

Petroleum Technology (PETR)

Courses

PETR A130 Remotely Actuated Valves **4 Credits**

Introduces terminology, symbolism and basic principles for installation and maintenance of remotely actuated valves encountered in industrial process instrumentation.

Registration Restrictions: Admission to the Associate of Applied Science in Industrial Process Instrumentation, Associate of Applied Science in Process Technology, Undergraduate Certificate in Petroleum Technology or Occupational Endorsement Certificate in Valve Installation and Maintenance

PETR A131 Mechanically Actuated Valves **2 Credits**

Introduces terminology, symbolism and basic principles for installation and maintenance of mechanically actuated valves encountered in industrial process instrumentation.

Registration Restrictions: Admission to the Associate of Applied Science in Industrial Process Instrumentation, Associate of Applied Science in Process Technology, Undergraduate Certificate in Petroleum Technology or Occupational Endorsement Certificate in Valve Installation and Maintenance

PETR A155 Process Industry Basics **3 Credits**

Introduces reading of various process drawings. Covers basic piping and tubing systems, and plant operations including safety procedures, communications, and planning. Overview of various measuring tools and techniques, basic industrial hand tools, and their safe and effective use.

Prerequisites: MATH A055 with a minimum grade of C or MATH A105 with a minimum grade of C or MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A211 with a minimum grade of C or MATH A212 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C or MATH A251F with a minimum grade of C or MATH A252 with a minimum grade of C or MATH A252F with a minimum grade of C or MATH A253 with a minimum grade of C.

PETR A240 Industrial Process Instrumentation III **3 Credits**

Presents details of the installation and application of continuous process instruments in closed feedback control loops. Includes practice of functional check-out procedures on physical hardware. Introduces ladder logic used for discrete control of processes.

Prerequisites: PRT A144 with a minimum grade of C.

PETR A244 Industrial Process Instrumentation IV **3 Credits**

Explores techniques used in designing and optimizing control loops. Develops methods for testing and optimizing feedback and feed forward control loops, and introduces loop implementation methods in digital control environments.

Prerequisites: (MATH A105 with a minimum grade of C or MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A211 with a minimum grade of C or MATH A212 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C or MATH A251F with a minimum grade of C or MATH A252 with a minimum grade of C or MATH A252F with a minimum grade of C or MATH A253 with a minimum grade of C) and PETR A240 with a minimum grade of C.