

ENVIRONMENTAL CONTROL TECHNOLOGY (HVAC/R)

Environmental Control Technology prepares students for employment in the fields of heating, ventilation, air conditioning and refrigeration. Students will gain a foundation in HVAC/R through the study of modern refrigeration.



WHAT YOU WILL LEARN

- Air Conditioning •Heating •Refrigeration •Troubleshooting & Repair
- Interpret Electrical Schematics

WHERE DO YOU SEE YOURSELF?

- Environmental Control Technician •Facilities Manager •Environmental Lab Technician
- Product Environmental Engineer •Environmental Regulator •HVAC/R Technician •Source Control Technician •Surface Water Specialist •Waste Management Technician •Sheet Metal Fabricator •Waste Water Plant Operator •Water Quality Specialist

PAY RANGE

Average salary for entry-level is between \$20 - 25 per hour.

Technicians with 3-5 years of experience can make between \$45 - 50 per hour.

DEGREE & CERTIFICATE OFFERED

Associate of Science in Environmental Control Technology (Not for Transfer) - 60 units
Certificate of Achievement in Environmental Control Technology - 32 units

CLASSES YOU MIGHT TAKE

ECT 242 Air Conditioning Sheet Metal

Introductory course to basic air conditioning sheet metal theory, design, drafting, bending, shaping, soldering, tools and equipment used to fabricate fittings.

ECT 280 Elect & Controls for HVAC

Electrical Theory and Applications of Controls is a basic course covering the theory and controls for the heating, venting, air conditioning/refrigeration controls. The course explores the theories and concepts of Ohms and Kirchoff's laws, in addition to the theories and concepts of refrigeration.

ECT 281 Basic Air Conditioning

Introductory lecture and demonstration course in residential air conditioning, refrigeration and heating that covers applied refrigeration theory. Students will learn how to evacuate and charge systems, diagnose refrigeration problems and how to properly install an entire duct system in the project house. In addition, proper brazing techniques, tools and safety practices are taught as applied to various other trades.

ECT 282 Advanced AC/Refrig Comm/Dom

Advanced Air Conditioning/Refrigeration Commercial/Residential course covers commercial and domestic air conditioning and refrigeration theory. Topics include the fundamentals of wiring circuits and the concept of electrical problem solving as it relates to both commercial and residential applications. Topics also include using methods to calculate heat loads values necessary to sizing equipment in the industry.

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