

Course Code : ME 732

Course Title : Advanced Air conditioning and Refrigeration

Credit Hours : 3

Course Description

Absorption refrigeration systems, Thermoelectric refrigeration systems, Indoor air quality, Space air diffusion, Building air distribution.

Course Objectives

Apply the advanced principles of refrigeration and air conditioning.
Design any refrigeration and air conditioning system.

Course Topics

Week no. 1: Absorption refrigeration systems.

Week no. 2: Absorption refrigeration systems.

Week no. 3: Absorption refrigeration systems.

Week no. 4: Thermoelectric refrigeration systems

Week no. 5: Thermoelectric refrigeration systems

Week no. 6: Thermoelectric refrigeration systems

Week no. 7: Indoor air quality / 7th week evaluation.

Week no. 8: Indoor air quality.

Week no. 9: Indoor air quality.

Week no. 10: Space air diffusion.

Week no. 11: Space air diffusion.

Week no. 12: Space air diffusion. / 12th week evaluation

Week no. 13: Building air distribution.

Week no. 14: Building air distribution.

Week no. 15: Presentation on selected topics.

Week no. 16: Final examination

References

ASHRAE, Applications

ASHRAE, Fundamentals

- Stocker W. F. "Refrigeration and Air Conditioning"