

PROCESS TECHNOLOGY (PTAC)

PTAC 1302 Introduction to Process Technology 3 Credits (3 Lec, 1 Lab)

This is an introduction overview to the various processing industries.

Prerequisite(s): Reading level 7 Writing level 7 Math level 6

Course Type: Technical

PTAC 1308 Safety, Health, and Environment I 3 Credits (3 Lec, 1 Lab)

This course is an overview of safety, health and environmental issues in the performance of all job tasks for industrial workers of state/federal regulations and guidelines, which require industrial safety training. Topics include the 29 CFR 1910, 1926, and National Fire Protection Association (NFPA) 70E standards such as confined space entry, emergency action, lock out/tag out, arc flash, and other work-related subjects.

Prerequisite(s): Reading level 7 Writing level 7 Math level 6

Course Type: Technical

PTAC 1310 Process Technology I - Equipment 3 Credits (2 Lec, 4 Lab)

This course is an introduction to the use of common processing equipment.

Prerequisite(s): PTAC 1302, Reading level 7, Writing level 7, Math level 6

Course Type: Technical

PTAC 1332 Process Instrumentation I 3 Credits (3 Lec, 1 Lab)

This is a study of instruments and control systems used in the process industry including terminology, process variables, symbology, control loops, and basic troubleshooting.

Prerequisite(s): PTAC 1302, TECM 1301 or higher, Reading level 7, Writing level 7, Math level 6

Course Type: Technical

PTAC 1408 Safety, Health, and Environment I 4 Credits (3 Lec, 2 Lab)

This course is an overview of safety, health, and environmental issues in the performance of all job tasks for industrial workers of state/federal regulations and guidelines, which require industrial safety training. Topics include the 29 CFR 1910, 1926, and National Fire Protection Association (NFPA) 70E standards such as confined space entry, emergency action, lock out/tag out, arc flash, and other work-related subjects.

Prerequisite(s): Reading level 7, Writing level 7, Math level 6

Course Type: Technical

PTAC 1410 Process Technology I - Equipment 4 Credits (2 Lec, 4 Lab)

This course is an introduction to the use of common processing equipment.

Prerequisite(s): PTAC 1302, Reading level 7, Writing level 7, Math level 6

Course Type: Technical

PTAC 1432 Process Instrumentation I 4 Credits (3 Lec, 2 Lab)

This is a study of instruments and control systems used in the process industry including terminology, process variables, symbology, control loops, and basic troubleshooting.

Prerequisite(s): TECM 1301, PTAC 1302, Reading level 7, Writing level 7, Math level 6

Course Type: Technical

PTAC 2314 Principles of Quality 3 Credits (3 Lec, 1 Lab)

In this study of the background and application of quality concepts, topics include team skills, quality tools, statistics, economics and continuous improvement. As part of the course, students use statistical process control to collect, organize, and analyze data; describe the principles of quality control; demonstrate team skills; and apply quality tools to process systems.

Prerequisite(s): Reading level 7 Writing level 7 Math level 6

Course Type: Technical

PTAC 2420 Process Technology II-Systems 4 Credits (3 Lec, 3 Lab)

This is a study of the various process systems, including related scientific principles. As a part of this course, students describe the purpose and function of common process systems; and operate each process system.

Prerequisite(s): PTAC 1310 or PTAC 1410 Reading level 7, Writing level 7, Math level 6

Course Type: Technical

PTAC 2438 Process Technology III - Operations 4 Credits (3 Lec, 3 Lab)

This course emphasizes activities associated with the hands-on operation of process equipment.

Prerequisite(s): PTAC 1332 or PTAC 1432 and PTAC 2420 Reading level 7 Writing level 7 Math level 6

Course Type: Technical

PTAC 2446 Process Troubleshooting 4 Credits (3 Lec, 3 Lab)

This course offers instruction in the different types of troubleshooting techniques, procedures, and methods used to solve process problems.

Prerequisite(s): PTAC 1332 or PTAC 1432 and PTAC 2420 Reading level 7 Writing level 7 Math level 6

Course Type: Technical