

# **Hong Kong International Aviation Academy's Professional and Vocational Training Services**



HONG KONG INTERNATIONAL  
AVIATION | 香港國際  
ACADEMY | 航空學院  
A DIVISION OF THE AIRPORT AUTHORITY HONG KONG

# HKIAA's vision to become a top choice globally for aviation training

Building a sustainable  
workforce at HKIA  
to support the growth of  
HK's aviation industry

Establish a regional aviation  
Training hub to support the  
Development of aviation in  
APAC







## **ATTRACT**

Outreaching to attract the next generation of aviation professionals



## **Prepare**

Basic aviation knowledge for new Airport joiners



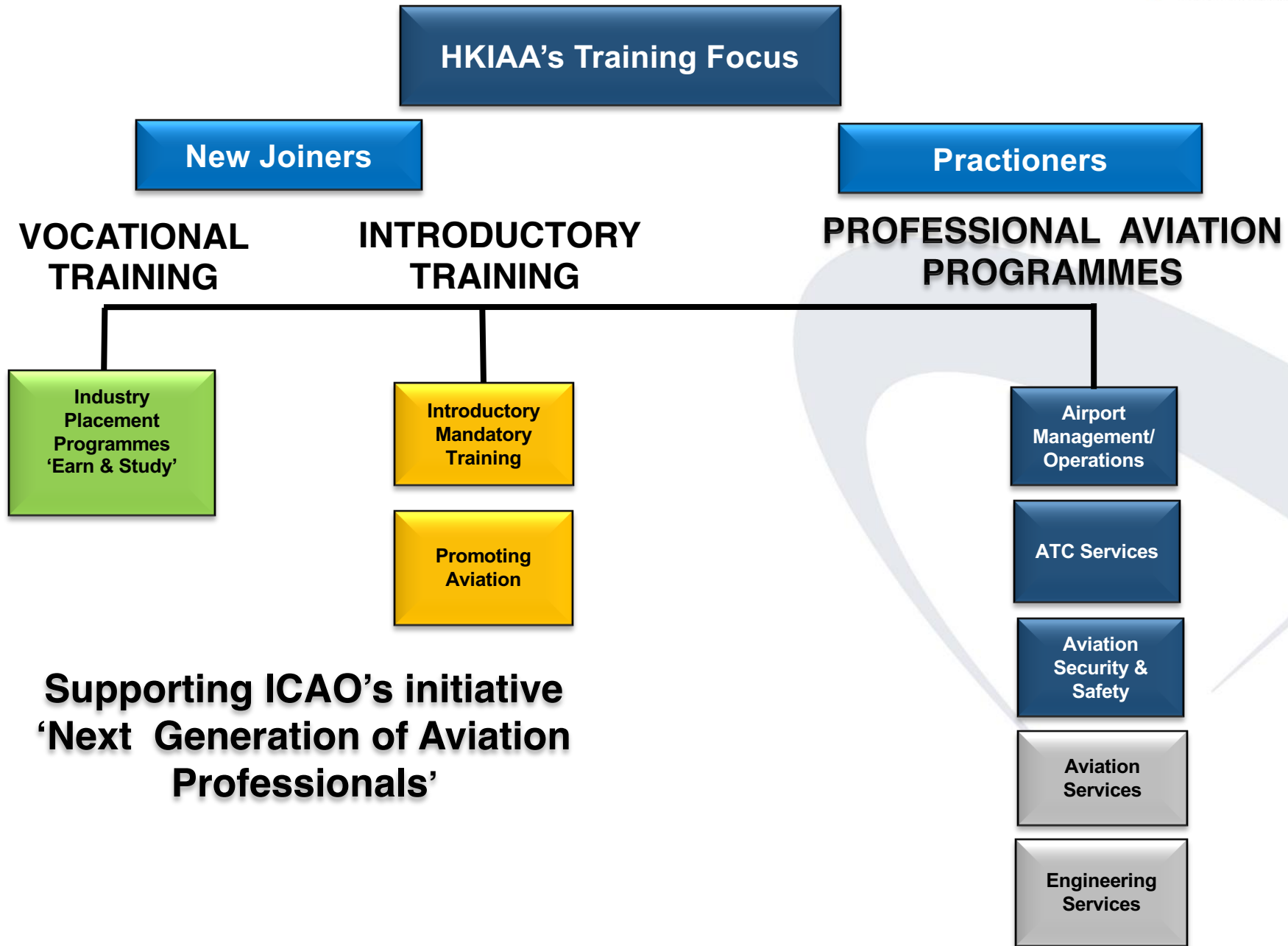
## **RETAIN**

Industry Placement Programmes - 'work and learn' to attract & retain



## **NUTURE**

Up-skilling - Professional Aviation Training Faculties (ICAO accredited)



# Air Traffic Control (ATC)

# Establishing HKIAA as an International ATC Training Centre



## ATC Training Needs in APAC over 5 years

Indonesia = 750  
Philippines = 500  
Cambodia = 150



- **Provide theoretical and practical training to ICAO Annex 1 Standards**
- **Basic Ab initio training delivered in Hong Kong for the first time using latest simulator suites**
- **HKIAA is providing skills & knowledge for CAD's Student ATC Officers between September 2019 to July 2020**
- **During 2020 expand to APAC States**

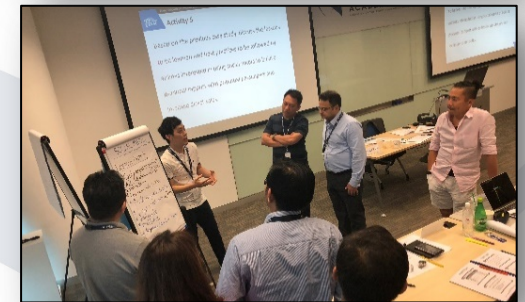


# Industry Placement Scheme



# Vocational and Professional Education and Training in HKIAA

- Implementing the proposals by the Task Force on Promotion of VPET
- HKIAA is a co-founder of the CTAN (Corporate Tech Academy Network)
- HKIAA now offers a Diploma in Aviation Operations with 12 months industry placement
- Providing a articulation pathway via HK's qualifications framework
- HKIAA has cutting edge VR technologies to adapt professional and vocational training for a new generation



# Industry Placement Program

To nurture talent and provide career opportunities





## Diploma in Aviation Operations (DAO) at QF3



## Placement Category 實習工作類別

Cargo and Air Freight 航空貨運

Aircraft Catering Services 航空配餐

Aircraft Engineering 飛機工程

Ramp and Flight Operations 停機坪服務

Customer Services/ Ground Handling Services  
客戶服務/地勤

Aviation Security 航空保安

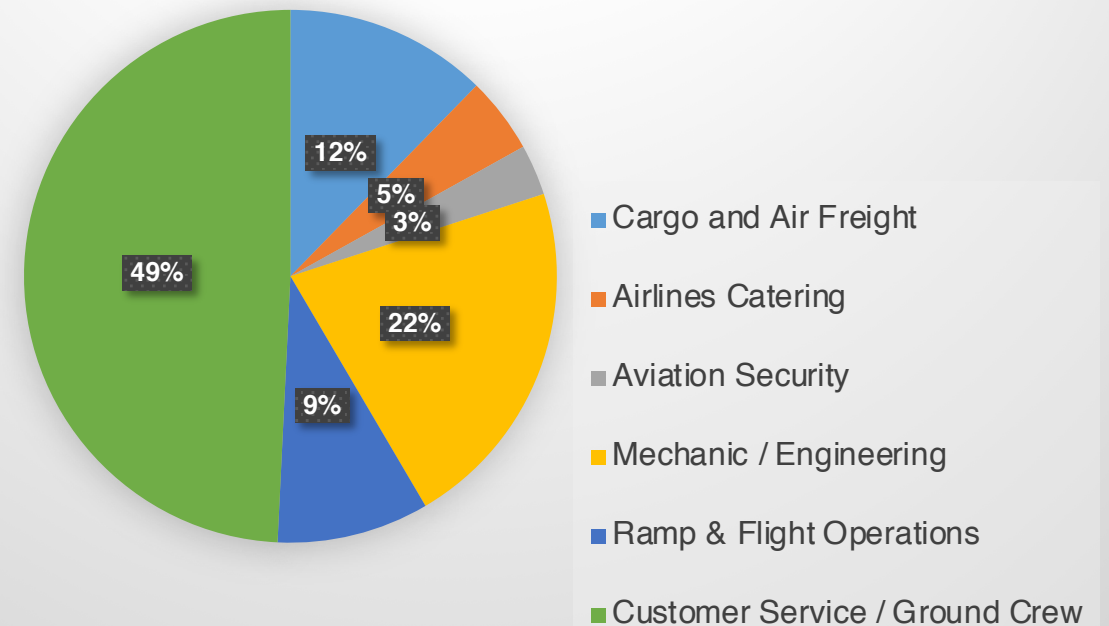
\*For reference only, subject to changes 所有實習工作類別只供參考，可能有所變動



# Summary of Placement Positions matched to Diploma in Airport Operations Students

Placement Categories	Percentage
Customer Service / Ground Crew	49.2%
Aircraft Engineering	21.5%
Cargo & Air Freight	12.3%
Ramp & Flight Operations	9.2%
Airlines Catering	4.6%
Aviation Security	3.1%
Total	100%

Summary of Placement Category



# Virtual Reality and Training

## Virtual Training Environments (VTE)





## VTE offers an ‘active learning experience’

**“To ensure cognitive skills acquired in a VTE are transferable to the real world, training objectives need to be tied directly to realistic scenario events, which in turn are directly linked to measures of specific required behaviours”.**

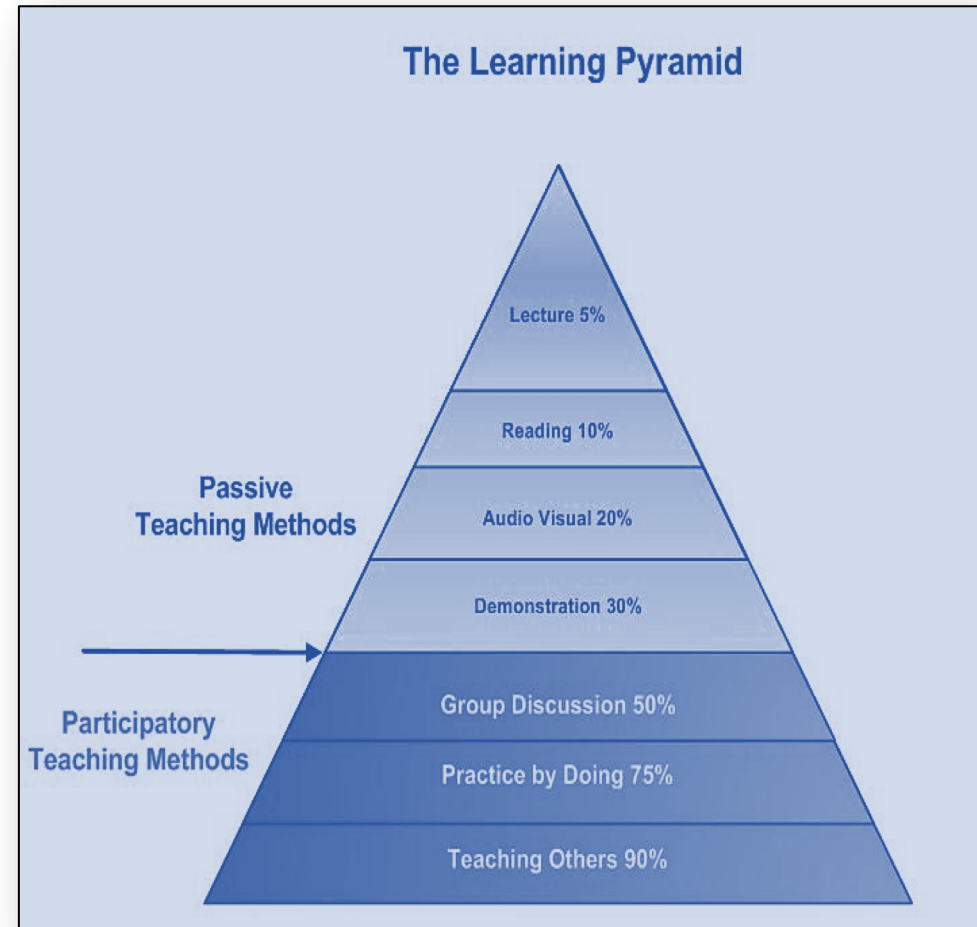
J.Tichon (2007)

### What VTE's provide

- Learning environment is immersive, customizable providing engagement and motivation.
- Students can observe, and manipulate the virtual world.
- Safe environments for students to learn repeatable skills training by ‘failing’ and ‘succeeding’.
- Multi user environment

# Maximizing learning using VTE

- VR in a VTE combined with gamification improves the user experience:
  - Provide realism,
  - Provide engagement, and
  - Drives motivation
- Gaming with learning focused simulations should contain:
  - Time constraints,
  - Limited resources,
  - Challenges,
  - Excitement,
  - Uncertainty,
  - Anticipation,
  - Fear,
  - Practice.



## Peak Performance Pyramid

Source Peak Performance Center

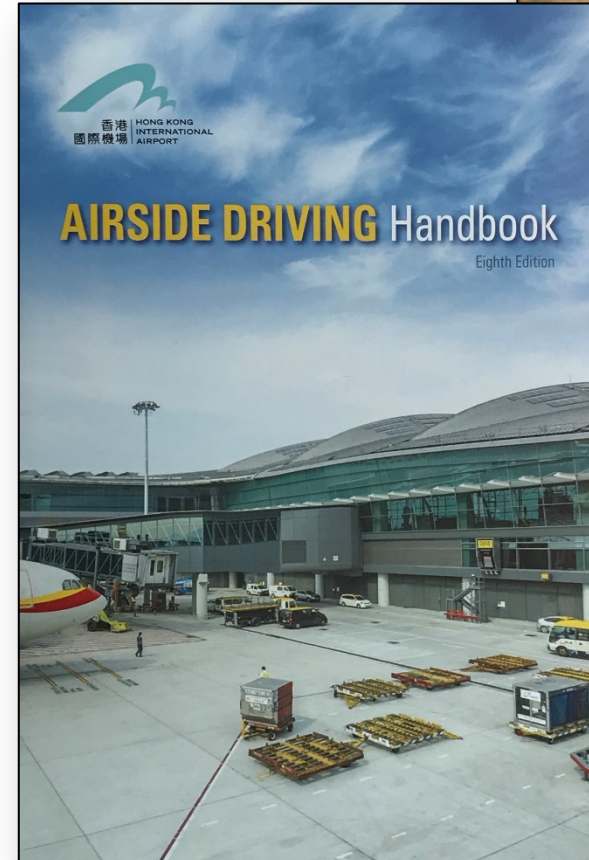
# What and When to use VR?

Operating airport equipment requires the operator certification and annual recertification of skills.

- Air-bridge operators.
- Airside driving.
- Cargo and catering loaders.
- Refueling operations.....etc.

VR overrides restrictions on conventional training

- Increase training capacity.
- Improve training experience.
- Reduce training costs.





# HKIAA's new permanent home

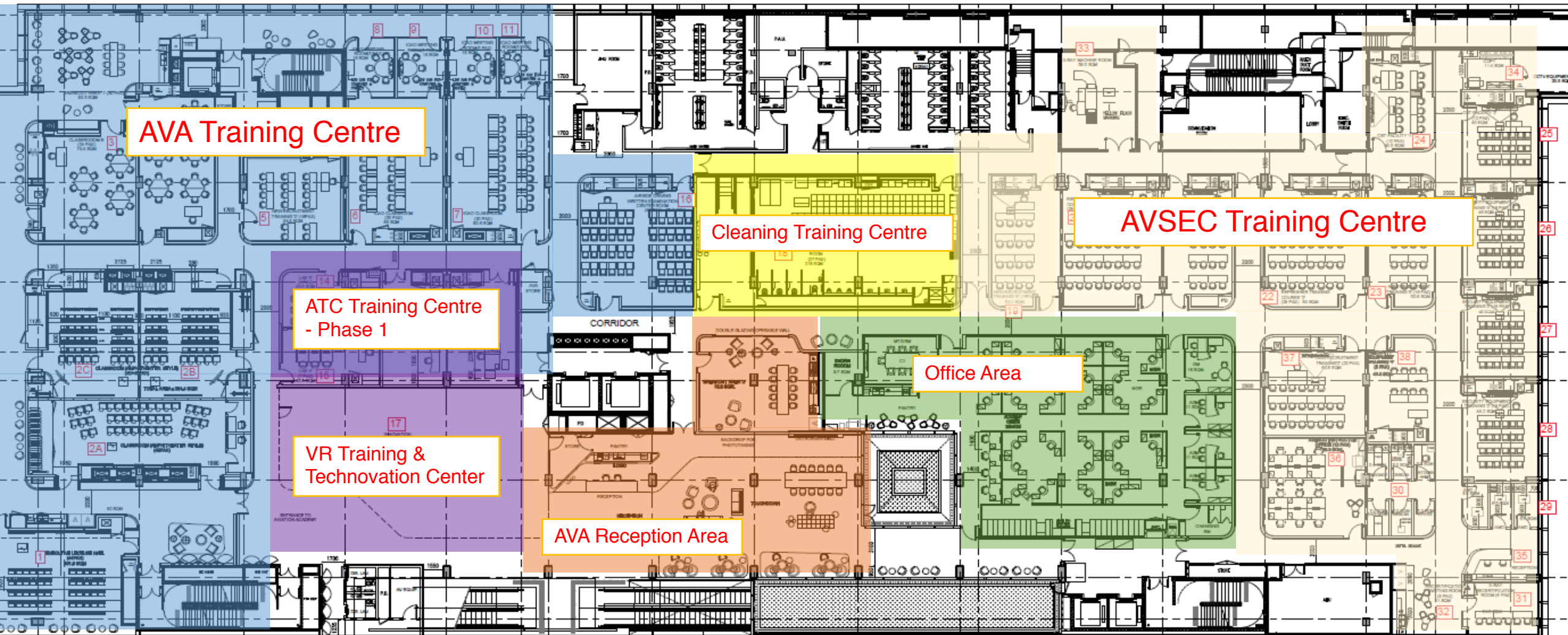
# Facility Readiness and Launch of HKIAA's New Permanent Home (CP4)





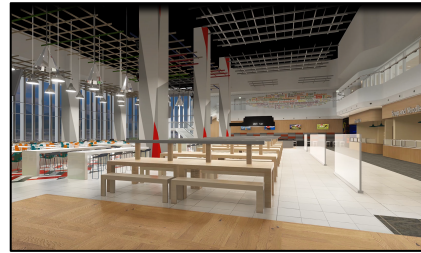
# HKIAA New Permanent Home

## CP4E-L9-Academy Floor Plan

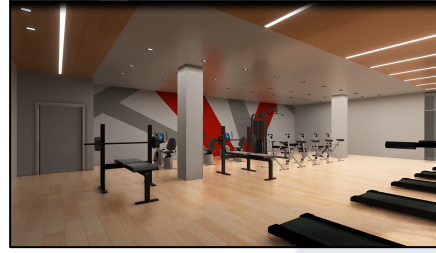


# HKIAA New Headquarters at CP4E

10/F – 11/F  
Airport Community Centre



Staff Canteen



Gymnasium



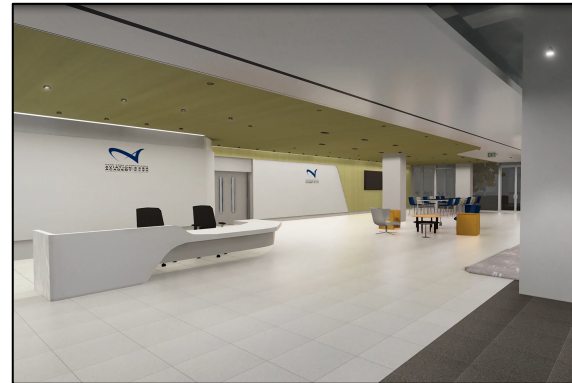
Multi-function facilities



Outdoor resting area



9/F HKIAA Headquarter



HKIAA Reception



ATC Training Centre



Digital Training Centre



Auditorium

G/F Child Care Centre



機場幼兒園  
Airport Preschool



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