**Mohawk Valley Community College**

**Utica & Rome, New York**

**ET230: AC Motors & Controls C-3 P-4 Cr-5**

**Catalog Description:** This course is intended for the heating, refrigeration and air condition technicians. It provides HVAC student with theory and practicum in motors & controls and networking protocols. The course has a blend of theory and practice suitable for vocational-technical students or industry practitioners who wish to upgrade their backgrounds. Electrical principles, components, meters, schematics, and systems are discussed and applied to modern small and large scale installations

**Prerequisites:**  ET111or permission of the Department Head

**Student Learning Outcomes:** The student will:

* The student will understand the principles involved in AC motors operations.
* The student will construct, analyze and operate various motor control circuits
* The student will be able to identify, troubleshoot and repair a transformer energized motor control circuit.
* The student will construct various single and three phase motor control circuits and identify control functions.
* The student will be able program AC & DC motor drives
* The student will design & troubleshoot complex motor control circuitry

.

**Major Topics:** Ac single & three phase motors, control circuits, motor identification and configuration.