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## Automotive Technology

Brick Center	2 Year Program	Jay Houle
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Waretown Center	2 Year Program	Louis Gauvain

**T**he Automotive Technology program introduces the student to major concepts and theories of automotive maintenance, service, repair and electronic computer diagnosis on modern automobiles. This program is evaluated by the National Automotive Technicians Education Foundation (NATEF) and the instructors are certified by The National Institute for Automotive Service Excellence (ASE).

### Related Job Titles

Automotive Service Technician  
Automotive Mechanic  
Front-end Specialist  
Service Advisor

### Skills You Will Learn

*How to:*

- Service lube points and check fluid levels
- Service tires
- Maintain and service climate control systems
- Diagnose and repair charging, lighting, ignition, fuel delivery, electronic and starting systems
- Maintain, diagnose and repair braking, steering and suspension systems
- Perform a wheel alignment

### Worker Requirements

*You should prefer:*

- Working with machines and tools
- Working with your hands

*You should be able to:*

- Use hand and power tools
- Follow general safety procedures
- Read at a 12<sup>th</sup> grade level
- Speak clearly
- Perform basic mathematic calculations

### Career Ladder

Trainee mechanics can advance to mechanics, shop supervisors, service managers or repair service estimators.

### Continuing Education

University of Northwestern Ohio  
Brookdale Community College  
Ohio Technical College  
Lincoln Technical Institute  
University of Northwestern Ohio  
Mercer County College:  
Chrysler Apprentice Program  
Universal Technical Institute

**Tech Prep agreements are in place with several different colleges and technical institutes, providing students the opportunity to earn college credits or course exemptions.**

# Building Construction Technology

Brick Center

2 Year Program

Mark Muraczewski

**T**his program teaches the basic fundamentals of construction, as well as touching on more in depth topics such as blueprint reading, framing, concrete block construction, roofing, sheathing, siding, drywall applications, door and window installation, interior finishes, and much more. Students are also exposed to various local companies and industry professionals who are seeking skilled employees, as well as colleges and technical institutes for continuing education.

## Skills You Will Learn

- Estimate material requirements
- Prepare building sites
- Build and install foundation forms
- Install rough framing and roof components
- Install exterior and interior finishes
- Assemble and construct stairs
- Install climbing equipment and work platforms
- Safety regulations and requirements
- Computer use to aid designing and estimating

## Worker Requirements

*You should prefer:*

- Working with your hands
- Precision and detail work
- Seeing the results of your own work

*You should be able to:*

- Solve simple math problems quickly
- Read and interpret working drawings
- Use a computer for applications in the construction industry

## Related Job Titles

Contractor  
Construction Inspector  
Form Builder

## Career Ladder

Most start as apprentices or helpers and advance to journeymen with experience and training. With additional education, many move on to become supervisors or contractors.

## Continuing Education

Ocean County Vocational Technical School  
Ocean County College  
Pennsylvania College of Technology  
New England Institute of Technology  
Carpenter's Local 2018 Apprenticeship

## Child Care Professions

Brick Center

2 Year Program

Laura Morelli

**C**hildcare providers are responsible for the care, safety and nutritional needs of young children, focusing on age appropriate activities. They provide a safe, caring and supportive environment, where the child feels inspired to learn through play during structured and open-ended activities. Keeping young children healthy and safe is the most important aspect of the job. Children in our “Tiny Tech” Preschool are 3-5 years of age.

### Related Job Titles

Infant/toddler childcare provider  
Preschool childcare provider  
Pre-K childcare provider

### Skills You Will Learn

*How to:*

- Perform Board of Health food service and safety procedures
- Perform Board of Health cleaning procedures
- Perform Board of Health Universal Precaution procedures
- Follow DYFS day care licensing requirements
- NAEYC guidelines for developing age appropriate curriculum

### Worker Requirements

*You should be able to:*

- Follow safety procedures
- Effectively communicate
- Use child guidance techniques
- Have good time management skills
- Follow multi-step instructions
- Complete all tasks and assignments independently
- Follow professional dress code and workplace attitude

### Career Ladder

After completing their CDA, Child Care graduates are eligible for full-time employment in child care/day care centers. Graduates may also work towards a bachelor's/master's degree in education to become teachers/administrator.

### Continuing Education

Ocean County College  
CDA classes: Toddler CDA and/or  
Preschool CDA  
Child Development Associates Certificate

### Additional Information

National Association for the Education of  
Young Children (NAEYC)  
1834 Connecticut Ave., NW  
Washington, DC 20009  
800-424-2460  
[www.cdacouncil.org](http://www.cdacouncil.org)

**Tech Prep agreements are in place with  
Farleigh Dickinson University and  
Atlantic Cape Community College,  
enabling students to receive college  
credits upon successful completion of the  
course and challenge exam.**

# Collision Repair

Jackson Center

2 Year Program

Mike Lundin

**T**hese technicians repair cars and other vehicles that have body damage or are in need of reconditioning. They may repair the entire car or specialize in an area such as detailing, glass or custom paint. They straighten, remove rust and/or repaint the car.

## Related Job Titles

Auto Body Repairer	Shop Estimator
Truck Body Builder	Auto Painter
Glass Installer	Detailer

## Skills You Will Learn

*How to:*

- Apply personal work, tool and welding safety techniques
- Operate a power sander to remove rust from a car
- Fill and grind down metal surfaces
- Spray paint a car
- Replace a damaged bumper
- Use a hydraulic jack to straighten a unibody structure
- Use MIG, TIG, and oxy-acetylene welders
- Use body hammers and dollies

## Worker Requirements

*You should prefer:*

- Working with machines and tools
- Mechanical processes

*You should be able to:*

- Perform a variety of tasks which often change
- Work with a minimum amount of direct supervision
- Work with precise limits of accuracy

## Career Ladder

Most entrants start as helpers until they have enough experience to become automotive body repairers, shop supervisors, shop owners or auto damage appraisers.

## Continuing Education

Ocean County Vocational Technical School  
Brookdale Community College  
Denver Auto Diesel College  
Pennco Tech  
Ohio Technical College  
Lincoln College of Technology  
Universal Technical Institute  
University of Northwest Ohio

**A Tech Prep agreement is in place with Ohio Technical College, enabling students to receive advanced placement upon successful completion of the course and challenge exam.**

# Computer Science

Toms River Center

2 Year Program

Mike Clarke

**T**hose trained in computer science can specialize in a number of different areas (see “Related Job Titles” below). They can be programmers, software engineers or website designers. They may work individually or on a team, as a member, team leader or project manager. They may be involved with developing e-businesses or may specialize in web development.

## Related Job Titles

Software Development	Database Developer
Network Engineer	QA Engineer
Web Developer	E-business Architect
Project Manager	Systems Operator
Systems Analyst	Programmer/Analyst

## Career Ladder

Workers in these fields usually begin as assistant members of a technical staff, or as trainees. They can then advance to team leader or project management. Generally, they are expected to put in as much time as is necessary to complete a task.

## Skills You Will Learn

- Use a variety of applications software
- Object-oriented software design
- Program in a high level language
- Produce a production software package
- Advanced web site development
- Use graphics animation packages
- Install and use a relational database
- Write a procedure

## Worker Requirements

*You must:*

- Like to analyze problems and propose solutions
- Be detail oriented and self-disciplined
- Have the ability to compose/write explanations and instructions for your work
- Be able to express yourself clearly, both written and orally

## Continuing Education

An Associate or Bachelor Degree in Computer Science (with a concentration in one’s desired field) or the equivalent experience is necessary for most jobs. A Bachelor Degree is usually required for advancement.

Ocean County College  
Rutgers University  
New Jersey Institute of Technology  
The Richard Stockton College of NJ

**Tech Prep agreements are in place with Ocean County College and The Art Institute of Philadelphia, enabling students to receive college credits upon successful completion of the course.**

# Computer Service Repair

Toms River Center

1 Year Program  
(A.M. Class Only)

Keith Pobuta

**C**omputer repair technicians install, maintain and repair computer systems. This course is for students interested in pursuing a career in the computer service repair or computer networking field.

## Related Job Titles

Computer Repair Technician  
Network Assistant  
Computer Sales  
Computer Cabling Technician

## Skills You Will Learn

- Computer basics of hardware, software and operating systems
- Troubleshooting through a knowledge-based approach
- Installing/upgrading Windows
- Securing computers
- Wireless networks
- Wireless devices
- Robotics theory

## Worker Requirements

*You must:*

- Study new hardware and software that comes out on the market
- Attend manufacturers' training
- Be prepared to work until the job is completed

## Career Ladder

Workers in this field usually begin as assistant members of a technical staff, or as trainees. They can advance with experience and continued education.

## Continuing Education

A+ Certification  
Net+ Certification  
Ocean County Vocational Technical School  
Ocean County College  
Brookdale Community College  
DeVry University

## Additional Information

Students should have basic computer skills before entering this program.

# Cosmetology

Brick Center  
Jackson Center  
Toms River Center

2 Year Program  
2 Year Program  
2 Year Program

Regina Rosetto & Kelly Maloney  
Josephine Campisano  
Deb Gall

**T**he Cosmetology program teaches the skills and knowledge necessary to pass the New Jersey State Board of Cosmetology licensing exam.

## Related Job Titles

Cosmetologist	Hair Stylist
Beautician	Barber
Skin Care Technician	Nail Technician

## Skills You Will Learn

All tasks must be completed in compliance with the general rules and regulations of the State Board of Cosmetology and Hairstyling.

- Perform sterilization/sanitation procedures
- Shampoo and condition hair and scalp
- Cut, shape, set/style, color & lighten hair
- Perform permanent waving/chemical relaxing
- Perform manicures, pedicures and application of artificial nails
- Hair removal and waxing
- Apply makeup and perform facials
- Perform salon reception functions
- Care and styling of wigs, extension application
- Thermal pressing and curling

## Worker Requirements

*You should be able to:*

- Feel at ease with strangers
- Work well with people
- Make decisions based on professional judgment
- Perform a variety of duties
- Be flexible and patient
- Be creative
- Adapt color and style to a client's features

## Special Requirements

To obtain a NJ State Board License for Cosmetology and Hairstyling, students must be at least 17 years of age and a high school graduate, accrue 1000 hours of Cosmetology education, complete and pass the Cosmetology course, and successfully pass the theory and practical portion of the NJ State Board of Cosmetology Licensing Exam.

## Career Ladder

Students who attain a license, may seek employment in the field working in salons, barbershops, or spas, some may pursue further education for advancement, and some may go on to open up their own businesses, or even work with the NJ State Board of Cosmetology. In addition, some students may pursue a teaching certificate or educational license in order to become Cosmetology instructors.

## Continuing Education

Ocean County Vocational Technical School  
Ocean County College  
Paul Mitchell School  
Christine Valmy Beauty School

**A Tech Prep agreement is in place with Ocean County College, enabling students to receive college credits upon successful completion of the course.**

## Culinary Arts

Brick Center  
2 Year Rotation Program

Bakery Fundamentals- Jill Scott-Geraghty  
Baking- Dennis Melia  
Dining Room- Bruce VanSickle  
Culinary I- Roseann Del Nero  
Culinary II- Gary Lesniak

**T**he Culinary Arts program provides students with experience in the preparation, service and management tasks involved in the food service industry. Areas of concentration include safety, sanitation, food preparation, commercial baking, dining room service and management.

### Related Job Titles

Chef	Food & Beverage Manager
Pastry Chef	Short Order Cook
Host	Wait Staff/Bus Person

### Skills You Will Learn

- Prepare stocks, soups and sauces
- Prepare fruits and vegetables
- Prepare fish, seafood, meats, poultry, dairy and egg products
- Prepare starch and grain products
- Prepare salads and buffet foods
- Produce bakery goods, such as breads & pastries
- Plan, organize and implement work
- Service hand tools and kitchen and bake shop equipment
- Purchase, receive and store supplies and equipment
- Proper serving techniques
- Safety and sanitation
- Guest relations and management skills

### Worker Requirements

*You should prefer:*

- Working with machines and methods
- Seeing the physical results of your work

*You should be able to:*

- Work as part of a team
- Read recipes and food orders accurately
- Use hand and kitchen tools
- Plan and organize your work
- Work under pressure

### Career Ladder

Beginning cooks or bakers will have to work for several years before they can become head cooks, chefs, pastry chefs or bakers in a fine restaurant. Most cooks can find opportunities for advancement in the Culinary field by networking with professional organizations such as The American Culinary Federation (ATF). After several years cooks may decide to go into business as caterers or restaurant owners.

### Continuing Education

Ocean County Vocational Technical School  
Brookdale Community College  
Atlantic Cape Community College  
Culinary Institute of America  
Johnson and Wales University  
The Restaurant School at Walnut Hill College

**A Tech Prep agreement is in place with several colleges, enabling students to receive up to 12 college credits upon successful completion of the course and portfolio review/challenge exam.**

# Custom Woodworking and Design

Jackson Center

2 Year Program  
(P.M. Class Only)

Robert Gonsalves

**C**ustom woodworking students will learn the setup and operation of woodworking machinery and equipment, laminating, sanding, veneering, machining, assembly and finishing. The program is project focused and emphasis is placed on selecting proper materials, manufacturing parts to specification, assembling, and finishing individually designed projects. Students are able to design and construct their own projects with materials provided by the school.

## Related Job Titles

Custom Woodworker  
Cabinetmaker  
Construction Carpenter  
Form Builder  
Maintenance Carpenter

## Skills You Will Learn

- Read blueprints and shop drawings
- Select, setup and use hand and power tools
- Cabinet joint construction
- Layout, finishing and final assembly
- Millwork

## Worker Requirements

*You should prefer:*

- Working with things
- Precision and detail work
- Seeing the results of your work

*You should be able to:*

- Solve simple math problems quickly
- Read and interpret working drawings
- Use a computer for applications in the construction industry

## Career Ladder

Most woodworkers/cabinetmakers start as helpers or as an apprentice. With experience, they can become supervisors or open their own shop.

## Continuing Education

Ocean County Vocational Technical School  
Ocean County College  
New England Institute of Technology  
New England School of Architectural  
Woodworking

# Dental Assisting

*Health immunizations and uniform required*

Toms River Center

2 Year Program

Roxanne Beers

**T**his program teaches four-handed dentistry and lab skills, prevention techniques, operative treatment, and specialty areas. The course provides preparation for students interested in dental careers such as a Certified Dental Assistant, Registered Dental Assistant, dental hygienist, lab technician, x-ray technician, and dentist. A clinical experience in a dental office is a required part of the program.

## Related Job Titles

Dental Hygienist  
Dental Laboratory Technician  
Dental Receptionist

## Skills You Will Learn

- CPR
- Taking patient's medical history and vital signs
- Mixing dental materials
- Passing instruments and suctioning
- Pouring laboratory models
- Taking and developing dental x-rays
- Sterilization of instruments
- Performing instrument set-ups
- Showing patients how to brush/floss
- Dentrix software
- Skills and techniques used as a Registered Dental Assistant

## Worker Requirements

*You should prefer:*

- Activities involving direct contact with people
- Activities involving processes and machines

*You should be able to:*

- Use a keyboard for data entry
- Perceive detail in objects, pictures and charts
- Follow specific instructions
- Communicate well, put people at ease
- Display professional manner and appearance

## Special Requirements

Certain functions can only be performed by a registered dental assistant under the direct supervision of a licensed dentist.

## Career Ladder

Students may climb the health career ladder by passing challenging state and national board examinations.

The licensure options include:

- NJ State Dental Radiology License  
X-Ray License
- Dental Assisting National Board  
Certified Dental Assistant
- NJ State Dental Board Expanded  
Functions License

Some dental assistants go for additional college level education and become dental hygienists.

## Continuing Education

Ocean County Vocational Technical School  
Camden County College  
Middlesex County College  
Burlington County College  
University of Medicine and Dentistry of NJ

**Upon successful completion of this two-year program, students will have the opportunity to take a portion of the DANB CDA exam.**

## Design and Visual Communications

2 Year Rotation Program – Brick Center

Multimedia  
Photography  
Digital Reproduction

Jeremy Dusza  
Howard Polenberg  
Chris Ehrhardt

### Design and Visual Communication

Emphasizes preparation for both employment and continuing education at a post secondary institution. Students select from eleven ten-week courses consisting of conventional and digital skills required in various visual art and communication careers.

**Multimedia:** Emphasizes the creation of digital art for print, video and electronic media. This component of the program includes courses in: Digital Art and Design, Animation and Multimedia, Web Design and Video Production.

**Digital Reproduction:** Emphasizes the use of current technologies in both conventional printing and digital reproduction. This component of the program includes courses in: Design and Reproduction, Screen Printing, and Production Graphics.

**Photography:** Covers the techniques of traditional and digital photography highlighting skills required in advertising, portraiture, multimedia and fine art. Includes courses in: Digital Photography, Multimedia Photography, Film and Darkroom Photography, and Studio Lighting.

### Continuing Education Opportunities

Ocean County College  
Brookdale Community College  
The Art Institute of Philadelphia  
The Antonelli Institute  
Boston University- Center for Digital Arts  
Rochester Institute of Technology  
Clemson University  
School of Visual Arts  
Academy for Media Productions (AMP)

**A Tech Prep agreement is in place with several colleges, enabling qualified students to receive college credits upon successful completion of the course and portfolio review.**

## Diesel Engine Technology

*ASE certification is available to successful graduates*

Jackson Center

2 Year Program

Greg Cullen

**T**his program explores the fundamentals of modern automotive/diesel technology for automobiles and light trucks. Students explore technology found in most automobiles, sport utility vehicles, and light trucks including engine performance, electrical systems, driveline, brakes, steering, and suspensions. Students also focus on the responsibilities of a service consultant in the automobile and light truck industry.

### Related Job Titles

Automotive Technician  
Light Diesel Technician  
Basic Engine Performance  
Automobile Service Consultant

### Skills You Will Learn

*How to:*

- Handle tools and shop equipment
- Operate electronic test equipment
- Troubleshoot a vehicle's electrical system
- Disassemble, inspect and rebuild gas and diesel engines
- Complete in-vehicle repairs: brakes, engines, steering, suspensions, and driveline

### Worker Requirements

*You should prefer:*

- Working with things and objects
- Working with your hands

*You should be able to:*

- Read and understand service manuals
- Perform a variety of duties
- Solve problems using good judgment

### Career Ladder

Most entrants start as trainee mechanics. They can then advance to supervisors, service managers and service representatives or open their own shop.

### Continuing Education

Brookdale Community College  
Lincoln Technical Institute  
Ohio Technical College  
Universal Technical Institute  
Pennco Tech  
University of Northwestern Ohio

**ASE certification is available to successful graduates. Students can earn course exemptions from Lincoln Technical Institute and Ohio Technical College, as well as up to 12 credits from University of Northwestern Ohio.**

# Electrical Trades/Integrated Cabling Technology

Toms River Center  
Jackson Center

2 Year Program

Tom Pernal  
Tom Allen

**T**his course deals with residential and light commercial electrical wiring, as well as voice, data and video cabling. The fundamental theory and installation of circuits for power and lighting, test equipment, transformers, motors and various types of control devices for power, lighting and security are emphasized.

## Skills You Will Learn

- Proper use of tools and safe industry work practices
- Installation methods for various types of outlet and device boxes, cables, conduits and service equipment
- Load calculations for residential and small commercial service
- Basic introduction to the National Electrical Code
- Electrical theory
- Voice, data and video cabling skills
- Fiber optic theory

## Worker Requirements

*You should prefer:*

- Customer interaction
- Pride in workmanship
- Continuing education in the field

*You should be able to:*

- Think and problem solve on your own
- Apply your skills to the job at hand
- Differentiate colors
- Work in confined areas, like utility access holes
- Work indoors and outdoors year round
- Work at heights in excess of 15 to 20 feet

## Related Job Titles

Residential & Commercial Electrical Apprentice  
Video, Voice and Data Installation Technician  
Entry Level Fiber Optic Technician  
Fire Alarm, Security and/or Audio Systems Installer

## Career Ladder

Supervisory and management positions  
Union Apprenticeship  
Electrical Contractor License

## Continuing Education

OCVTS Evening Apprenticeship Program  
Two or Four-year Colleges  
Technical Schools  
Equipment/Manufacturers' Training

**Upon successful completion of this two-year program, students will receive advanced standing in the OCVTS Apprenticeship program.**

# Fashion Design/Merchandising

Brick Center

2 Year Program

Carey Brown

**T**he fashion industry employs a wide variety of people who are responsible for the creation and sale of clothing and accessories. It is one of the few industries you can participate in on many different levels, including designing, buying, selling, advertising and visual merchandising.

## Related Job Titles

Asst. Fashion Designer  
Visual Merchandising Assistant  
Assistant Buyer  
Asst. Technical Designer  
Sales Associate

## Skills You Will Learn

- Entry level skills in various fields of the fashion industry: design, sales and visual display
- Terminology and trends in the fashion world

## Worker Requirements

*You should prefer:*

- Activities concerning people and ideas
- Activities of an abstract and creative nature
- Seeing the results of your work

*You should be able to:*

- Reason logically and solve problems
- Make decisions based on personal judgment
- Interpret feelings, ideas or facts artistically
- Influence people's opinions, attitudes or judgments
- Perceive details in objects, pictures or charts and see differences in their shapes and measurements
- Coordinate and plan entire activities
- Work well under pressure
- Communicate thoughts and ideas to others
- Work well in a team

## Career Ladder

Working in the fashion industry can be exciting, creative and glamorous. Many of the jobs require hard work and long hours. Many people start out as sales associates or assistants and will work their way up to a managerial position. You must have the vision to recognize that talent and a commitment to being the best are important factors to becoming successful in the fashion industry.

## Continuing Education

Brookdale Community College  
Burlington County College  
The Art Institute of Philadelphia  
Johnson & Wales University  
Fashion Institute of Technology  
Berkeley College  
Fashion Institute of Design & Merchandising  
Laboratory Institute of Merchandising  
Philadelphia University  
Savannah College of Art & Design

**A Tech Prep agreement is in place with Brookdale Community College, enabling students to receive 3 college credits upon successful completion of the course and challenge exam.**

# Health & Fitness Technology

Toms River Center

2 Year Program

Helene Crist

**T**his course introduces students to the fields of fitness, personal training, nutrition and physical rehabilitative therapy through preparation as an entry level personal trainer, fitness technician or group fitness instructor.

## Related Job Titles

Personal Trainer	Recreation Aide
Group Fitness Instructor	Floor Trainer
Recreation Assistant	Recreation Trainee

## Skills You Will Learn

- Assess health status and current fitness level
- Demonstrate resistance training and flexibility
- Teach exercise techniques and lifestyle behavior change for lifelong fitness and sports
- Teach and demonstrate group fitness exercises used to attain cardiovascular fitness
- Perform minor maintenance on equipment

## Worker Requirements

*You should prefer:*

- Activities of a humanitarian nature
- Working with little direct supervision
- Dealing directly with people

*You should be able to:*

- Plan, direct and control the activities of others
- Make evaluations based on measurable criteria
- Work in cooperation with others
- Maintain good health
- Be physically fit

## Career Ladder

Workers in this field usually begin as assistants to learn basic skills and to gain experience. They can then advance to a management position offering a higher salary.

## Continuing Education

An associate's degree in physical fitness is normally desired to enter this field, but not required. Students may desire to obtain additional certifications and/or college.

***Certification as a Personal Trainer with CPR certification is typically required to enter this field.***

**A Tech Prep agreement is in place with Ocean County College, enabling students to receive up to five college credits upon successful completion of the course.**

# Heating, Ventilation, Air Conditioning & Refrigeration

Brick Center

2 Year Program

Robert Doherty  
Todd Harrington

**I**n this program, first year students will take HVAC/Mechanical Services to learn practical hands-on training and operating theory of today's hot water, heating and air conditioning, and plumbing systems. Second year students will take HVAC/Refrigeration to learn how to install, service and repair heating, air conditioning and refrigeration equipment for both home and commercial use.

## Related Job Titles

Air Conditioning Installer/Service Technician  
Furnace Installer  
Refrigeration Technician

## Skills You Will Learn

*Basic theory and operation of:*

- Mechanical and electrical components
- Standard and high efficiency air conditioning
- Gas heat, oil heat and heat pumps
- Commercial refrigeration

*How to install, repair and maintain:*

- Heating
- Air conditioning
- Commercial refrigeration equipment

## Worker Requirements

*You should be able to:*

- Work with machines and tools
- Multitask
- Read and understand technical manuals and blueprints
- Work with limited supervision
- Use logical, step-by-step procedures
- Follow directions
- Bend, stoop, climb and crawl
- Work in confined spaces

## Career Ladder

Most entrants in this career begin as apprentices until they have enough experience to become journeymen or become self-employed.

## Continuing Education

Ocean County Vocational Technical School  
Apprenticeship Program  
Mercer County College  
Lincoln Technical Institute  
Pennco Technical Institute  
University of Northwestern Ohio

***\*The Environmental Protection Agency Refrigerant Certification Exam is given upon completion of this program.\****

**Upon successful completion of this two-year program, students will receive advanced standing in the OCVTS Apprenticeship program. A Tech Prep agreement is in place with the University of Northwestern Ohio, enabling qualified students to receive up to 6 college credits.**

# Marine Service Technology

Toms River Center

2 Year Program  
(P.M. Class Only)

Robert Berenwick

**M**arine service technicians inspect, maintain and repair boats of all kinds. Their area of responsibility includes maintenance of hulls, propulsion systems, rigging and navigational equipment. They use measuring equipment to diagnose problems and perform the necessary repairs. A marine service technician may install and test sanitation and refrigeration systems, electrical systems, steering gear and accessories.

## Skills You Will Learn

- Inboard and outboard engine service and troubleshooting
- Hull repairs and maintenance
- Boating fundamentals
- Navigation skills

## Worker Requirements

*You should prefer:*

- Working at many different tasks
- Working with machines and tools
- Working outdoors

*You should be able to:*

- Read and understand technical manuals
- Work with limited supervision
- Use logical, step-by-step procedures
- Bend, stoop, crawl and climb

## Related Job Titles

Gasoline Engine Technician  
Propeller Technician  
Factory Service Technician

## Career Ladder

Most entrants start as limited technical mechanics. As their skill increases, their level of responsibility also increases to the point of becoming a supervisor or owner of their own marina or repair shop.

## Continuing Education

Ocean County Vocational Technical School  
Brookdale Community College  
Ocean County College  
New England Institute of Technology  
Marine Mechanic's Institute

# Medical Assistant

*Health immunizations and uniforms required*

Toms River Center

2 Year Program

Marlene Damon  
Irene Malfitano

**T**hese health service workers assist doctors in the examination of patients and in the operation of medical offices. While duties vary from office to office, most perform clerical functions as well as clinical tasks under the supervision of a physician.

## Related Job Titles

Medical Receptionist      Medical Assistant  
Billing and Coding Specialist  
Radiology Technician  
LPN or RN

## Skills You Will Learn

- Medical terminology
- Record a patients' medical history
- Assist doctors with special procedures
- Computerized scheduling and software
- Insurance billing and coding
- Take vital signs
- Perform electrocardiograms and lab procedures
- Venipuncture techniques

## Worker Requirements

*You should prefer:*

- Activities involving direct contact with people
- Activities of a scientific and technical nature

*You should be able to:*

- Work well under pressure
- Work effectively with others
- Work within set standards of accuracy
- Communicate well, written and oral
- Stand the sight of blood
- Maintain confidentiality of medical

## Career Ladder

Medical office assistants can advance to office manager with experience. Some choose to further their education and go on to careers such as LPN, Respiratory Therapist and RN.

## Continuing Education

Ocean County Vocational Technical School  
Ocean County College  
University of Medicine and Dentistry of NJ  
Brookdale Community College

**Students may complete an additional class following graduation in the area of parenteral administration (injections). Upon passing an examination at the completion of this class, students are qualified to become a National Certified Medical Assistant.**

# Medical Skills and Related Health Careers

*Health immunizations and uniforms required*

Toms River Center

2 Year Program

Mildred Fritz

**T**hese health service workers assist in the care of sick and injured people under the direction of doctors, nurses and other medical supervisors. They free health care professionals from the routine work required to treat a patient.

## Skills You Will Learn

- Determine and care for patient needs
- Make beds
- Assist with examinations
- Maintain an aseptic environment
- Take and record vital signs
- Determine a patients' nutritional needs
- Assist with rehabilitation of patient
- Office procedure, medical terminology, medical ethics and patient rapport
- Clinical experience in a hospital environment
- Job entry level skills consistent with pursuing nurse aide certification

## Worker Requirements

*You should prefer:*

- Activities involving direct personal contact and helping people
- Activities of a scientific and technical nature

*You should be able to:*

- Work effectively with others
- Be pleasant, tactful and patient
- Make decisions quickly
- Maintain confidentiality of records and other information

## Related Job Titles

Nursing Assistant	Nurse Aide
Orderly	Nurse
Dietary Aide	

## Career Ladder

Opportunities for advancement require additional education. The curriculum provides an overview of health careers such as Nurse Assistant, Physical Therapy Aide, Medical Office Assistant, X-Ray Technician, Laboratory Technician and Nurse.

## Continuing Education

Ocean County College  
Brookdale Community College  
Kean College  
Richard Stockton College of New Jersey  
Rutgers University

**A Tech Prep agreement is in place with Rutgers University, enabling students to receive up to 9 college credits upon successful completion of the course.**

# Pre-Engineering Technology

Toms River Center

2 Year Program

Kirk Goebel

**T**his course is for high school students interested in engineering, automation, and manufacturing careers. Both Computer-Aid (CAD) and hand drafting skills are instructed to enable students to design mechanical components. Automation and Manufacturing skills are instructed to enable students to develop programs that control the setup and operation of 3D-Printers, Computer Numerical Control (CNC) machining and other automation to

## Related Job Titles

CNC Operator/Programmer  
CADD Draftsperson/Technician  
Field Technician  
Marketing Representatvie

## Skills You Will Learn

- Print Reading
- Math for manufacturing
- Drafting of technical/mechanical components (CADD & hand)
- 3D-Printer prototyping
- G-Code programming
- CNC machining
- Automation

## Worker Requirements

*You should:*

- Prefer doing detailed work
- Possess organizational and logical work habits
- Be willing to continue professional development

*You should be able to:*

- Apply algebra and geometry to solve mathematical problems
- Read and comprehend technical information and drawings
- Follow safety instruction

*Physically you must:*

- Have good hand-eye coordination
- Be able to work at a project for long periods of time with high accuracy
- Be able to work with tools

## Career Ladder

CNC operators or CADD technicians with several years of experience may advance to supervisory positions. They may also become programmers of CNC machining tools. All trade areas can continue their education to become Professional Engineers, Marketing Representatives, Estimators or Field Technicians of CNC and Automation equipment.

## Continuing Education

Ocean County College  
New Jersey Institute of Technology  
Rutgers University  
Rowan University

# Welding

*American Welding Society national certification is available to successful graduates.*

Toms River Center

2 Year Program

James Mansfield

**T**his program provides students with hands-on instruction in a variety of welding and metal fabrication processes. Upon completion students are prepared for careers in construction, fabrication and repair of industrial and transportation equipment including cars, ships, pleasure crafts and aircraft. They are also qualified for employment in the area of structural welding including the fabrication of bridges, steel structures, pipelines and boilers.

## Related Job Titles

Arc Welder  
Production Line Welder  
Underwater Welder  
Welder/Fabricator  
Welding Sales  
Welding Education

## Skills You Will Learn

- Repair of broken or cracked metal objects
- Build up metal parts using electric welding or brazing equipment
- How to weld parts of products, such as pipelines, boilers, cars and airplanes using gas and electric welding equipment
- Shielded metal arc, gas metal arc welding
- Gas tungsten arc, flux core arc welding
- Oxy-fuel gas and plasma arc cutting

## Worker Requirements

*You should prefer:*

- Working with machines and tools

*You should be able to:*

- Do precision work
- Make decisions based on measurable information
- Work from sketches, drawing or blueprints

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## Career Ladder

Most welders start as helpers or metal fabricators. Skilled welders may become inspectors, technicians or supervisors. With college training they may become welding engineers.

## Continuing Education

Ocean County Vocational Technical School  
Hobart School of Welding Technology  
Ohio Technical College  
The Lincoln Welding School  
Welder Training & Testing Institute  
Pennsylvania College of Technology  
Underwater Welding Divers Academy  
Of the Eastern Seaboard, Inc..

**A national certification from the American Welding Society (AWS) is available to graduates upon successful completion of an AWS exam.**