

IND ELEC/INSTR TECH (IDIT)

IDIT 101 ADVANCED INSTRUMENTATION 1**3 Credit Hours**

Comprehensive study of temperature and pressure instrumentation devices. Students will learn installation, calibration and troubleshooting skills associated with various types of sensors, controllers and recording devices relating to temperature and pressure parameters. (2 lecture, 2 lab)

Pre/Corequisite(s): MATH 125

IDIT 102 ADVANCED INSTRUMENTATION 2**3 Credit Hours**

Comprehensive study of flow and level instrumentation devices and procedures. Students will learn installation, calibration and troubleshooting skills associated with various types of sensors, controllers and recording devices relating to flow and level parameters. (2 lecture, 2 lab)

Prerequisite(s): MATH 125

IDIT 201 ADVANCED INSTRUMENTATION 3**3 Credit Hours**

Comprehensive study of analytical instrumentation devices and procedures. Students will learn installation, calibration and troubleshooting skills associated with various types of analyzers, including pH and ORP meters, gas chromatographs, spectrophotometers, color, carbon and optical analyzers (turbidity, opacity, etc). (2 lecture, 2 lab)

Prerequisite(s): IDIT 102

IDIT 202 ADVANCED INSTRUMENTATION 4**3 Credit Hours**

Comprehensive study of Supervisory Control and Data Access (SCADA) systems, Distributed Control Systems (DCS), and Programmable Control Systems (PLC). Students will discuss the hardware, software and telemetry systems involved with these control mechanisms. (2 lecture, 2 lab)

Prerequisite(s): ELEC 204