#### Indian Institute of Science



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## ME 287 (JAN) 3:0

# Refrigeration Engineering

Instructor(s): G S V L Narasimhan

### **Course description:**

Methods of refrigeration, vapour compression refrigeration-standard and actual vapour compression cycles, multipressure systems, compressors, condensers, expansion devices, evaporators, refrigerants and refrigeration controls, component matching and system integration, vapour absorption refrigeration thermodynamics, single stage, dual stage and dual effect systems. Selection of working fluids, design of generators and absorbers, non-conventional refrigeration systems, vapour jet refrigeration.

### **Prerequisites:**

**Resources:** 

Stoecker, W.F., and Jones, J.W., Refrigeration and Air conditioning, Second Edn, Tata McGraw Hill, 1982., Therlkeld, J.L., Therm al Environm ent al Engineering, Prentice Hall, Inc., Englewood Cliffs, New Jersey, 1970., ASHRAE Handbooks (SI Editions): Fundam entals (2009), Refrigeration (2010).

**Outcomes:** 

Additional information:

Course website: