

### **ME 621 Refrigeration and Air-Conditioning (3-0-0-6)**

Psychrometry; Heating- and cooling-load calculations; Air-conditioning systems; Fan and duct systems; Pumps and pumping; Cooling and dehumidifying coils; Air-conditioning controls; Vapour-compression cycles; Compressors; Condensers and evaporators; Expansion devices; Vapour-compression-system analysis; Refrigerants; Multipressure systems; Absorption refrigeration; Heat pumps; Cooling towers and evaporative condensers.

#### *Textbooks:*

- [1] W F Stoecker and J W Jones, *Refrigeration and Air Conditioning*, 2nd ed, McGraw-Hill International Editions, 1982.
- [2] J L Threkeld, *Thermal Environmental Engineering*, 2nd ed, Prentice Hall Inc, 1970
- [3] C P Arora, *Refrigeration and Air Conditioning*, Tata McGraw-Hill, 1996.