

IV Year I - Semester

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## AG419 Refrigeration and Air Conditioning

### **Course Description & Objectives:**

*This subject explores the basics of psychrometry and various types of refrigeration and air-conditions system which will be applicable for both domestic and industry.*

### **Course Outcomes:**

*Students will have practical knowledge of refrigeration system to broaden its industrial applications and uses.*

### **List of Experiments:**

1. Study of vapour compression and vapour absorption systems
2. Study of electrolux refrigerator
3. Solving problems on refrigeration on vapour absorption system
4. Experiments with the refrigeration tutor to study various components of refrigeration
5. Determination of the coefficient of performance of the refrigeration tutor
6. Experiment on humidifier for the determination of humidifying efficiency
7. Experiment on dehumidifier for the determination of dehumidifying efficiency
8. Experiment on the cooling efficiency of a domestic refrigerator
9. Experiments on working details of a cold storage plant and air conditioning unit
10. Experiments with air conditioning tutor to study various components
11. Determination of the coefficient of performance of air conditioning tutor
12. Estimation of refrigeration load; Estimation of cooling load for air conditioner
13. Estimation of humidification and dehumidification load
14. Design of complete cold storage system.