

# Course Offerings at The School of Cooperative Technical Education

Classes meet Monday – Friday

A.M. or P.M. 3 period blocks

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## Automotive

**Automotive Mechanics:** Students will learn basic skills and trouble shooting for various automotive issues and repairs. Students will learn how to complete proper maintenance including brake systems, steering and suspension systems, electronics, heating and cooling, engine performance and repair and NYS inspection service. The course will cover different aspects of working in a repair shop and dealership. The course is geared towards passing the NATEF Exam as well as numerous ASE, SP2, NYS Inspector's certification and other certification exams. Students will be prepared for entry level employment in both private and corporate repair facilities and dealerships.

**This course is offered at 96<sup>th</sup> Street and at Long Island City HS (1 year course)**

## Construction Trades

**Introduction to Building Maintenance:** Entry level course that provides students with the basic hands-on experiences necessary to perform basic building maintenance functions. The curriculum consists of four units of study: Carpentry, Electrical, Plumbing and Janitorial. The course focuses on the use of the basic hand and power tools and the skills needed to assist building maintenance crews in residential and commercial buildings. Students will also be prepared for entry level janitorial services.

**This course is offered at STEP in Canarsie Brooklyn. (1 year course)**

**Building Maintenance:** This course provides students with the theoretical and hands-on experiences necessary to perform entry building maintenance and repair functions. The curriculum consists of four units of study: Carpentry, Electrical, Plumbing and Janitorial. Students will learn entry level skills in the use of the appropriate hand and power tools, and will learn functional skills including: sheetrock installation, finishing and repair, floors and wall tile installation, painting, door and door lock installation and repairs and landscaping. The course is geared towards completing certifications in a variety of areas such as green janitorial, various FDNY certificates of Fitness and Apprenticeship exams. Students are prepared for entry level positions in building maintenance at institutional/commercial or private buildings.

**This course is offered at Seaview Hospital and IBR in Staten Island and 96<sup>th</sup> Street (1 year course)**

**Carpentry:** Students will learn basic carpentry skills, for residential and commercial construction that are applicable in both new construction and renovation/restoration. Students will learn blueprint reading, use of hand power tools, cabinet making and millwork, green carpentry and residential building framing and finishing. The course includes, trade related math including geometry, measuring and cost estimating. This course is geared towards passing safety and other certifications. Students are prepared for positions in lumber yards, entry level carpentry and to enter carpenter's apprenticeship programs.

**This course is offered at 96<sup>th</sup> Street, Long Island City HS, Longwood Campus in the Bronx (1 year course)**

**Electrical Installation:** Students will need to use algebraic equations. The course covers electrical circuits, wiring, boxes and raceways, switches and receptacles, overload protection, blueprints, lighting, residential service panel, troubleshooting, low voltage applications, solar panel use and installation in the residential and commercial setting. The course is geared towards passing numerous FDNY certificate exams, the Transit electrical helper exam and potential enrollment in an apprenticeship program. Students will be prepared for work as an electrician's helper.

**This course is offered at 96<sup>th</sup> Street and East Harlem- 120<sup>th</sup> Street (1 year course)**

**Introduction to Residential Construction:** Entry level course that introduces students to basic carpentry and wiring skills. Students will learn measurement, safety, and the use of hand tools while completing small projects.

**This course is offered at Truman HS in the Bronx (1 year course)**

**Residential Construction:** This course covers basic carpentry and electrical installation in the residential setting. Students will learn how to use power tools and gain skills in many aspects of new construction as well as renovation. The electrical portion of the class will cover basic residential wiring and introduction to solar power. This course is geared towards passing some FDNY Certificates of Fitness. Students will be prepared to enter the construction trades as an assistant/helper.

**This course is offered at Truman HS in the Bronx (1 year course)**

**Plumbing:** This course introduces students to entry level residential plumbing. Students will learn the basic skills in preparing, installing and repairing pipes and tubes that distribute fresh water and dispose of wastewater. Additionally, they will learn the installation and repairs of plumbing fixtures, such as used in kitchen and bathroom. Skills include the use of basic hand and power tools that are used in the installations of black pipes, copper tubes and PVC, faucets, and valves. The course is geared towards passing numerous FDNY Certificates of Fitness. Students are prepared for entry into apprenticeship programs and as a plumber's helper.

**This course is offered at the Longwood Campus in the Bronx (1 year course)**

**Welding:** Reading material for the NYS Welder's license is at an upper class high school level. The course includes geometry and Trigonometry as well as measurement. Students will learn how to read blue prints, basic and advanced shield metal arc welding, gas metal arc welding, gas tungsten arc welding, oxy fuel cutting, plasma arc cutting and fabrication. This course is geared towards passing the NYS Dept. of Transportation Field Welder's Certification Exams and FDNY Certificate of Fitness F-60 and G-60. Students will be prepared for positions in local labor union programs as well as immediate employment as a welder.

**This course is offered at 96<sup>th</sup> Street (1 year minimum, some students may stay for a 3<sup>rd</sup> semester for more advanced coursework when available)**

### Computer Technology and Design

**A+/IT Essentials:** Students will need to read manuals and perform basic algebraic equations. Students will learn different number systems, engineering notation, build electronic circuits, control electronic circuits with software, repair desktop and laptop computers, install and use basic computer software such as operating systems and tools to maintain and troubleshoot computer issues, setup and maintain a small local network, troubleshoot mobile devices. The course is geared towards passing the A+ Certification exam and can lead to an entry level position in Information Technology (Helpdesk, Support Technician).

**This course is offered at John Adams H.S. and 96<sup>th</sup> Street (1 year course)**

**CISCO Networking:** Students will learn about networks, routing and switch configuration and resolving network problems. By the end of the course students will be able to configure and troubleshoot complex networks and resolve issues with data link protocols, LANs, inter-VLAN routing, multi-area OSPF and WAN technologies. The course is geared towards passing the Network +, Cisco CCENT and CCNA Certifications. Students can obtain entry level positions in the IT industry. Students may need to take the A+ course as a pre-requisite.

**This course is offered at 96<sup>th</sup> Street (1 year course)**

**Graphic Design and Visual Arts:** This is an introductory course to expose students to the world of graphic design. Students will participate in a projects based curriculum that allows them to follow the design and development process from planning to analysis to evaluation and distribution. They will learn the concepts and principles of effective design using digital photography, Adobe tools, Adobe Photoshop and other programs. The course is geared towards passing the Adobe ACA Certification. Students will be prepared for entry level positions.

**This course is offered at 96<sup>th</sup> Street (1 year course)**

**Web Design:** Students need to have basic PC/Mac skills. Course and a material is on the 8<sup>th</sup> grade reading level and above. Students need to be able to perform basic mathematics including percentages and fractions. The course will focus on IT business needs and network functioning and then move on to mark-up language and site development, HTML5 Coding, style sheets and graphical elements, GUI HTML editors and mobile web sites, web sites for business, network and cloud security and compatibility. The course is geared towards passing the CIW Web Foundations Associate Certifications for Internet, Site development, Network Technology and the W3Schools Certificates HTML, CSS and JavaScript. This course prepares students for post-secondary training in the field.  
**This course is offered at 96<sup>th</sup> Street (1 year course)**

### Culinary Arts

**Introduction to Culinary Arts:** Entry level course that focuses on tools, sanitation, measuring, knife skills, baking, This course is geared towards passing the NYC Food Handlers Certificate exam or ServSafe Food Handlers exam. Students are prepared for positions in commercial kitchens prepping for the chefs and completing other basic tasks in the kitchen before and during meal service.

**This course is offered at STEP in Canarsie Brooklyn, QTC in Queens (1 year course)**

**Culinary:** Students will be exposed to different aspects of restaurant, catering facility and commercial/institutional food service. Students will learn different culinary arts techniques including preparation of stocks, sauces, soups, dry heat and moist heat cooking and a combination of cooking methods. Students will also learn baking/pastry arts including yeast products such as breads and rolls, laminated doughs such as puff pastry, quick breads, frozen desserts, sauces, and chocolate. While engaging in these learning opportunities students will become familiar with related math, use of tools and appliances, knife skills and techniques. Students will also learn about the roles and functions of the front of the house and the back of the house, financial management and costs. This course is geared towards passing the Food Handlers Certificate and being prepared for employment as an entry level baker or cook or a prep cook. As this sequence moves quickly depending on a student's prior knowledge and ability to progress through the material students will be able to take this course in either a 2 semester or 3 semester sequence.

**This course is offered at 96<sup>th</sup> Street and the beginning part of the sequence is offered at QTC in Queens. (2-3 semesters)**

### Health Related and Office Careers

**Certified Nursing Assistant:** The course teaches the skills, laws and practical hands on experience to become a Certified Nursing Assistant. Reading materials are on the 6<sup>th</sup> grade level and above. The course includes classroom instruction and hands on practice off-site. The course is geared towards passing the NYS Certified Nursing Assistant exam. Students can obtain positions as Nursing Assistants upon completion.

**This course is offered at the Longwood Campus in the Bronx (1 semester course)**

**Introduction to Office Skills:** Entry level course where students will learn about the office environment. Skills will focus on customer service, reception and phone answering skills, basic keyboarding, confidentiality laws, filing and organization, business attire and professional behavior. Students will be prepared for entry level office positions assisting clerical staff and office managers in the business environment.

**This course is offered at STEP in Canarsie Brooklyn (1 year course)**

**Medical Billing and Coding:** Student will read material on the 8<sup>th</sup> grade level and above. Students will need to do basic math including percentages. Students will learn about different types of insurance, billing for single and multi-physician offices, understanding hospital, emergency room and out-patient services, learn proper vocabulary, tasks of the medical biller, confidentiality and other applicable laws. The course can be before or after taking the Medical Office Management course, when offered, for a more well-rounded sequence. This course is geared towards CPC Certification and Expert rating Medical Billing Certification. Students will be prepared for an entry level position.

**This course is offered at 96<sup>th</sup> Street (1 semester course)**

**Medical Office Management:** Students will read materials at the 7<sup>th</sup> grade level and above. The course includes office skills such as computer programs, proper personal and phone interactions, confidentiality and other legislative requirements as well as maintaining medical records, scheduling, financial and payroll and introduction to aspects of billing. The course can be taken before or after the Medical Billing and Coding course, when offered, for a more well-rounded sequence. This course prepares students for entry level work in a medical office setting.

**This course is offered at the Longwood Campus in the Bronx, 96<sup>th</sup> Street (not always available, check schedule). (1 semester course)**

**Vision Technology:** Students will read material at the 6<sup>th</sup> grade level and above and be required to do basic math. Students will learn all aspects of making lens, measurement: Millimeter, diopter power, prescription lens centration as well as optical terminology, lens design, dispensing, fitting and sales. The course is geared towards the ABO exam and entry level positions as an optical technician, opticians assistant, lab personnel or sales.

**This course is offered at 96<sup>th</sup> Street (1 year course)**

### **Unisex Salon Services**

**Barbering:** Students learn the proper use and safety of tools and many aspects of the running of a salon including professional attire and good grooming, inventory, and customer service. Students gain skills in shaving, haircutting, styling, coloring, manicures, massage, facials, and exposure to latest trends. Students will be able to perform live work in addition to classroom instruction. This course is geared towards passing the HIV infection control license and the Barbering Apprentice Certification exam. Students will be prepared to obtain a entry level position in a unisex salon or barber shop.

**This course is offered at 96<sup>th</sup> Street (1 year course)**

**Natural Hair Styling:** Students will be introduced to numerous facets of cosmetology. They will learn hair care, hair design, styling, braiding, weaving and styles for special occasions. Students are exposed to financial management and various business aspects of cosmetology. This course is geared towards passing the HIV infection control license and the NYS Natural Hair Styling License. Students will be prepared for an entry level position in a salon.

**This course is offered at 96<sup>th</sup> Street (1 year course)**