



Course Number/Title: MEC K272 Fluid Mechanics/Thermodynamics

Objective:

The Objective of this Course is to Understand and Predict how Matter will Respond when Acted upon by the following Natural Laws:

- 1) Law of Gravity
- 2) Force-Mass-Acceleration Law
- 3) Conservation of Energy Law
- 4) Conservation of Mass Law
- 5) Law of Kinetic Energy
- 6) Law of Potential Energy
- 7) Law of Internal Energy
- 8) Law of Flow Energy
- 9) Law of Work
- 10) Law of Power
- 11) Law of Friction Loss
- 12) Law of Heat

Measurable Outcomes:

Upon Completion of this Course the Student will:

1. Be able to determine pressures, forces, velocities and Buoyancy of static fluids
2. Be able to apply continuity and energy equations to a variety of flow situations
3. Be able to determine pipe head loss due to friction flow problems
4. Be able to analyze engine cycles that involve constant pressure, temperature, volume or entropy. Also to understand the perfect gas laws.