# OACES CTE



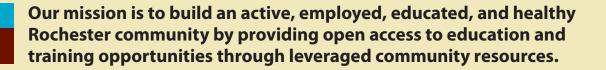




# CAREER & TECHNICAL EDUCATION TRAINING PROGRAMS







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# WHAT IS CAREER & TECHNICAL

# **EDUCATION?**



OACES students come from all kinds of backgrounds and life experiences Some enroll to fulfill personal goals, some want to improve their math and literacy skills, some are here to transition to a better life, some want to

become a better family provider.

No matter what your dreams might be, OACES is the first step in making them come true. Career & Technical Education (CTE) prepares students of all ages for the workforce by offering classes where they can learn skills they need to enter in-demand career fields. Unlike traditional education settings, CTE classes take place in environments that reflect actual working situations.

CTE has a long and rich history in the United States. Today's CTE programs are found throughout the country and encompass a variety of challenging fields. CTE programs are constantly evolving due to the changing global economy, and they strive to bridge the skills gap that exists between workers and employers in today's challenging economic times.

OACES CTE students can expect to be taught employable skills from job related skills to workplace ethics. Upon class completion, students have opportunities for post-secondary education and to earn industry recognized and stackable credentials that can result in employment and career advancement.

CTE programs currently include in-demand careers such as:

- Automotive Technologies
- Culinary
- Electrical

All CTE programs have an industry specific advisory board consisting of local employers that assist in providing up-to-date industry information and developing CTE training curriculums. Advisory boards serve as a direct link for students to the workforce and ensure that CTE training is aligned with current industry workforce demands.

# **HOW TO APPLY**

To enroll, visit our information office Monday through Friday at the OACES Welcome Center between 9:00 a.m.-3:00 p.m., located at 30 Hart Street, Rochester, NY.

#### **APPLY ONLINE**

Visit **oaces.net/enroll-now/** to complete an application to attend. An OACES staff member will contact you after you complete the enrollment form.

#### OR

Call (585)IMPROVE (585-467-7683) to speak with an intake counselor.

Financial aid will be determined at your intake date. OACES follows the Rochester City School District calendar.



#### **REFUND POLICY**

Class Cancelation: If OACES cancels a class cohort for any reason and a student has paid tuition, 100% of the tuition paid will be refunded within 45 days of the scheduled class start date.

Tuition Refund: If a student chooses to withdraw or otherwise has their enrollment terminated, they are required to complete the Withdrawal Form including all signatures. The student will submit the form to the Registrar. The date of Withdrawal is based on the Last Date of Attendance (LDA) to class as recorded in OACES official attendance records. The refund will be based on the following chart:

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# OACES AUTOMOTIVE TECHNOLOGIES PROGRAM

The Automotive Technologies Program is designed to prepare students with the knowledge and skills needed to service, troubleshoot and repair basic automotive systems. Hands-on shop time allows students to disassemble, repair, reassemble, rebuild and test auto engines, brakes and suspension systems.

Course work includes the fuel systems, electrical, transmission, trans-axel and belt/pulley/chain drive systems. Instruction also covers safety practices, wiring diagrams, mechanical schematics and the use of technical manuals.

**Training Duration:** 624 hours (3-6 months)

**Schedule:** 9:00 a.m. - 3:30 p.m., 5 days a week schedule, Monday–Friday

**Admission/Academic Requirements:** Class open to all students. No technology experience required.

**Performance Expectations:** Exemplary attendance, ability to work well with others in a group setting, ability to follow directions and conform to safety rules

**Costs**: Tuition for Automotive Technologies Program is \$5,000. Financial Assistance for Career Training classes will be assessed on an individual basis at Intake.

#### **Career Opportunities**

- According to the Bureau of Labor Statistics, the average annual salary for Automotive Service Technicians and Mechanics is \$46,760 in 2020.
- Employment opportunities are available in the following areas: automotive service, oil changes, tire service, small engine service and repair, equipment service and repair and motorcycle/recreational vehicle service and repair.

## **Program of Study & Technical Competencies**

#### **LEVEL 1**

#### **Orientation & Foundational Skills**

- Demonstrate the knowledge of the role that safety plays in equipment and auto engine repair
- Demonstrate the use and care of appropriate personal protective equipment
- Add, subtract, multiply and divide numbers with and without a calculator
- Demonstrate workplace ethics
- Identify various careers related to equipment and auto engine repair and the expectations for each
- Know and interpret MSDS sheets
- Understand fires and extinguishing methods
- Maintain OACES minimum attendance standards
- Shop safety

#### **Basic Work Skills**

- Understand and use terms connected with automotive technologies
- Identify and use measuring and calibrating tools
- Identify the basic hand tools used in automotive technologies
- · Demonstrate the safe use of industry related hand tools
- · Identify and use industry related power tools
- · Identify and use common fasteners

#### **Technical Skills**

- Understand and use parts management, inventory control and service orders
- Recognize and understand various engine designs
- Recognize and analyze components and operation of 4-stroke engines
- Recognize and use various parts of cooling systems
- Identify and use various parts of the fuel and lubrication system
- Identify and use basic parts of the governor system
- Identify, test and replace various parts of the electrical system
- Identify, test and replace various parts of the ignition system
- Complete oil and tire changes.

#### **LEVEL 2**

#### **4-Stroke Engines**

- Define 4-stroke engine terminologies
- Know and use basic engine principals of operations of a 4-stroke engine
- Identify 4-stroke engine parts
- Diagnose 4-stroke engine problems
- Disassemble a 4-stroke engine
- Inspect components to verify that the correct problem has

#### been identified

- Repair/service failed components identified during the inspection
- Reassemble a 4-stroke engine
- Test a 4-stroke engine

#### **Basic Welding Competencies**

- Identify and use basic welding tools and safety equipment
- Identify and use various types of welding simulators
- · Identify and use MIG, TIG and Stick welders

#### **Disc and Drum Braking System**

The training includes the following components:

- Handbrake assembly
- · Diagonally split hydraulic circuit
- Master cylinder
- Brake fluid reservoir
- Brake pedal and light
- Front hubs, discs and calipers
- Rear hubs and drums

#### 4, 6 and 8 Cylinder Gasoline Engine Training

The training includes the following:

- The position and mounting of all engine components
- The operation of crankshaft and pistons
- The operation of inlet and exhaust valves
- The timing relationships between engine components

#### **Steering and Suspension System Training**

The training offers the following:

- Inspect steering shaft universal joint, flexible coupling, collapsible column, lock cylinder mechanism, and steering wheel.
- Disassemble, inspect, and reassemble rack and pinion steering gear.
- Inspect power steering fluid levels and condition.
- Diagnose power steering fluid leakage.
- Remove, inspect, and replace power steering pump, mounts, seals, pump belt, pump pulley, and pump belt.
- Remove, inspect, and install coil springs and spring insulators.

#### **Certifications/Instructional Outcomes**

- Lincoln Welding Safety
- Basic Welding Competencies
- Automotive Technologies Level I
- · Automotive Technologies Level II



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# **OACES**CULINARY PROGRAM

The OACES Culinary Program provides students with an introductory experience to the food service industry in addition to daily operation of the OACES cafe.

The Culinary Program focuses on quality of preparation and presentation in both small and large quantity cooking. Both theory and hands-on experience are included in areas such as: menu planning, methods of cookery, food control, sanitation and food costing. Advanced instruction includes basic managerial and supervisory techniques.

**Training Duration:** 624 hours (3-6 months)

**Schedule:** 9:00 a.m. - 3:30 p.m., 5 days a week schedule, Monday–Friday

**Admission/Academic Requirements:** Class open to all students. No technology experience required.

**Performance Expectations:** Exemplary attendance, be able to lift 50 lbs. No food allergies that can result in immediate hospitalization.

**Costs:** Tuition for Culinary Program is \$5,000. Financial Assistance for Career Training classes will be assessed on an individual basis at Intake.

## **Career Opportunities**

- According to the Bureau of Labor Statistics, the average annual salary for Chefs and Head Cooks was \$58,740 in 2020.
- The restaurant industry is the country's largest employer after government with over 12.5 million jobs.
- Post-secondary education includes clinical dietetics, culinary arts, food service administration, hospitality services, hotel management and pastry arts.



## **Program of Study & Technical Competencies**

#### **Foundational Skills**

- · Identify safety hazards in the kitchen
- Complete ServSafe Food Handler's Certification
- Understand/demonstrate various methods and units of measure for measuring ingredients
- Identify common kitchen tools used to measure
- Maintain OACES minimum attendance standards
- Participate in operation of the Hart Street Café
- · Food hander's cart

#### **Nutrition & Menu Basics**

- Identify the sources of major nutrients, i.e. carbohydrates, fats, proteins and vitamins
- Identify common food allergies and appropriate substitutions
- · Describe the function and importance of the menu
- Identify various types of menus

#### **Tools & Equipment**

- Identify the basic tools and equipment used in the kitchen
- Demonstrate the proper use, cleaning, sanitizing and storage of common kitchen tools and equipment
- Identify common knives used in the kitchen and their parts
- · Demonstrate safe use of knives

#### **Recipe Basics & Cooking Principles**

- Identify the major parts of a recipe
- Demonstrate the ability to read and interpret a recipe before preparation begins
- Describe moist heat and dry heat cooking methods and other applications that use these methods, i.e. blanching, deglazing, reducing, etc.
- · Describe how to create different flavors in foods

through cooking techniques and combination of ingredients

#### **Food Preparation & Production**

- Identify techniques and demonstrate ability to prepare breakfast foods
- Identify techniques and demonstrate ability to prepare salads, dressings and sandwiches
- Identify techniques and demonstrate ability to prepare stocks, soups and sauces
- Identify techniques and demonstrate ability to prepare various starches
- Identify techniques and demonstrate ability to prepare beef, pork, poultry and seafood
- Identify methods and demonstrate ability to prepare various pastry items

#### **Food Handler Skills**

- Complete ServSafe chapter reviews, study questions and quizzes for the following modules:
  - Food Safety is Important
  - Good Personal Hygiene
  - Controlling Time and Temperature
  - Preventing Cross-Contamination
  - Cleaning and Sanitizing
  - Job Specific Guidelines

#### **Certifications/Instructional Outcomes**

- ServSafe Food Handler
- ROUXBE Online cooking school
- American Red Cross Adult & Infant CPR/First Aid, AED Machine
- · Culinary Level I
- · Culinary level II



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# **OACES**ELECTRICAL PROGRAM

The OACES Electrical Program will provide students the skills necessary to enter the electrical industry. Topics covered include residential and commercial wiring, related math, blueprint reading, wiring schematic's, raceway installation, trouble-shooting, fire alarm, security systems, low voltage systems, 10 and 30 systems, and construction safety. Curriculum consists of 20% lecture and 80% is hands-on performance based. Students will learn electrical theory through hands-on practical performance projects and lectures/lessons. Upon completion, the student will be prepared for direct entry into the work place or post-secondary education.

Training Duration: 624 hours (3-6 months)

Schedule: 9:00 a.m. - 3:30 p.m., 5 days a week schedule, Monday–Friday

**Admission/Academic Requirements:** Class open to all students. No technology experience required.

**Performance Expectations:** Must maintain OACES minimum attendance requirements, motivation to learn, ability to work with others and conform to rules, directions, and safety procedures.

**Costs:** Tuition for Electrical Program is \$5,000. Financial Assistance for Career Training classes will be assessed on an individual basis at Intake.

#### **Career Opportunities**

- According to the Bureau of Labor Statistics, the average annual salary of electricians was \$61,550 in 2020.
- Some career opportunities include: residential electrician, commercial electrician, power-line installer, voice and data installer, building/electrical inspector, maintenance worker, security and fire alarm installer, renewable energy installer and electrical product inventory control manager.



# **Program of Study & Technical Competencies**

#### **Electrical Orientation & Safety**

- Demonstrate proficiency in electrical and construction safety
- Identify various career paths in the electrical industry and the expectations for each
- Explain the purpose of a lock-out/tag-out/block-out program
- · Be familiar with electrical industry vocabulary
- Maintain OACES minimum attendance standards
- Complete 10-hour safety course

#### **Hand & Power Tools**

- Identify various hand and power tools used in the electrical industry
- Demonstrate the safe use of various hand and power tools
- Recognize worn or damaged tools for replacement or repair
- Demonstrate mastery reading rulers and tape measures

#### **Electrical Theory**

- Recognize the difference between AC and DC circuits
- Use basic math as it pertains to the electrical industry
- Recognize the difference between series and parallel circuits
- Apply Ohm's Law to resistance, voltage and current
- Recognize where to find code articles using the National Electrical Code (NEC)
- Explain the operation of transformers and power transmission
- Recognize and use various electrical meters and test equipment
- Identify how to troubleshoot basic electrical circuits

#### **Wiring Systems**

- Understand various conductors and cables
- Make safe conductor splices and connections
- · Determine the correct conductor size based on circuit load
- Recognize and explain the basics of conduit bending
- Recognize and install various raceway systems
- Identify and install various fittings, fasteners and other materials
- · Recognize and install receptacles and switches
- · Understand cable TV, phone and computer network wiring

#### **Overcurrent Protection & Grounding**

- · Explain the causes of overcurrent
- Identify and explain electrical overcurrent protective devices (OCPDs)
- Explain the operation of a ground-fault circuit interrupter (GFCI) and arc-fault circuit interrupter (AFCI) and how they are used

#### **Electrical Prints & Specifications**

- Identify the types of prints that an electrician may read
- Recognize and use standard parts of a drawing
- · Recognize and use standard electrical symbols
- Develop one-line and wiring diagram drawings

#### **The Service Entrance**

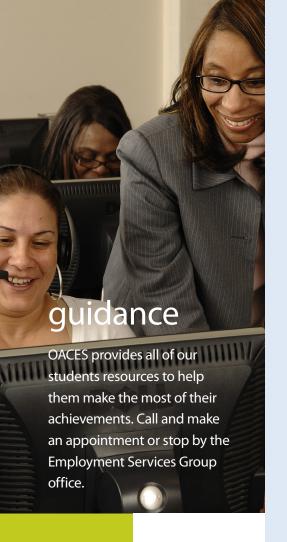
- Calculate the number of branch circuits for a residential dwelling
- Identify proper conductors and components of the service entrance
- · Identify different circuit breakers and their application
- Install an electrical service per NEC
- Understand power distribution from utility to a residential dwelling
- · Be familiar with grounding and bonding requirements

#### **Green Technology**

• Identify and use various alternative energy systems

#### **Certifications/Instructional Outcomes**

- · Basic Electrical Soldering
- Electrical Level I (Residential Wiring)
- Electrical Level II (Commercial Wiring)
- Electrical Service Installation
- 10-hour Occupational Safety & Health Administration (OSHA)
   "Construction Industry" Completion Card
- Amatrol Green Energy



# OACES EMPLOYMENT SERVICES GROUP

# Guiding You Through the Work Search Process

The Employment Services Group (ESG) at OACES guides students through the job search process. This office provides not only career direction for students, but offers support services for employers in identifying and placing qualified candidates. ESG works closely with OACES programs such as Community & Adults in Rochester Employment and Education Resource System (C.A.R.E.E.R.S.), Career & Technical Education (CTE) and the Apprenticeship program to supply the Rochester community with educated and qualified employees.

#### **Transitional and Case Management Services**

OACES provides transitional and case management services for students at all stages to make their evolution from student to employee a success. Activities focus primarily on one-on-one services to assist in removing common barriers experienced when looking for employment.

#### **Providing Resources for Students**

ESG provides training and assistance in resume writing, preparing job applications, interviewing techniques, dressing for success and navigating on-line job searches among other valuable services. ESG services do not end when a participant finds employment. OACES continues to assist students through Facebook and monthly email newsletters that provide information about jobs, daily living, personal finance, healthy habits and much more.

## **Providing Resources for Employers**

ESG offers multiple services for employers from extensive resume banks to workplace trainings. ESG can prescreen applicants and arrange on-site timely and productive interviews to find just the right candidate. In addition, ESG is knowledgeable about employer tax incentives and grant opportunities.

# **COMMUNITY PARTNERS & EMPLOYERS**

We work with community organizations and schools to help our students obtain resources for better living, access to healthcare, housing and additional education. We also help our students secure employment through partnerships with area businesses that employ our graduates or offer internships and apprentice training. Here is a partial list of our current partners:

**Aaron Manor** 

ACCES-VR: Adult Career and Continuing

**Education Services-**Vocational Rehabilitation

Action for a Better Community

Alternatives for Battered Woman

American Packaging Company

Associates for Training and Development

Association for the Blind and Visually Impaired (ABVI)

Boldo's Armory

Bryant & Stratton College

**Career Start** 

Casco Security Systems, Inc.

Center for Employment Opportunities

Creating Assets, Savings and Hope (CASH)

Catholic Family Center

Charles Settlement House

Citizens Bank

City of Rochester

City of Rochester Police and Citizens (PAC)

C.M. Armitage Electrical Contracting

Community Place

Compass Group at SJFC

Consumer Credit Counseling

Services of Rochester Country Inn & Suites

Days Inn

**Dunn Tire** 

East Avenue Inn

Food Link

Fingerlakes Health Center

Greece Central School District

Greater Rochester Chamber of Commerce

H&HRealty **Head Start** 

Henderson Ford

Hickey Freeman

Holiday Inn

Ibero American Action League

Iroquois Job Corps Center

Jewish Senior Life

Job Corps

Keidel's Janitorial Service, Inc.

Kev Bank

Kovalsky Carr Electrical Supply Co., Inc.

Larry Masei Electric

Literacy Volunteers of

Rochester

Lodge at Woodcliff

M&T Bank

Mercy Outreach Center

Monroe #1 BOCES

Monroe 2-Orleans BOCES

Monroe Community College

Monroe County DHS

Monroe County Health

Department

Monroe County Jail

National Center for Families

Learning (NCFL)

Native American Cultural Center

Nielsen House

NYS Commission for the Blind

NYS Department of Labor

New York Electrical Inspection Agency

NYS Office of Temporary and Disability Assistance (OTDA)

Palmer Food Services

PathStone Corporation

RADEC Corporation

R-Community Bikes

Red Cross

Regional Adult Education

Network (RAEN)

Residence Inn

Rochester Automobile Dealers

Association

Rochester Business Alliance

Rochester City School District Office of Parent Engagement

**Rochester Convention Center** 

**Rochester Educational Opportunity Center** 

Rochester Fire Department

Rochester Housing Authority

**Rochester Housing Council** 

Rochester Joint Apprenticeship

and Training Committee

**Rochester Police Department** 

**Rochester Rehabilitation Center** 

**Rochester Works!** 

Rush-Henrietta Central School District

Saints Place

Salvation Army

SEIU / Strong Hospital

South Plymouth Ave. Business

Association

St. Ann's Home

St. Joseph's Neighborhood

**Program** 

Strathallen Hotel

Strong Memorial Hospital

UCLM - United Christian

Leadership Ministry of

Western NY

Universal Pre-K

University of Rochester

**Urban League** 

**US Army** 

**Veterans Outreach Center** 

Volunteers of America (VOA)

Walmart

Wegmans

Wesley on East

Work Now

Workforce Investment Board

Xerox

YWCA Housing Program

211/Lifeline

Together, we can create an employed, educated, active, and healthy Rochester community.



