Course Learning Outcomes:

By the end of this course, a student should be able to:

- identify any existing machine hydraulic system as being the same as one for the five basic systems studied.
- select and apply any of the five basic systems to power a machine using efficiency and cost as controlling factors
- calculate oil flow, oil pressure, and HP requirements for sizing components in the basic hydraulic system

Course Outline:

I. Series System
   A. Identification of Components
   B. Oil Flow Paths
   C. Operation
   D. Applications

II. Parallel Systems
   A. Identification of Components
   B. Oil Flow Paths
   C. Operation
   D. Applications

III. High-Low (Press) Systems
    A. Identification of Components
    B. Oil Flow Paths
    C. Operation
    D. Applications

IV. Regenerative System
    A. Identification of Components
    B. Oil Flow Paths
    C. Operation
    D. Applications

V. Hydrostatic Drive
   A. Identification of Components
   B. Loop Oil Flow Paths
   C. Pressure Control
   D. Applications

VI. Vocabulary