

# OPERATION & MAINTENANCE OF AIR CONDITIONING AND MECHANICAL VENTILATION (ACMV) COMPETENCY COURSE – LEVEL 2

## Prerequisite:

- ✓ Completed O&M Level 1

## Registration Fee:

Ashrae Member: RM2,000.00

Non-Member: RM2,700.00

## Venue:

ASHRAE Malaysia Secretariat  
518, Block A,  
Kelana Business Centre,  
Kelana Jaya, Selangor



7 - 9 August 2026  
9:00 AM - 5:30 PM



**Ts. Ng Wen Bin**  
Senior Lecturer,  
UNIKL MFI



# Operation & Maintenance of Air-Conditioning And Mechanical Ventilation (ACMV) Competency Course – Level 2

## Day One

Time	Topic	Duration
8.30 - 8.50am	Participation Registration	20 Min
8.50 - 9.00am	Opening Speech	10 Min
9.00 - 10.30am	Chapter 1: Air Conditioning and Refrigeration Systems <ul style="list-style-type: none"> <li>• Type of Air Conditioning system               <ul style="list-style-type: none"> <li>◦ Central air conditioning system</li> <li>◦ Window air conditioning unit</li> <li>◦ Split air conditioning system</li> <li>◦ Ductless mini-split air conditioning system</li> <li>◦ Packaged air conditioning system</li> <li>◦ Variable refrigerant flow (VRF) system</li> <li>◦ Chilled water system</li> <li>◦ Absorption cooling system</li> <li>◦ Heat pump system..</li> </ul> </li> </ul>	1 Hr 30 Min
10.30 - 10.45am	Morning Tea Break	15 Min
10.45 - 1.00pm	Chapter 2: Introduction to Psychrometric	2 Hr 15 Min
1.00 - 2.30pm	Lunch Break	1 Hr
2.30 - 3.30pm	Chapter 3: Measuring Cooling Capacity of an air conditioning Unit <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Theoretical Background</li> <li>• Equipment and Tools Required</li> <li>• Measuring procedure</li> <li>• Calculation and data analysis</li> <li>• Interpretation of results</li> <li>• Practical activities</li> </ul>	1 Hr
3.30 - 3.45pm	Afternoon Tea Break	15 Min
3.45 - 5.30pm	Practical Activities	1 Hr 45 Min
5.30pm	End Of Day 1	

# Operation & Maintenance of Air-Conditioning And Mechanical Ventilation (ACMV) Competency Course – Level 2

## Day Two

Time	Topic	Duration
8.30 - 8.40am	Participation Registration	15 Min
8.45 - 10.30am	Chapter 4: Air and Water Distribution System <ul style="list-style-type: none"> <li>Introduction to Air Distribution Systems</li> <li>Key Components of Distribution Systems</li> <li>Principles of Distribution System Design</li> <li>Balancing and Optimization</li> <li>System Controls and Automation</li> <li>Common Issues and Troubleshooting</li> </ul>	1 Hr 45 Min
10.30 - 10.45am	Morning Tea Break	15 Min
10.45 - 1.00pm	Chapter 5: Sound and Vibration in Air Conditioning System <ul style="list-style-type: none"> <li>Sound and sound transmission that are relevant to air system design</li> <li>Major sound sources and absorbers found in air systems</li> <li>Calculation of sound reduction methods</li> </ul>	2 Hrs 15 Min
1.00 - 2.00pm	Lunch Break	1 Hr
2.00 - 3.30pm	Chapter 5: Sound and Vibration in Air Conditioning System <ul style="list-style-type: none"> <li>Measuring procedure</li> <li>Practical activities</li> </ul>	1 Hr 30 Min
3.30 - 3.45pm	Tea Break	15 Min
3.45 - 5.30pm	Practical Activities	1 Hr 30 Min
5.30pm	End of Day 2	

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## Day Three

Time	Topic	Duration
8.30 - 9.00am	Participation Registration	15 Min
9.00 - 10.00am	Theoretical Examination	1 Hr
10.00 - 10.15am	Morning Tea Break	15 Min
10.15 - 12.00pm	Practical Assessment	1 Hr 45 Min
12.00 - 1.00pm	Lunch Break	1 Hr
1.00 - 5.30pm	Practical Assessment & Tea Break	4 Hrs 30 Min
5.30pm	End of Day 3	