
pherrmann@onboces.org

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teacher

Jeffrey Brown
jbrown@onboces.org

Computer Technology

This program is open to all students in their junior or senior year of high school. Students will learn about all aspects of computer technology including software packages, operating systems and hardware architecture. Students are eligible for Comp TIA-A+ certification.

Objectives

1. Basic computer technology and network concepts.
2. Proficiency with software packages including Microsoft Office.
3. Knowledge of internet security concerns and how to maintain a safe computing environment.
4. Fundamentals of cyber security.
5. Describe and assemble a computer system.
6. Installation of an operating system.
7. Troubleshooting computer issues by using system tools and diagnostic software.
8. Exploration of programming, web design, robotics, micro computing and multimedia.

Units of Study

Introduction to Computers, Introduction to Microsoft Office, Operating Systems (various), Computer Hardware and Systems (CISCO IT), Networking, Programming (Javascript, Python), Web Design (HTML & CSS), Cyber Security, Database Design and AI computing.

How to Enroll

Orleans/Niagara BOCES partners with local school districts and businesses to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Computer Technology/Computer Systems Technology – 15.1202



The Computer Technology curriculum teaches students about all aspects of computer technology including standard software packages, operating systems, programming, databases and hardware architecture.

College Articulation Agreements

Genesee Community College (Orleans Career & Technical Education Center)

Niagara County Community College

Available Certifications

CISCO - IT Essentials

CompTIA (A)

CompTIA (B)

CISCO - Linux Essentials

CISCO - Cybersecurity



Possible Career Paths

- Associate's Degree: Environmental Science and Protection Technicians, increased demand 9%*
- Bachelor's Degree: Ecologist, increased demand 11%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teacher

Paul Dewey
pdewey@onboces.org

Conservation

Conservation is a two-year program open to all students in their junior or senior year. This program is designed to give students a better understanding of our natural resources and the reasoning for preserving them with activity based learning experiences.

Objectives

1. To prepare students for entry level occupations in the Conservation/ Natural Resources fields.
2. Prepare students for advanced studies at two and four year colleges.
3. Offer students college level studies and college credits.
4. Develop hands-on skills used in the natural resource career area.
5. Demonstrate and participate in new and emerging trends and techniques in the conservation field.
6. To get students up from their desk and outside.
7. Research land management including woodlots, parks and recreational facilities. Participate in various equipment operations, environmental water quality monitoring, wildlife management projects and power equipment service.
8. Learn greenhouse management by operating onsite greenhouse and maintaining heating, watering and ventilation systems, forest and floral stock and monitoring temperature, moisture and nutrient levels. Students will also construct research areas on hydroponics, aquaponics, ornamental pools and waterfalls.

Units of Study

Forestry – Tree identification, conducting timber cruise, managing a woodlot, operating a chainsaw and safety. Wildlife – Identify, track and monitor a variety of wildlife species. Survey and manage wildlife habitat. Maintain a fish hatchery operation. Develop and conduct wildlife habitat enhancement activities. Wood Products Production – Identification of merchantable timber and fell trees using industry safety standards. Operation of a lumber mill to produce lumber stock. Design and construct projects from the trees you harvested. Equipment Operations – Learn the design, safe operation and maintenance on various machines and equipment. Compete – Show your skills with individual and team events sponsored by SkillsUSA, and the New York State Envirothon and New York State Parks F.O.R.C.E.S. (Friends of Recreation, Conservation and Environmental Stewardship) volunteer program..

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.



NYS Approved Program Title & CIP Code

Natural Resources and Conservation – 03.9999

This program is designed to give students a better understanding of our natural resources and the reasoning for preserving them with activity based learning experiences.

College Articulation Agreements

Bryant and Stratton College

Niagara County Community College

Dual Credit

Morrisville State College School of Agriculture & Natural Resources

Available Certifications

Bobcat Training

Power Tool Institute



Possible Career Paths

- With a Completion of 2 year CTE Program & obtaining NYS licensure: Hair Stylist, increased demand 8%*
- Associate's Degree: Business Owner, increased demand 3%*
- Bachelor's Degree: Formulation Chemist, increased demand 7%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Orleans Career and Technical Education Center (OCTEC)

4232 Shelby Basin Rd.
Medina, NY 14103

Teachers

Anne Carnahan
acarnahan@onboces.org

Sue Lindke
slindke@onboces.org

Niagara Career and Technical Education Center (NCTEC)

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teachers

Pauline Carney
pcarney@onboces.org

Erica Cook
ecook@onboces.org

Jill Fisher
jfisher@onboces.org

Cosmetology

Cosmetology is a two-year program for juniors and seniors. In this program students learn the latest techniques in Cosmetology and apply them in our full service salon, which is open to the public. After students have successfully completed 1000 hours of cosmetology they are prepared to apply for licensing through New York State.

Objectives

1. Learn necessary skills to meet the standards set forth by the State Education Department Cosmetology and Department of Licenses.
2. To train students for gainful employment in the field of Cosmetology.
3. Develop in each student the self-confidence and positive attitude regarding their skills as a professional cosmetologist.
4. Encourage a sense of professionalism and high ethical standards.

Units of Study

Sterilization and Sanitation, Skin Care, Facials and Cosmetics, Haircutting and Styling, Manicures and Pedicures, Scalp and Hair Treatments, Permanent Waving, Thermal Curling, Artificial Nails, Chemical Hair Reconstruction, Hair Color and Decolorization, Temporary Hair Removal, Salon Management and Ownership, Hair Extensions and Wigs.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Cosmetology/Cosmetologist, General – 12.0401



Gain hands-on experience in hairstyling, hair coloring, skin care/cosmetics, and nail technology. The training you receive will prepare you to take the New York State Cosmetology Examination to become a licensed cosmetologist.

College Articulation Agreements

Bryant and Stratton College

Available Certifications

NYS Cosmetology License

Infection Control Certifications



Possible Career Paths

- With a 2 year CTE program:
Cooks, increased demand 11%*
- Associate's Degree:
Restaurant Manager, increased demand 9%*
- Bachelor's Degree: Food Scientist, increased demand 7%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Orleans Career and Technical Education Center OCTEC

4232 Shelby Basin Rd.
Medina, NY 14103

Teacher

James Atzrott
jatzrott@onboces.org

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teachers

Lisa Cook
lcook@onboces.org

Caitlin Kucharski
ckucharski@onboces.org

Culinary Arts

This program is open to all juniors and seniors. Students in this program will be exposed to a variety of careers within the culinary arts and food preparation field. By actual participation, students will become familiar with the workings of modern kitchen while preparing foods of various types. This training will prepare them for future employment in both preparation and serving. This program also qualifies students for acceptance at post-secondary schools specializing in training necessary to become entry level chefs, restaurant managers, restaurant management, restaurant owners, or to become instructors of culinary arts trades. New York ProStart Program is available.

Objectives

1. Develop the skills needed in operating food equipment efficiently and safely; handling of foods, storage, cooking techniques and proper safe temperatures.
2. Have students prepare food in a hygienic and sanitary manner, working with Board of Health regulations.
3. Familiarize students with various techniques used in food preparation for occasions such as buffets, weddings, formal dinners, short order cooking, fast food operations and takeout services.
4. Aid students in developing the initiative and confidence that is needed to succeed in the food service trades, and the styles of foods that people want today such as: low fat, low cholesterol, high nutritional value.
5. Stress the importance of working in harmony with other students, working in a professional manner and time management.
6. Develop job seeking abilities necessary to succeed in the working world.

Units of Study

Sanitation, Hand Tools, Safety, Customer Relations, Business Math, Basic Cooking Skills, Commercial Baking, Cooking Techniques such as: Meats, Poultry, Seafood, Stocks, Sauces and Soups, Garde Manager: Eggs, Breakfast, Sandwiches, Fruits, Vegetables, Pasta and Grains, Menu Planning and Nutrition.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Culinary Arts/Chef Training – 12.0503



Students in this program will be exposed to a variety of careers within the culinary arts and food preparation field. Through active participation, students will become familiar with the workings of a modern kitchen while preparing foods of various types.

College Articulation Agreements

- Alfred State School of Applied Technology
- Bryant and Stratton College
- Culinary Institute of America
- Erie Community College
- Niagara County Community College
- SUNY College of Agriculture and Tech at Cobleskill



Available Certifications

- ProStart

Possible Career Paths

- With a 2 year CTE program: Diesel Service Technician, increased demand 5%*
- Associate's Degree: Heavy Equipment Mechanic, increased demand 8%*
- Bachelor's Degree: Agricultural Engineer, increased demand 8%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Orleans Career and Technical Education Center OCTEC

4232 Shelby Basin Rd.
Medina, NY 14103

Teacher

Mike Schultz
mschultz@onboces.org

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teacher

Westin Blidy
wblidy@onboces.org

Diesel Technology/Heavy

Heavy Equipment/Diesel/Agriculture Mechanics is a two-year program open to all high school juniors and seniors. Students who have found an interest in working with machines in the construction, agriculture, trucking, lawn and garden industry, welding and the Armed Forces should consider this program. Students will be working on trucks (pickups and semis), tractors, forklifts, backhoes, bulldozers, skid steers and excavators. Students will also work in groups for engine teardown, overhaul and failure analysis.

Objectives

1. Provide instruction to help students achieve the skills and experiences necessary so that they may gain employment.
2. Prepare students that wish to study at college with general repair knowledge to help them achieve success in their post-secondary goals.
3. Develop job seeking skills necessary to find and obtain employment in the field of their choice.
4. Assist students in developing and maintaining work habits, proper attitudes, and the ability to work harmoniously with others.
5. Provide students with leadership training activities that will enlarge their vision and enrich their lives for better citizenship through FFA and SkillsUSA organizations.

Units of Study

Safety Overhaul/Service and Tune-up Medium and Heavy Duty Diesel Engines, Basic Welding (Arc, Acetylene, MIG), Air Conditioning Service and Troubleshooting, Transmissions/Clutches/Torque Converters and Air Brake Systems, Heavy Equipment Preventative Maintenance, Troubleshoot and Service Hydraulic Systems, 12/24 Volt Electrical Charging and Starting Circuits, Electronic Engine Controls and Troubleshooting, Heavy Equipment Operation.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Diesel Mechanics Technology/Technician – 47.0605

Equipment



Diesel Technology/Heavy Equipment is a two-year program open to all high school juniors and seniors. Students who have found an interest in working with machines in the transportation, construction, or agricultural industry should consider this program. Students will be working on various pieces of equipment such as, bulldozers, skid steers, excavators and trucks. Students will work in groups on projects including engine teardown, overhaul and failure analysis.

College Articulation Agreements

Alfred State School of Applied Technology

SUNY Morrisville

University of Northwestern Ohio



Available Certifications

Occupational Safety & Health Administration (OSHA) 10 Hour Certification

The National Institute for Automotive Service Excellence (ASE) - Engines, Suspension, Electrical, Brakes (4 Areas)

Bobcat Safety

Possible Career Paths

- With a 2 year CTE program: Childcare Assistant, increased demand 7%*
- Associate's Degree/CDA Credential: Daycare Teacher, increased demand 7%*
- Bachelor's Degree: Childcare Center Director, Public School Teacher, increased demand 7%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Orleans Career and Technical Education Center OCTEC

4232 Shelby Basin Rd.
Medina, NY 14103

Teacher

Christine Burdick
cburdick@onbores.org

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teacher

Laura Koeppel
lkoeppel@onbores.org

Early Childhood Education

This program has several options open to all students in their junior and senior years. Students spend a portion of their time teaching preschool children and gain hands-on experiences working in the on-site preschool program. Students completing this program will gain experience working with children two to five years of age. The curriculum includes several professional development opportunities such as Disabilities Awareness training; Identification and Reporting of Child Abuse for Mandated Reporters; Adult, Infant and Child CPR and Standard First Aid.

Objectives

1. Help students maintain a safe, healthy and nurturing environment for children.
2. Assist the student with developing communication skills with children and adults.
3. Familiarize students of appropriate child guidance techniques and classroom management.
4. Understand the stages of development birth to eight years.
5. Learn principles of child development in order to create developmentally appropriate activities.
6. Develop the skills needed in seeking employment working with young children.

Units of Study

During the program students will: Read Aloud with Children, Child Guidance Techniques, Observation and Assessment, Health and Safety in a Child Care Setting, Areas of Development: Physical, Cognitive, Social and Emotional, Classroom Environment, Nutrition, Family Involvement, Day Care Regulations, Professionalism, Diversity in Education, Teaching Children with Special Needs, Developmental Theory, Developmentally Appropriate Practice in Art, Science, Math and Literacy.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Child Care Provider/Assistant – 19.0709



Students spend a portion of their time teaching preschool children and gain hands-on experiences working in the on-site preschool program. Students completing this program will gain experience working with children two to five years of age.

College Articulation Agreements

Medaille College

Niagara County Community College

SUNY College of Agriculture & Tech at Cobleskill

Dual Credit

Erie Community College (Niagara Career & Technical Education Center)

Genesee Community College (Orleans Career & Technical Education Center)

Available Certifications

CPR

Identifying and Responding to Anaphylaxis

Mandated Reporter of Child Abuse and Neglect



Possible Career Paths

- With a 2 year CTE program: Electricians, increased demand 10%*
- Associate's Degree: Electronics Technician, increased demand 2%*
- Bachelor's Degree: Electrical Engineer, increased demand 2%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Orleans Career and Technical Education Center OCTEC

4232 Shelby Basin Rd.
Medina, NY 14103

Teacher

William Leggett
wleggett@onboces.org

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teachers

Robert Fritton
rfritton@onboces.org

Logan Spain
rspain@onboces.org

Electricity and Electronics

This is a two-year program for juniors and seniors which allows students the opportunity to attain entry level job skills and/or prepare for additional in-depth training in the Electricity/Electronics field. Students will study Electronics Technology with many analog and digital projects to build. Residential house wiring and industrial motor controls along with training on PLC's (Programmable Logic Controller) are part of the program. Classes may wire a modular home or work on projects outside of the Career and Technical Ed Center. Students will be given job-seeking skills and be assisted in finding jobs near the end of their second year. We have had multiple State and National SkillsUSA Champions in this program.

Objectives

1. Understand the theory of Electricity: Ohms, Volts, Amps and Watts.
2. Learn the use of hand tools and how to solder projects.
3. Understand how to wire a house with NEC Codes.
4. Learn ladder logic and industrial motor-control.
5. Develop skills needed to bend metal and PVC conduit.
6. Learn how to wire and program PLC's.
7. Familiarize students with the basics of solar power in the use of home construction.

Units of Study

Electrical Safety, Hand and Power Tools, Electrical Theory, Reading Electrical Schematics, Proper Solder Technique, Digital Multi Meters, Residential Wiring, Commercial and Industrial Wiring, NEC Code Book, Installing Breaker Panels, Using an Oscilloscope, Programming PLC's, Motor Control, Alternative Energy Sources, Bending Conduit, and Alarm Systems.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Electrician – 46.0302



This two-year program allows students the opportunity to attain entry level job skills and/or prepare for additional in-depth training in the Electricity and Electronics field. Students will study electronics technology as well as residential house wiring.

College Articulation Agreements

Alfred State School of Applied Technology
Erie Community College



Available Certifications

Occupational Safety & Health Administration (OSHA) 10 Hour Certification

Possible Career Paths

- With a 2 year CTE program: EMT, increased demand 7%*
- Associate's Degree/
Additional Certifications: Paramedic, increased demand 7%*
- Bachelor's Degree: Emergency Management Director, increased demand 5%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

**Niagara Career and
Technical Education Center
NCTEC**
3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teacher

Sara McCartin
smccartin@onboces.org

Emergency Medical Services

This two-year program focuses on the skills and knowledge required for basic certification in the field of Emergency Medical Services (EMS). Students will be learning how to provide immediate lifesaving care to critical patients who access the EMS system. Students will learn the critical link that CFRs and EMTs provide between the scene of an emergency and health care system. Students can become certified as Certified First Responders (CFR) and as Emergency Medical Technicians (EMT). They will have the opportunity to get certificates and be trained in CPR/AED, HIPAA, Bloodborne and Airborne Pathogens, Sexual Harassment in the Workplace, Hazardous Materials Awareness, and the Incident Command System.

Objectives

1. Function in uncommon situations while remaining calm.
2. Has a basic understanding of stress response and methods to ensure personal well-being.
3. Has an understanding of body substance isolation.
4. Understands basic medical-legal principles.
5. Functions within the scope of care as defined by state, regional and local regulatory agencies.
6. Administering cardiopulmonary resuscitation, including use of automated external defibrillators.
7. Providing prehospital emergency medical care of simple and multiple system trauma.
8. Providing emergency medical care.
9. Reassuring patients and bystanders by working in a confident, efficient manner.
10. Avoid mishandling and undue haste while working expeditiously to accomplish the task.

Units of Study

Introduction to EMS, the Human Body, Medical Terminology, Artificial Ventilation, Oxygenation, Resuscitation, Medical Emergencies, Trauma Emergencies, Special Populations, Operations, Terrorism and Mass Casualty Incidents.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Emergency Medical Technology/Technician (EMT Paramedic) – 51.0906



This program is a two year program that focuses on the skills required for certification and advancement in the field of Emergency Health Care/Pre-Hospital Care. Students can obtain certification in American Heart Association Basic Life Support, HIPAA, and infection control. Students successfully completing the course will be eligible to take New York State Emergency Medical Responder and Technician Certification.

College Articulation Agreements

Bryant and Stratton College

Niagara University

Certifications

NYS Certification for CFR/EMT

CPR/AED

Incident Command Systems (ICS) 100 & 700

Hazardous Materials Awareness

HIPAA

Mandated Reporter for Child Abuse and Neglect



Possible Career Paths

- With a 2 year CTE program:
Retail Sales Associate,
Tailor, Visual Merchandiser,
Home Stager, Store Manager
- Bachelor's Degree: Interior
Designer, Fashion Designer,
Marketing, increased
demand 4%*

**Projected national growth for
2018-2028, US Bureau of Labor Statistics*

Contact Information

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teacher

Debra Wilczak
dwilczak@onboces.org

Fashion Design and Interior

Fashion Design and Interior Decorating is a two-year program for juniors and seniors. During the two year program, students will focus on fashion illustration, the elements and principles of design, textile science, apparel design and construction, pattern making methods, professional sewing techniques, retail merchandising and marketing, and interior floor planning and styles.

Each year the senior class plans and organizes an annual fashion show. Junior and Senior year students showcase their fashion collection with models walking the runway.

Enrolled students can earn credits that will satisfy core academic requirements in English Language Arts, Math and Science. Through the integration of these core academics, achieving a Regents Diploma remains in reach.

Objectives

1. Be able to discuss the business of fashion including marketing and advertising strategies.
2. Understand the use of textiles for apparel and interiors.
3. Demonstrate pattern making skills using flat pattern and draping techniques.
4. Construct apparel and interior furnishings using professional skills.
5. Recognize and name various interior styles.
6. Perform measuring and layout skills for interiors.
7. Organize and produce a live fashion show.

Units of Study

During the program, students will study the Elements and Principles of Design, Textile Science, Fashion History, Fashion Psychology, Illustration, Marketing and Merchandising, Apparel Production, Interior Backgrounds, Interior Styles, Floor Planning, Fashion Show Production, Industry careers.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Apparel and Textile Manufacture – 19.0902

Decorating



Fashion Design and Interior Decorating is a two-year program combining both theory and practical techniques based on the business of fashion, apparel production and construction, and the interior decorating industry. Math and science skills are critical to the success of design students, as well as abstract thinking skills and creative problem solving methods.

Dual Credit

Buffalo State College



Possible Career Paths

- With a 2 year CTE program: Craft and Fine Artists, increased demand 1%*
- Associate's Degree: Web Developer, increased demand 13%*
- Bachelor's Degree: Graphic Designers, increased demand 3%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Orleans Career and Technical Education Center OCTEC

4232 Shelby Basin Rd.
Medina, NY 14103

Teacher

Karen Krull
kkrull@onboces.org

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teacher

Susan Staddon
szelasko-staddon@onboces.org

Graphic Communications

The Graphic Communications program is for junior and senior students who are interested in entering the photography, multimedia, printing and advertising industries. Students will learn skills in layout and design with the latest software for digital illustration, photo imaging, digital photography, web design and publishing. Through project development, students will discover and design for the promotional world of advertising and marketing. After students experience multiple areas within the graphic communication field, they will choose their favorite area to focus on and master in their senior year.

Objectives

1. Fundamental skills in the multi-faceted industry of graphic communications.
2. Learn the latest design software to achieve acceptable standards of work in the graphic design industry.
3. Apply traditional methods and digital technology in creative expression.
4. Utilize and understand production procedures in the print industry.
5. Gain hands on, industry specific experiences in producing graphic communications projects from start to finish.
6. Introduction of various forms of print including web, mobile and print.
7. Explore creativity and technology of graphic communications through various media, including current industry software.

Units of Study

Safety, Print Design, Typography, Color Theory, Proofreading, Measurement, Drawing/Tonal Drawing Styles, Lithography, Intaglio, Relief, Screen Digital Printing Methods, Prepress, Principles and Elements of Design, Web/Mobile Design and Layout, Package Design, Advertising and Marketing, Digital/Studio Photography, History of Graphic Design, Traditional and Digital Illustration, and Finishing and Bindery Methods.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Graphic Printing Equipment Operator, General Production – 10.0305



The Graphic Communications curriculum combines art, design, technology and production. Students learn the skills involved in the creation and production of graphic products from print to new media.

College Articulation Agreements

Bryant and Stratton College
Fulton-Montgomery Community College
SUNY Canton

Dual Credit

Genesee Community College (Orleans Career & Technical Education Center)



Possible Career Paths

- With a 2 year CTE program: Certified Nursing Assistant, increased demand 9%*
- Licensed Practical Nurse, increased demand 11%
- Surgical Tech, increased demand 9%
- Sterilization, increased demand 9%
- Home Health Care, increased demand 36%
- Associate's Degree: Radiology, increased demand 9%*
- Bachelor's Degree: Registered Nurse, increased demand 12%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Orleans Career and Technical Education Center OCTEC

4232 Shelby Basin Rd.
Medina, NY 14103

Teachers

Leanne Serrato
lserrato@onboces.org

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teacher

Laura Vendryes
lvendryes@onboces.org

Health Occupations

This program is available to juniors and seniors. The Health Occupations Technician program addresses this demand in a two-year program that focuses on the art and science of providing patient care with real-life experience in a variety of health care settings. Emphasis is placed on providing safe, reliable, ethical, and a respectful patient care.

This is a very active program with classroom, lab and clinical components. Each of the components is designed to prepare students to care for diverse individuals of all ages, from birth to the end stages of life. Students will experience all aspects of the health care field from illness and injury to gain real life experience. Our students gain first-hand clinical experience in local long term care facilities.

After successful completion of the HOT program students are eligible to take the NYS Nursing Assistant Certification exam and enter into the workforce. In addition, graduates also develop a foundation on which to make informed decisions regarding their future choices in health care employment and potential future education in the health care professions.

Objectives

1. Health Occupations Education Core
2. Introduction to Clinical Settings
3. Exploratory of Health Fields
4. Certified Nurse's Assistant – Long Term Care (State Certification Exam)
5. CPR Certification

Units of Study

Health Care Agencies, Resident/Patient Rights, Ethics, Communication, Body Structure and Function, Growth and Development, Care of the Older Person, Safety, Body Mechanics, Infection Prevention, Providing Personal Care, Nutrition, Elimination, Vital Signs, Respiratory Support, Rehabilitation, Diseases and Disorders, Dementia, Developmental Disabilities, Basic Emergency Care, End-of-Life Care, Job Management Skills, Personal Health and Wellness.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Nurse/Nurse Assistant/Aide and Patient Care Assistant – 51.1614

Technician



This is a very active program with classroom, lab and clinical components. Each of the components is designed to prepare students to care for diverse individuals of all ages, from birth to the end stages of life. Students will experience all aspects of the health care field from illness and injury to gain real life experience. Our students gain first-hand clinical experience in local long term care facilities.

Available Certifications

NYS Certified Nursing Home Nurse Aide (CNA)

CPR/AED

The Health Insurance Portability and Accountability Act (HIPAA)

First Aid

NARCAN Training



Possible Career Paths

- With a 2 year CTE program:
Plumber/Pipe Fitter,
increased demand 14%*,
HVAC/R Technician,
increased demand 13%*
- Bachelor's Degree:
Mechanical Engineer,
increased demand 4%*

**Projected national growth for
2018-2028, US Bureau of Labor Statistics*

Contact Information

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teacher

Nick DiFelice
ndifelice@onbooces.org

Heating/Ventilation/Air

HVAC is a two-year program for juniors and seniors. This program is designed to provide students with employability skills in the service and installation of residential and commercial heating, air conditioning and refrigeration units. This is a comprehensive technical and hands-on training program that covers all critical aspects of the HVAC/R field. Students will learn to install, maintain, troubleshoot and repair both residential and commercial systems in a fully operational HVAC/R lab. Instruction includes wireless and Wi-Fi control systems. OSHA certification is available to all students. EPA is available to students who want it (extra cost).

Objectives

1. Students will be given the opportunity to work on actual field equipment and modern environmental control systems.
2. "Real Life" on the job training for second year students who will spend up to 72 hours of field training with local HVAC companies. Students will learn from experienced professionals in installing, servicing, sales, project management and engineering.

Units of Study

Introduction to Heating and Cooling, Refrigeration Fundamentals, Air Distribution Systems, Electricity and Control Circuits, Gas and Oil Burners, Refrigeration Recovery, Boilers, Transformers and Motors, Installation and Service of Standard and High Tech Gas, Oil, Electric and Hydronic Heating, Pressure Systems, Air Conditioning Installation and Servicing, Humidification and De-humidification, and Reclaiming and Recycling Refrigerants.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Heating, Air Conditioning, Ventilation and Refrigeration Maintenance
Technology/Technician – 47.0201

Conditioning and Refrigeration



Heating/Ventilation/Air Conditioning and Refrigeration (HVAC) is a two-year program designed to provide students with employability skills in the service and installation of residential and commercial heating and cooling.

College Articulation Agreements

University of Northwestern Ohio
Erie Community College

Available Certifications

TracPipe Flex Gas Line Certification
Section 608 EPA Technician Certification
Occupational Safety & Health Administration (OSHA) 10 Hour Certification



Possible Career Paths

- With a 2 year CTE program: CNC Machinists and Tool Makers 7%*
- Associate's Degree: Mechanical Engineering Technician, increased demand 6%*
- Bachelor's Degree: Mechanical Engineer, increased demand 7%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Orleans Career and Technical Education Center OCTEC

4232 Shelby Basin Rd.
Medina, NY 14103

Teacher

William Rakonczay
wrakonczay@onboces.org

Facebook: OCTEC AME Class

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Road
Sanborn, NY 14132

Teacher

Scott Brauer
sbrauer@onboces.org

Precision Machine Technology/ Advanced Manufacturing and

Over the two-year program students are exposed to Computer Numerical Machining, Computer Aided Design and Welding Technologies. Students will experience how multiple technologies interact in a real manufacturing environment. Laboratory experiences and field trips to local industries help students to understand the manufacturing environment. All students follow approved industry and engineering methods and standards while learning to fabricate industry specific metal products.

At our facility in Medina (OCTEC), this program is only one of three in NY State involved with the NASA Hunch Program. The students in this program are making hardware that will be used on the International Space Station. Currently the program has parts onboard the International Space Station that were fabricated in class on the equipment in this program.

Objectives

1. Acquiring tooling and machining skills utilizing computer driven CNC layout techniques and manual techniques (CNC mills/lathes/plasma and laser machines).
2. Gain knowledge and skills in a variety of metal joining, cutting and fabrication processes.
3. Learn how to create simple and complex parts, understanding how and why these parts are graphically depicted on blueprints.
4. Use various design processes utilizing leading edge software and technologies.
5. Be able to operate machining and fabrication equipment.
6. A global understanding of the design and production processes of metal products.

Units of Study

Shop terminology, blueprint reading, operation of a job shop, complex projects, employment in the machine trades by the spring of their senior year.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Machine Tool Technology/Machinist – 48.0501

Project Based Engineering/ Engineering



The National Award Winning program is two years in length and designed to develop skills which allow graduates to be successful as they enter the Advanced Manufacturing and Engineering fields.

College Articulation Agreements

Alfred State School of Applied Technology
Bryant and Stratton College
Erie Community College
Niagara County Community College

Available Certifications

National Institute for Metalworking Skills (NIMS) for:
CNC Machining and Manual Machining
Tooling U-SME



Possible Career Paths

- With a 2 year CTE program:
Private Security Officer,
increased demand 4%*
- Associate's Degree: Law
Enforcement Officer,
increased demand 5%*
- Bachelor's Degree:, Forensic
Science Technicians,
increased demand 14%*
- Master's Degree:, Lawyer,
increased demand 6%*

**Projected national growth for
2018-2028, US Bureau of Labor Statistics*

Contact Information

Orleans Career and Technical Education Center OCTEC

4232 Shelby Basin Rd.
Medina, NY 14103

Teachers

Dudley Gilbert
dgilbert@onboces.org

Gene Newman
gnewman@onboces.org

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teachers

Amber Croff
acroff@onboces.org

Jess Traver
jtraver@onboces.org

Security and Law

Students will engage in the fundamentals of law enforcement and security. Instruction will include: defensive tactics, proper handcuffing skills, appropriate use of a police baton, firearms safety training, police traffic stops, crime scene investigations, evidence handling and evidence packaging. Additional areas of instruction will include: emergency responses, arrest procedures, photographing and fingerprinting a suspect. Fingerprint training encompasses recognition, analysis and matching of fingerprints. The laws of New York State and the Federal government will be prominent throughout the course of study. Professional certificates available are: NYS Security Guard certification; First Aid/Combat Lifesaver; CPR/AED certification; NYS Mandated Reporter, NARCAN/Drug Overdose Prevention and Defensive Tactics/Self Defense certification.

Objectives

1. Treat every student fairly and foster respect and dignity in the classroom.
2. Introduce you to all sectors and areas of security and law; allowing you to make a realistic and educated career choice.
3. Give you theoretical and practical skills in law and security to make you competitive as an applicant or new recruit for a law enforcement agency.
4. Improve physical and mental readiness to become a successful security or law enforcement officer.
5. Develop and expand your critical thinking and problem solving skills; preparing you for the work force or college.

Units of Study

Leadership, Values and Ethics in Law Enforcement, US Government, Branches of Government, Definition of Crime, Criminology, Supporting Victims, Police and Society, Courts and Case Process, Investigations, Trials and Court Personnel, Sentencing, Prison/Jail, Capital Punishment and Juvenile Justice.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Criminal Justice/Police Science – 43.0107

Enforcement

As a Law Enforcement cadet you will be meeting community leaders and conducting real world police training with the possibility of earning college credit. The purpose of this course is to prepare you for a career in security, law enforcement and/or the military which requires you to be mentally, physically, morally strong and dedicated.

College Articulation Agreements

Bryant and Stratton College
Erie Community College
Medaille College
Niagara County Community College

Available Certifications

NYS Security Guard
NYS Mandated Reporter for Child Abuse & Neglect
CPR/AED
First Aid/Combat LifeSaver
Hazardous Material Awareness
Introduction to the FEMA Incident Command System - ICS 100
Introduction to the FEMA National Incident Management System - ICS 700
Empower the Girls or Strategies of Safety



Possible Career Paths

- With a 2 year CTE program: Computer Support Specialist, increased demand 10%*
- Associate's Degree: Web Developers, increased demand 13%*
- Bachelor's Degree: Software Developer, increased demand 21%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

**Niagara Career and
Technical Education Center
NCTEC**
3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teacher

Michelle LeFauve
mlefauve@onboces.org

Web and Game Development

The Web and Game Development program is geared toward students interested in exploring computer programming, web technologies, and the creativity and technology of game creation. Students in this program will develop skills in coding, interactive design, game theory and development, and mobile game app creation using industry-standard programming languages and development tools. The program consists of one year of Web Development and one year of Game Development. Potential careers may include: web developer, interface designer, computer programmer, systems analyst, software engineer, database specialist, game programmer, mobile app developer, and other computer science careers.

Objectives

1. Gain experience with interface design, form creation and processing, and web coding.
2. Evaluate existing web sites.
3. Learn programming syntax and create their own web sites using HTML5, CSS3, and JavaScript.
4. Learn all the foundational skills of web development, including navigation, links, images, graphics, styling, and responsive web design.
5. Develop skills with the latest industry-standard design software.

Units of Study

Game creation (digital, board, and escape room), virtual reality development, game theory, programming logic, website functionality, interface design, color theory, typography, design and layout principles, interface design, logo and sprite creation, and preparation of images.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Game and Interactive Media Design – 50.0411



Students will learn industry standard software and programming languages hands-on by creating their own websites and games. The Web & Game Development program gives students a jumpstart on college by building a foundational understanding of programming logic and design principles. It also helps them to develop critical thinking skills and an eye for detail. Skills learned in this class can be applied to a myriad of careers.



College Articulation Agreements

Niagara County Community College

Software Skills

Adobe Photoshop
GameMaker
Unity
Visual Studio

Coding Language Skills

HTML
CSS
JavaScript
C#

Precision Certificates

Digital Media
Computer Programming
C#
Computer Technology

Possible Career Paths

- With a 2 year CTE program: Welders, Cutters, Solderers, and Brazers, increased demand 3%*
- Associate's Degree: Commercial Welding Diver, increased demand 9.5%*
- Bachelor's Degree: Mechanical Engineers, increased demand 4%*

**Projected national growth for 2018-2028, US Bureau of Labor Statistics*

Contact Information

Orleans Career and Technical Education Center OCTEC

4232 Shelby Basin Rd.
Medina, NY 14103

Teachers

Ron Jackson
rjackson@onboces.org

Adam Zerby
azerby@onboces.org

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teachers

Shane Bartella
sbartella@onboces.org

Eric Farrell
efarrell@onboces.org

Welding

The welding program is a two-year program for juniors and seniors. This program is designed to develop skills in all areas of welding and metal fabrication, but most specifically those areas where there is the greatest employment potential. This two-year program will ensure good working skills in welding. Approximately one-quarter of the course is devoted to metal fabrication methods and production of welded items.

Objectives

1. Learn safe and sound procedures.
2. Develop and acquire skills and concepts.
3. Select and utilize a wide variety of measuring and blueprint reading.
4. Understand the usage of metallurgy and the science of metal.
5. Assist in developing acceptable work habits and attitudes.
6. Develop job-seeking skills necessary to succeed in the world of work.

Units of Study

First Year: Shop Safety, Oxy-Acetylene Welding, Cutting and Brazing, Basic Arc Welding, Measurement and Basic Blueprint Reading, Basic Welding Inspection, Discontinuities/Defects, Hand Tools, Set Up Operations, Basic MIG Welding with common Joints, Basic Metallurgy, CNC Plasma Cutting.

Second Year: Review of the First Year, Welding and Cutting Safety, Gas Tungsten Arc Welding (TIG) of Steel, Aluminum and Stainless Steel, Gas Metal Arc Welding (MIG) Steel and Aluminum, Welding Inspection (interpret weld discontinuities/defects), American Welding Society Entry-Level Certification, Basic Rigging, Flux-Core Welding, Advance Shielded Metal Arc Welding (Stick), Pipe Welding, Metal Fabrication, Metallurgy, Blueprint Reading, Plasma Arc Cutting.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.

NYS Approved Program Title & CIP Code

Welding Technology/Welder – 48.0508



The welding program is designed to develop skills in all areas of welding and metal fabrication, but most specifically those areas where there is the greatest employment potential.

College Articulation Agreements

- Alfred State School of Applied Technology
- Mohawk Valley Community College
- Niagara County Community College

Available Certifications

- AWS-GMAW, SMAW, FCAW, Pipe, Vertical Welding
- OSHA 10 Hour Course Certification



Emphasis will be on:

1. Attendance - Needed for successful employment.
2. Interpersonal Relations - The ability to work effectively with others.
3. Communication Skills - To develop effective communication skills.
4. Responsibility/Time Management - To work effectively in completing assigned tasks.
5. Workplace/Personal Safety - To protect oneself and others.
6. Personal Hygiene/Appearance - To dress appropriately in the workplace.

Contact Information

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teacher

Jeff Keller
jkeller@onboces.org

Vocational-Individually Paced Automotive Services

Students will learn fundamental skills and knowledge in the automotive industry. Students who successfully complete this course may be eligible to meet the requirements set forth by the NYS Department of Education for the Career Development and Occupational Studies (CDOS) credential. Required course work and work based learning hours can be tracked and documented for these students. Students that start in this course and develop both the employability and fundamental automotive skills may be prepared to move into two-year CTE programs.

Objectives

1. Auto Service – Developing the skills needed to service an automobile and exposure to jobs available in the industry.
2. Automotive Maintenance – The occupational skills needed to maintain and repair everyday needs of the automobile as performed by service centers.
3. Automotive Repair – Developing basic mechanical skills used by automotive mechanics in a working service shop.

Units of Study

Safety Procedures, Customer Relations, Vehicle Detailing, Vehicle Fluids, Tire Service, Brake Service, Vehicle Repair, Vehicle Estimation, Oxy/Acetylene Torches, Belts and Hoses, NYS Inspection, Steering and Suspension, Tools and Equipment, Under Hood Checks, Lubrication, Oil and Filter Changes, Battery Service, Cooling System Service.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.



Vocational-Individually Paced (VIP) Career & Technical courses are designed to meet the needs of students who require a smaller learning environment and a curriculum pace that meets the needs of the students in grades 10-12. Courses will provide introductory skills in various career and technical areas in preparation for future life and employment skills.

Available Certifications

S/P2 Safety & Pollution Prevention Training



Emphasis will be on:

1. Attendance - Needed for successful employment.
2. Interpersonal Relations - The ability to work effectively with others.
3. Communication Skills - To develop effective communication skills.
4. Responsibility/Time Management - To work effectively in completing assigned tasks.
5. Workplace/Personal Safety - To protect oneself and others.
6. Personal Hygiene/Appearance - To dress appropriately in the workplace.

Contact Information

Niagara Career and Technical Education Center NCTEC

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teacher

Gary Benker
gbenker@onboces.org

Vocational-Individually Paced Buildings and Grounds

Students will learn fundamental skills and knowledge in the building industry. Students who successfully complete this course may be eligible to meet the requirements set forth by the NYS Department of Education for the Career Development and Occupational Studies (CDOS) credential. Required course work and work based learning hours can be tracked and documented for these students. Students that start in this course and develop both the employability and fundamental building trade skills may be prepared to move into two-year CTE programs.

Objectives

1. Overview of the building trades including carpentry, layout, measurement, maintenance repair, cleaning and landscaping.
2. Employability skills.
3. Exploration of different careers in the building industry.

Units of Study

Grounds Maintenance Equipment and Procedures, Landscaping, Fundamental House and Building Maintenance, Hand and Power Tools, Carpentry, Employability Skills, Safety, Measuring Instruments, Blueprint Reading.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.



Vocational-Individually Paced (VIP) Career & Technical courses are designed to meet the needs of students who require a smaller learning environment and a curriculum pace that meets the needs of the students in grades 10-12. Courses will provide introductory skills in various career and technical areas in preparation for future life and employment skills.



Emphasis will be on:

1. Attendance - Needed for successful employment.
2. Interpersonal Relations - The ability to work effectively with others.
3. Communication Skills - To develop effective communication skills.
4. Responsibility/Time Management - To work effectively in completing assigned tasks.
5. Workplace/Personal Safety - To protect oneself and others.
6. Personal Hygiene/Appearance - To dress appropriately in the workplace.

Contact Information

Orleans Career and Technical Education Center OCTEC - Afternoon

4232 Shelby Basin Rd.
Medina, NY 14103

Niagara Career and Technical Education Center NCTEC - Morning

3181 Saunders Settlement Rd.
Sanborn, NY 14132

Teacher

Jessica Kronenberg
jkronenberg@onboces.org

Vocational-Individually Paced Food Service

Students will learn fundamental skills and knowledge in the food preparation industry. Students who successfully complete this course may be eligible to meet the requirements set forth by the NYS Department of Education for the Career Development and Occupational Studies (CDOS) credential. Required course work and work based learning hours can be tracked and documented for these students. Students that start in this course and develop both the employability and fundamental culinary skills may be prepared to move into two-year CTE programs.

Objectives

1. Overview of food preparation.
2. Employability skills.
3. Exploration with global and gourmet foods.
4. Exploration in food science and food service operations.

Units of Study

Food Service Equipment, Food Safety and Sanitation, Standard Recipes, Soups, Salads, Sandwiches, Vegetables, Fruits, Breakfast, Cooking Techniques, Knife Skills, Employability Skills, Measuring Instruments and Math, Science and ELA.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.



Vocational-Individually Paced (VIP) Career & Technical courses are designed to meet the needs of students who require a smaller learning environment and a curriculum pace that meets the needs of the students in grades 10-12. Courses will provide introductory skills in various career and technical areas in preparation for future life and employment skills.



Emphasis will be on:

1. Attendance – Needed for successful employment.
2. Interpersonal Relations – The ability to work effectively with others.
3. Communication Skills – To develop effective communication skills.
4. Responsibility/Time Management – To work effectively in completing assigned tasks.
5. Workplace/Personal Safety – To protect oneself and others.
6. Personal Hygiene/Appearance – To dress appropriately in the workplace.

Contact Information

Orleans Career and Technical Education Center OCTEC

4232 Shelby Basin Rd.
Medina, NY 14103

Teacher

Jay Kaplewicz
jkaplewicz@onboces.org

Vocational-Individually Paced Horticulture, Landscaping and Small Engines

Students will learn fundamental skills and knowledge in the landscaping industry. Students who successfully complete this course may be eligible to meet the requirements set forth by the NYS Department of Education for the Career Development and Occupational Studies (CDOS) credential. Required course work and work based learning hours can be tracked and documented for these students. Students that start in this course and develop both the employability and fundamental landscaping skills may be prepared to move into two-year CTE programs.

Objectives

1. Overview of the landscaping trades including landscaping, plant science, small engines, and lawn care and maintenance.
2. Employability skills.
3. Exploration of different careers in the landscaping industries.

Units of Study

General Shop Safety, Plant Science, Soil Science, Landscape Design, Hardscape Design, Turf-Grass Management, Fall Maintenance, Bill of Materials and Project Planning, Landscape Design Projects, Spring Gardening, Spring Landscape Maintenance, Lawn Care and Maintenance, Landscape Design Installation Methods, Small Engine Safety and Maintenance, Arboriculture, Greenhouse Management and Small Engine Repair.

How to Enroll

Orleans/Niagara BOCES partners with local school districts to provide exciting hands-on career and technical training during a normal school day. To learn more, speak with your high school counselor.



Vocational-Individually Paced (VIP) Career & Technical courses are designed to meet the needs of students who require a smaller learning environment and a curriculum pace that meets the needs of the students in grades 10-12. Courses will provide introductory skills in various career and technical areas in preparation for future life and employment skills.



Orleans/Niagara BOCES Non-Discrimination Statement

The Orleans/Niagara Board of Cooperative Educational Services (BOCES) does not discriminate against any employee, student, applicant for employment or candidate for enrollment on the basis of gender, race, color, religion or creed, age, national origin, marital status, disability, sexual orientation or any other classification protected by law (including, with respect to employees and applicants for employment, genetic predisposition or carrier status), unless based upon a bona fide occupational qualification or otherwise provided for by the law. Any person wishing to obtain information about BOCES procedures for grieving alleged civil rights violations may obtain information by contacting Wayne Van Vleet, Director of Labor Relations/Civil Rights Compliance Officer, 4232 Shelby Basin Road, Medina, New York 14103, telephone number (716) 731-6800, extension 2206.

Frequently Asked Questions

Q: Who is eligible to attend a career and technical education program?

A: Minimum requirement for secondary students to enter a secondary day program include enrollment in a component district school and completion of 10th grade. Exceptions to the minimum criteria may be permitted through special arrangements.

Q: I would like to enroll in one of your career and technical education programs. What do I do?

A: To enroll in a career and technical education program high school students can talk to their school counselor. For specific program content students can contact our principals and they will be able to talk over the process with you. You can contact Orleans Center Principal, Mrs. Nicole Goyette (ngoyette@onboces.org) at 716-731-6800, extension: 2230 or Niagara Center Principal Mr. Michael Mann (mmann@onboces.org) at 716-731-6800, extension: 4442.

Q: How are your programs different from traditional high school?

A: Hands-on learning is a hallmark of the career and technical school experience. While academics are part of the program, and students learn via traditional lecture, reading and writing projects, the majority of their time is spent applying these skills in practical applications in their career field of study.

Q: How long are the programs?

A: Most career and technical school students attend for a half school day, approximately two and a half hours.

Q: What is a Career and Technical Endorsement?

A: Students enrolled in a school district or BOCES approved career and technical education (CTE) program who successfully complete all requirements earn a technical endorsement to be affixed to their high school diploma.

Student Requirements:

- Completion of a minimum of 22 units of credit, as required for graduation.
- Passing grades on 5 required Regents examinations or approved alternatives.
- Have earned a completion certificate.
- Successful completion of a 2-part technical assessment (written & practical).
- Achieved a 70% or better average on student portfolios.

Q: Will I receive Academic Credits for completing a program?

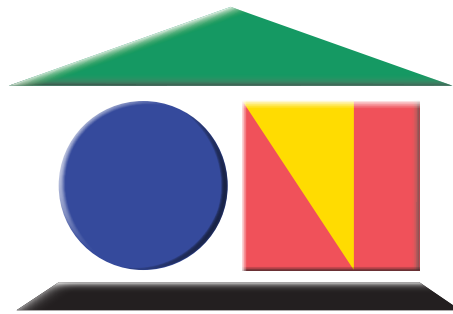
A: You can only receive Academic Credits if you complete two years of the career and technical education program. Also there are no academic credits for our VIP Programs and a "New Vision" program. Allied Health is a "New Vision" program and offers college credits.

Q: Are there any costs involved in attending the programs?

A: Tuition, textbooks, and transportation are covered by your home school district. Some programs require the purchase of uniforms, work boots, safety glasses, or personal tools that are paid for by the student.

Notes

Notes



ORLEANS/NIAGARA
Board of Cooperative Educational Services

Explore, Learn, Succeed

**Orleans and Niagara Career
and Technical Education Centers**