
SECTION HEADING

RNEW 1100: Process Dynamics

Description

Process Dynamics introduces concepts which deal with physical forces and their relationship to energy through temperature and pressure and are frequently encountered in an operation plant environment. An explanation and understanding of a plant system is crucial to this course. The scientific principles of flow, temperature, pressure heat, gasses, liquids, solids, fluid systems, process dynamics and heat transfer are covered in detail. The curriculum of this course encompasses basic physics and science.

Credits

3

Prerequisite

None

Corequisite

None

Topics to be Covered

1. Mathematics
2. Chemistry
3. Physics
4. Machines
5. Fluid Systems
6. Process Variables and Measurement
7. Heat
8. Elements of Control Systems
9. Statistical Process Control
10. Process Sampling

Learning Outcomes

1. Describe the principles of temperature, pressure and flow, and the relationships that exist between them.
2. Identify fluid systems and discuss environmental factors that affect them.
3. Explain heat and heat transfer.
4. Describe process variables and process variable measurement
5. Explain the operators' responsibilities in processing plants.

Credit Details

Lecture: 3

Lab: 0

OJT: 0

MnTC Goal Area(s): None