

# INSTRUMENTATION AND PROCESS (ISM)

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## **ISM 102 (4 credit hours)**

### **Fundamentals of Instrumentation**

Introduces concepts of instrumentation devices and laboratory techniques used for monitoring and controlling manufacturing processes. Includes component identification and application, basic conversions, accuracy of measuring devices, tubing use and selection, repair procedures and the theory of operation and calibration of pressure, and process measuring instruments. Covers the need for calibration and the use of various calibration standards. Includes safety precautions, and regulations encountered in the instrumentation field. Lecture: 3 credits (45 contact hours). Lab: 1 credit (30 contact hours).

**Attributes:** Technical

**Components:** LAB: Laboratory, LEC: Lecture

## **ISM 210 (4 credit hours)**

### **Fundamentals of Process Control**

Provides theoretical and practical experience in the operation of process control systems. Lecture: 3 credits (45 contact hours). Lab: 1 credit (30 contact hours).

**Attributes:** Technical

**Components:** LAB: Laboratory, LEC: Lecture