

HVAC Service Technicians Training Center

48-03 32nd Place, Long Island City, NY 11101 Tel: (718) 472-0404 (718) 472-0414 Fax: (718) 433-0676

Basic AC/R Electricity & Introduction to Controls: Part 1 (BE/C-1)

This introductory course covers basic electricity for AC/R including: relevant concepts of current and magnetism; the use of a VOM and clamp-on meter; series/parallel circuits; single and 3-phase power; transformers; fuses and circuit breakers; conductors and insulation; and switch operation. Students will also be introduced to controls. Topics will include: pictorials and ladder diagrams; and control simulators.

GOAL: Demonstrate the conditions for a good electrical circuit, the rules governing each condition governed by the electrical code and the safety operation that is important to the HVAC/R trade

OBJECTIVES: At the completion of this term, the student will be able to demonstrate how to: Be safe when working with electric circuits; Ground all electrical circuits; Identify the parts of an electrical circuit; Identify alternating and direct current generation; identify the conductors of copper and aluminum; Identify the resistive, inductive and capacitive loads in series and parallel circuits; Identify a complete circuit, open, short and grounded circuits; able to pass a safety exam.