



# Diploma in Refrigeration and Air-Conditioning Engineering (DRACE)

## For Whom

The Diploma in Refrigeration and Air-Conditioning Engineering (DRACE) is an industry-responsive program designed for individuals seeking advanced theoretical knowledge and hands-on skills in the HVAC-R field .

## Entry Requirement

Age: 18 years old

Academic Requirement:

> Minimum Grade "C6" in at least 3 GCE " O" Level subjects passes in English, Maths and Science or equivalent OR;

> International Secondary level qualification (Year 10) with Pass in 3 subjects (English, Maths and Science) OR;

Language Requirement:

> Minimum Grade "C6" in " O" Level subject pass in English OR

> Pass in International Secondary level (Year 10) in English

Minimum Age Requirement:

> 18 years old and above

Mature Candidate Requirement:

> Mature-aged student 30 years and above with at least 8 years of working experience and WPLN Assessment Level 6, OR

> At least 23 years old with 5 years of working experience in Refrigeration and Air Conditioning with relevant certificates.

# Diploma in Refrigeration and Air-Conditioning Engineering (DRACE)

## Course Overview

The Diploma in Refrigeration and Air-Conditioning Engineering (DRACE) comprehensive program equips learners to handle complex refrigeration systems with a strong focus on centralised air-conditioning, Variable Refrigerant Volume (VRV)/Variable Refrigerant Flow (VRF) systems, and split-type units. It introduces essential technical components such as engineering heat load calculation for system design and energy efficiency analysis. Utilizing a blended learning approach, the course integrates face-to-face instruction with digital tools like micro-learning via QR codes and online performance reflections. The curriculum emphasizes practical skills, covering tasks such as troubleshooting mechanical and electrical faults, refrigerant handling, and system commissioning.

## Course Content

- Module 1 – Fundamentals of Refrigeration and Air-Conditioning
- Module 2 – Centralized Air-Conditioning Systems and VRV Technology
- Module 3 – Engineering Heat Load Calculation
- Module 4 – Refrigeration System Troubleshooting and Diagnostics
- Module 5 – Refrigerant Handling, Charging, and Recovery
- Module 6 – Electrical Components and Control Systems in HVAC-R
- Module 7 – Industrial Attachment (IA)

## Course Duration

- Total Duration: 6 months of study + 6 months of IA.
- Total Contact Hours: 198 hours (including assessments).
- Full-Time: 5 days/week, 3 hours/day (08:30 AM to 11:45 AM).
- Part-Time: Weekend classes, 8 hours/week (08:30 AM to 6:00 PM).

## Medium of Instruction

English

## Teaching Methodology

- Face to face classroom teaching / Practical Demonstration

## Class Size

Maximum 25

# Diploma in Refrigeration and Air-Conditioning Engineering (DRACE)

## Key Person In-charge

Mr. Monish V (General Manager - Corporate Support Division)

## Funding & Claims:

NA

## Facilitator/Learner Ratio:

1:25 for Theory Lesson & Assessment

## Course Attendance Minimum:

75% attendance | (90% attendance for International Students)

## Course Fee Inclusive of GST:

S\$3,488.00

## Miscellaneous Fee

PURPOSE OF FEE	AMOUNT WITH GST
<ul style="list-style-type: none"><li>• Course Application Fee</li></ul>	S\$54.5
<ul style="list-style-type: none"><li>• Late Payment Fee</li></ul>	S\$109
<ul style="list-style-type: none"><li>• Deferment Administration Fee</li></ul>	S\$109
<ul style="list-style-type: none"><li>• Course Transfer Administration Fee</li></ul>	S\$109
<ul style="list-style-type: none"><li>• Supplementary Class (Tuition) / Make up Class Fee (Per Hour)</li></ul>	S\$43.6
<ul style="list-style-type: none"><li>• Supplementary Examination Fee (Per Module)</li></ul>	S\$109
<ul style="list-style-type: none"><li>• Appeal Evaluation Fee</li></ul>	S\$21.8
ADMINISTRATIVE FEE (APPLICABLE TO INTERNATIONAL STUDENTS)	AMOUNT WITH GST
<ul style="list-style-type: none"><li>• Medical Insurance</li></ul>	S\$87.2
<ul style="list-style-type: none"><li>• Administrative Fee for Student Pass Application</li></ul>	S\$54.5
<ul style="list-style-type: none"><li>• ICA Application Fees</li></ul>	S\$45
<ul style="list-style-type: none"><li>• ICA issuance Student Pass Application Fees</li></ul>	S\$90

# Diploma in Refrigeration and Air-Conditioning Engineering (DRACE)

## Learning Environment:

- Our ergonomically designed classrooms are fully air-conditioned, equipped with whiteboards; audio/video equipment and free wi-fi

## Assessment Advice :

- To receive the Diploma, students must pass two components for each module:  
Written Examination: Minimum score of 50/100.  
Practical Assessment: Must demonstrate competency in required tasks.

## Certification

- This academy is registered under PEI and awarded by Eversafe Academy Pte Ltd  
Based on the successful completion of the course and assessment, a certificate of achievement endorsed by Eversafe Academy Pte. Ltd., will be awarded to the trainee
- E-cert Available

## Course Venue

- 2 Kampong Kapur Road Little India Near, Jalan Besar, MRT Station Exit B, Singapore 208674
- 3 Soon Lee Street, #04-14/16&17, Pioneer Junction, Singapore-627606

## Renewal Points for professionals

NA

## Registration Venue

No. 2, Kampong Kapur Road, Little India, Near Jalan Besar, MRT Station Exit B, Singapore - 208674

No. 3, Soon Lee Street, #04-14/16 & 17, Pioneer Junction, Singapore - 627606.

No. 2, Joo Koon Road, Singapore - 628966.

No. 2, Wan Lee Road, Singapore - 627934.



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