

# MECHANICAL COURSES

## AC&R TROUBLESHOOTING (M11A)

**OBJECTIVE:**

This seminar provides knowledge and skills in inspection, maintenance and troubleshooting of AC & R systems.

**WHO SHOULD ATTEND?**

This course is recommended for anyone involved with the maintenance of AC & R systems.

**COURSE CONTENT:**

- AC&R Overview
- Heat and Matter
- Basic Refrigeration Cycle
- Air Properties & Simple Psychometric
- Instrumentation and Test Equipment
- Air Fans
- Physical Properties of Refrigerants
- Air Ducts and Filters
- Refrigerants Filters, Driers & Filter Driers
- A/C & R Circuit Troubleshooting
- Troubleshooting Electric Controls

**PRACTICAL TASKS:**

- Identifying AC & R components.
- Using psychometric chart
- Practical calculation of relative humidity dew point temperature, Specific humidity and enthalpy of air.
- Using A/C & R laboratory model in lab for checking high & low side operation and calculation of air properties passing through the evaporator.

**Duration: 5 Days**

Date:	Venue:	Cost:
Jan 3 – 7	Dammam	SR7,000
Jul 4 – 8	Riyadh	SR 8,000
Nov 14 – 18	Dammam	SR7,000

## AIR CONDITIONING MACHINE OPERATION (M86A)

**OBJECTIVE:**

To provide the participants with the knowledge of air conditioning machine operation.

**WHO SHOULD ATTEND?**

Engineers and technicians who work in the field of refrigeration and air conditioning.

**COURSE CONTENT:**

- General considerations
- Purposes
- Common factors
- Compressors
- Condensers
- Cooling towers
- Liquid coolers
- Centrifugal pumps
- Motor and motor controls
- Room a/c and dehumidifiers
- Package equipments
- Fans
- Evaporative air coolers
- Air heating coils
- Air cleaners
- Boilers
- Classification of methods

**Duration: 5 Days**

Date:	Venue:	Cost:
Feb 14-18	Dammam	SR7,000
Jun 6-10	Jubail	SR 8,000
Nov 14-18	Dammam	SR7,000