

Course Descriptions

APP101 - Range Maintenance

This course develops specific skills in servicing gas and electric ranges. Students will learn how to interpret the schematic wiring diagram; how to repair the surface heating components; how to repair the bake and broil components; and how to repair the clock, timer and/or lights. Most importantly, the students will learn to make these repairs in a safe, efficient, and productive manner.

APP102 - Refrigerator Maintenance

This course develops skills in servicing refrigerators. Students will learn to how to interpret the schematic wiring diagram; trace the sequence of operation; test every component; diagnose the compressor; check for refrigerant leaks; and/or recharge the system in a safe, efficient, and productive manner.

APP103 - Dishwasher Maintenance

This course develops skills in servicing convertible and built-in dishwashers. The students will learn to interpret the electrical diagram and trace the sequence of operation; specifically, the wash cycle, the rinse cycle, and the dry cycle. The students will also learn how to improve poor dish-washing results, improve poor drying results, and reduce noisy operations. Moreover, they will learn how to repair water leaks and how to make all repairs in a safe, efficient, and productive manner.

APP104 - Washer Maintenance

This course develops skills in servicing automatic washing machines. The students will learn how to interpret the electrical diagram and trace the sequence of operation. Also, how to diagnose and repair the timer, the water system, the agitator and motor, the pump, suspension system, plus more. Students will gain exposure to safety information, tools, and testing equipment.

APP105 - Dryer Maintenance

This course develops skills in servicing dryers. Students will learn how to interpret the electrical diagram and trace the sequence of operation. They will learn how to diagnose and repair controls, dryer timer, heating elements, thermostats, drum drive, motor and air flow, cabinet construction, and more.

ELE101 - General Wiring Maintenance

This course develops skills in diagnosing and repairing electrical components. Specifically, devices such as wall switches, lighting fixtures, duplex receptacles, GFCI's, AFCI's, 120-volt general purpose circuits, 240-volt dryer and range circuits, and more. The students will also learn basic principles of electricity, safety tips, VOM and Amp meter usage.

ELE102 - Advanced Wiring Maintenance

This course develops skills in maintaining service entrance equipment such as overhead and underground conductors, weatherheads, anchors, conduit, meter base, meter, main service panel, subpanels, junction boxes, grounding electrode conductor, grounding rod, etc. Also covered are electrical requirements in attics, basements, crawl spaces, garages, workshops, swimming pools, spas, hot tubs, low voltage circuits, planned maintenance activities, energy saving tips, and basic points of electrical safety. NOTE: Students are encouraged to bring their residential or community electrical drawings to class for analyzing.

ELE103 - Aluminum Wiring Maintenance (workshop)

This program is designed to help students understand how to maintain aluminum wiring branch circuits in accordance with applicable building codes. This program covers procedures that will promote awareness to unsafe conditions, connection failure warning signs, routine inspections, and proper maintenance techniques. Emphasis will be placed on making repairs in a safe, efficient and productive manner.

GEN101 - Career Opportunities in Apartment Maintenance

This course is designed to help students understand the role of a maintenance technician and to help them realize career opportunities in the industry. Students will gain exposure to different job levels in apartment maintenance, job assignments and work expectations for each level, work order procedures, service calls after normal business hours, compensation trends, overtime pay requirements, customer satisfaction, resident retention, plus more. The students will also gain exposure to employer benefits such as health insurance; sick, holiday, and vacation pay; 401k or pension plans; and educational assistance.

Course Descriptions

GEN102 - Basic Electricity

This course develops skills in understanding electrical fundamentals as a prerequisite for diagnosing and repairing major appliances, heating and cooling equipment, swimming pool pumps and motors, and defective circuits in a home or apartment. Specifically, the students will learn electrical theory, electrical terminology, ohms law, and electrical formulas. From a practical standpoint, students will learn how electricity is produced and distributed from the utility company, the demand for electricity in a home or apartment, how to diagnose failures using a volt-ohm meter, how to interpret diagrams and schematic, plus more. The program will conclude with basic points of electrical safety.

GEN103 - Self-Management

This course helps students develop careers within the residential and apartment industry. Simply stated, it's understanding and taking responsibility for one's on behavior and wellbeing. The course takes a psychological approach toward improving attitudes and concepts. It includes planning a career, projecting a professional image, developing skills, time management, human relation, motivation, personality, health, and leadership skills.

GEN104 - Supervision

This course prepares students for entry level supervision positions within the industry. The students will develop an understanding of various organizational structures and practices, supervisory methods and concepts, human relations within the industry, personal considerations, and supervision of maintenance activities.

HEA101 - Electric Furnace Maintenance

This course develops skills in servicing electric furnaces. Students will learn electric heating principles, how to interpret the schematic wiring diagram, how to trace the sequence of operation, how to test and evaluate the components, how to make repairs in no-heat situations, and how to adjust the furnace for optimum efficiency. Emphasis will be placed on making repairs in a safe, efficient and productive manner.

HEA102 - Gas Furnace Maintenance

This course develops skills in servicing gas furnaces. Students will learn to recognize the components, interpret the schematic wiring diagram, trace the sequence of operation, diagnose and replace only defective parts; and adjust the furnace for optimum efficiency. The students will also learn to clean the furnace, check for gas leaks, and complete service calls in safe, efficient, and productive manners.

HEA103 - EPA Technician Certification

The primary objective of this course is to prepare students for the EPA Technician Certification exam. The United States Environmental Protection Agency (EPA) has established a mandatory program that requires all technicians to be certified before performing maintenance, service, repair, or disposal of an appliance that contains refrigerant chemicals. To obtain certification, technicians must pass a closed-book proctored test which contains 25 questions about EPA regulations, and 25 questions on recycling procedures in the area in which they work. They may choose to test in only one area, or they may choose to test in more than one area, or they may choose to take the universal test which consists of 100 questions: 25 general and 75 sector-specific (25 from each sector of Type I, Type II and Type III). The minimum passing score is 70%.

HEA104 - Air Conditioning Maintenance

Residential air conditioning principles are studied in detail but with an emphasis on diagnosing, repairing, and tweaking the unit for optimum efficiency. Students will develop skills in understanding the refrigeration cycle, examining the components, interpreting the electrical wiring diagram and tracing the sequence of operation, analyzing the compressor, charging the system, making repairs, and conducting planned maintenance activities.

HEA105 - Heat Pump Maintenance

This course studies the basic approach to servicing residential heat pumps. The technicians will learn to diagnose a reverse-cycle heat pump, identify and test the components, determine what controls the direction of heat flow, adjust auxiliary heat, and more. The technicians will also gain exposure to causes of failures, planned maintenance techniques, safety information, tools, testing equipment, and most importantly, how to make all repairs in a safe, efficient, and productive manners.

Course Descriptions

HEA201 - Worst Case Draft Testing

This course develops skills in evaluating the operation of vented combustion appliances under conditions which may not allow them to function properly. Students will learn the importance of conducting a Daily Safety Test Out / Worst Case Draft Test; set-up procedures for pressure testing the combustion appliance zone; how to determine the worst-case configuration; draft test procedures for water heaters and furnaces; minimum draft testing requirements; and permanent corrective solutions that will minimize back-drafting and carbon monoxide poisoning.

INT101 - Grounds, Scenery & Curb Appeal

This course develops skills in maintaining the appearance of a residential building or apartment community. Students will gain exposure to a comprehensive list of items to inspect, clean and/or repair: e.g.: landscaping, parking lots and driveways, walkway and steps, fencing and gates, mailboxes, signs, children's play areas, disposal areas, retaining walls, drainage systems, building exterior components, hallways, laundry rooms, storage areas, etc. They will also learn aspects related to liability; e.g.: grounds safety, security systems, environmental health concerns, and utility shut-offs.

INT102 - Outdoor Accessories

This program covers maintaining and repairing outdoor amenities. They are items of being pleasant and something that expresses comfort, convenience, or enjoyment. Specifically, the students will learn how to maintain basketball courts, patios, sidewalks, steps, concrete walls, children's play areas, decks, fences, gates, volleyball courts, water fountains, flags and flag poles, banners, and signs. Emphasis will be placed on removing obstacles that may be considered hazardous and improving the appearance of the facility or community.

INT103 - Exterior Maintenance

This course develops skills in exterior building maintenance. Students will learn how to repair foundations, exterior walls, roofs, gutters and down spouts, screens and windows, doors and door locks, porches, patios, and decks. Also covered are safety awareness, tool selection, and construction materials. Most importantly, the students will learn to make repairs in safe, efficient, and productive manners.

INT104 - Interior Maintenance

This course develops skills in maintaining the interior components of a property and to ensure that all vacant apartment units are thoroughly restored to a "market ready" condition, and in a timely manner. Students will learn procedures for repairing interior components such as ceilings, walls, floors, stairs, doors, cabinets, trim, and baseboards. They will also inspect appliances, HVAC equipment, plumbing fixtures, and the electrical system for safety and functionality.

INT105 - Final & Inspection (workshop)

This course develops skills in making final preparations before a facility can be leased. It mainly covers touch-up work that may have been damaged during punch-out or the cleaning process. It also covers inspections to assure that the facility is clean, all appliances are working properly, and that all repairs were made in a professional manner.

INT201 - REAC Inspections

This course develops skills in conducting inspections as covered under the United States Department of Housing and Urban Development REAC (REAL ESTATE ASSESSMENT CENTER) Standards. Students will learn details about the inspection protocol and procedures, deficiency definitions, inspection guidelines, scoring, technical reviews, and database adjustments. Emphasis will be placed on achieving a 95-100% REAC score. Additionally, the program includes a strategy for getting everyone involved so team can have the greatest impact towards helping apartment communities achieve the highest score possible.

INT202 - Mold Remediation

This course involves the mold remediation process. It begins by providing background information about mold and its origins. Specifically, it defines mold (including characteristics and optimal, environmental factors for maturation based on type), mold's different types and manifestations, health risks associated with exposure, and, finally, procedures associated with the detection, containment, removal, prevention and completion of the remediation process.

Course Descriptions

PLU101 - General Plumbing Maintenance

This course develops skills in solving plumbing problems in a home or apartment community. The students will learn the anatomy of a plumbing system and how to make repairs at kitchen sinks, bathroom sinks, tubs, showers, toilets, and water heaters. The students will also learn drain cleaning techniques via plungers, pressure, and toilet augers. Other topics include tools of the trade, minimizing foul smells, thawing frozen pipes, and winterizing plumbing components. Emphasis will be placed on making repairs in a safe, efficient and productive manner.

PLU102 - Advanced Plumbing Maintenance

This course develops skills in making plumbing repairs. Students will learn how to work with different types of pipes; e.g.: PVC, CPVC, copper, galvanized, and black pipe. Moreover, they will learn how to cut, thread and braze pipe. Other topics include water softeners & treatment, water filters, on-demand and point of use hot water heaters, recirculating pumps and sump pump installation & repair, sewage ejector repair, correcting noise problems, air admittance valves, and drain machine cleaning. Emphasis will be placed on making repairs in a safe, efficient and productive manner.

SWI101 - Pool Codes

This course develops skills in understanding codes and regulations affecting public, semipublic, special-use, and private swimming pools and spas. Students will learn codes affecting the water supply and plumbing fixtures; sewer system and drains; depth markings; safety requirements, supervision and lifesaving equipment; disinfection and water quality; suits and towels for swimmers; cleaning pools; records of operation and supervision; supervision of personal conduct and regulations.

SWI102 - Pool Opening

This course develops skills in opening a pool for the season. Specifically, it covers draining the pool, cleaning the walls and floor, acid-bathing where necessary, repairing the walls and floor; and painting the pool. It also covers inspecting the chlorinator, chemical feeder; valves, filters, strainers, motor and pump assembly; and filling the pool.

SWI103 - CPO (Certified Pool Operator)

This course develops skills in maintaining records and files on water testing; disease and accident prevention; pool operation problems and chemical adjustments; equipment maintenance; energy conservation; training personnel; and monitoring swimmers.

SWI105 - Pool Closing

This course develops skills in closing a pool. It covers draining the pool; blowing out lines; winterizing the components; storage of equipment; and setting up circulation for winter water, plus chemicals.