

## **Course: Refrigeration And Air-Conditioning**

**Course Code:** noc17-mm14

**Session:** 2017-18

**Duration:** 8 Weeks

**Assessment procedures:** Weekly Assignment (25%) + proctored certification Exam (75%)

### **Curriculum of the Course:**

**Week-1:** Recapitulation of Thermodynamics, Introduction to Refrigeration, Air Refrigeration Cycle, Aircraft Refrigeration Cycles.

**Week-2:** Aircraft Refrigeration Cycles, Vapour Compression Cycle, P-h Charts, Actual Vapour Compression Cycle

**Week-3:** Actual Vapour Compression Cycle, Compound Compression with Intercooling, Multiple Evaporator and Cascade System, Problem Solving

**Week-4:** Refrigerants, Vapour Absorption Systems.

**Week-5:** Introduction to Air-conditioning, Properties of Moist Air, Psychrometric Chart, Psychrometric Processes.

**Week-6:** Psychrometric Processes, Infiltration Design Conditions, Cooling Load.

**Week-7:** Cooling Load, Air Distribution System, Problem Solving, Air-Conditioning Systems

**Week-8:** Human Physiology, Thermal Comfort, Indoor Environmental Health, Problem Solving

### **List of students enrolled**

S. No	Name of Students
1	Ravindra Sharma
2	Deepesh Agrawal