

# **APR 202 : ELEC/MFG PLANT 6 - MOTOR CONTROLS/CIRCUITS**

---

## **Transcript title**

MPE 6- Motor Controls/Circuits

## **Credits**

4

## **Grading mode**

Standard letter grades

## **Total contact hours**

84

## **Other hours**

84

## **Course Description**

Course of study includes reversing circuits applied to motors, power distribution systems, transformers, electronic control devices, relays, photoelectric and proximity controls, programmable controllers, starters, preventive maintenance, and the National Electric Code as it applies to these topics. This course will be taught in a lecture/lab format, with the lab portion including the demonstration of and hands on programming of variable speed drives.

## **Course learning outcomes**

1. Student will apply theory and techniques of industrial circuitry to typical applications in the trade.
2. Student will explain and practice preventive maintenance, troubleshooting, and safety as applied to the course content.
3. Student will describe and perform the technical skills required of a Journeyman Manufacturing Plant Electrician.
4. Student will relate the theory and application of programmable controllers.
5. Student will read and interpret electrical symbols, specifications, and line diagrams.
6. Student will interpret the National Electrical Code requirements as they apply to the subject matter of this course.