

# Professional Certificate in Aerospace Workshop Operations



## Course Description

The Professional Certificate in Aerospace Workshop Operations train participants as inspectors, CRS and ARC signatories of Aerospace Overhaul / Repair workshops.

## Who Should Attend

Practising artisans and mechanics, who wish to upgrade to inspectors and certifying signatories for Overhaul / Repair workshops. Participants who have successfully completed the course within the scope as described in the Certification Privilege Table for both Avionics and Mechanical, after 1 July 2005 will also required to pass CAAS L12 Basic Airworthiness Administration paper before he / she can be qualified as a Workshop Certifying Staff.

(N.B. The credits obtained from this exam are not meant to offset against the Aircraft Maintenance Engineers' basic exam).

## Minimum Entry Requirements

ITE NTC 3 or GCE 'N' / 'O' Level

Applicants without the above qualifications may be admitted on a case by case basis. The medium of instruction is English.

## Duration

Period : 3 - 4 months (approximately 15 weeks) per module

Time of course : 7.00pm to 10.00pm (Part Time)

Days of course : Tuesday and Thursday (2 times per week) *(subject to changes)*

## Payment Mode

Cash, NETS or Cheque in Singapore Dollars

3.5% surcharge if payment by Visa / MasterCard

## Course Fee

Module M1000 - S\$2,354.00 (78 Hours)

Module M2000 - S\$2,247.00 (72 Hours)

Module M2200 - S\$2,247.00 (72 Hours)

Module M2500 - S\$1,926.00 (54 Hours)

Module M3000 - S\$1,872.50 (60 Hours)

Module M3200 - S\$2,054.40 (54 Hours)

Module M4000 - S\$2,461.00 (72 Hours)

**The course is eligible for SkillsConnect Training Grant**

**(applicable to company sponsored applicants who are SCs and SPRs)**

*All fees quoted above are inclusive of 7% GST*

## Course Structure

### Basic Module

**Module 1000 is common and basic module.**

- 1) Basic Engineering and Aerodynamics
- 2) Aviation Practices
- 3) Human Factors and Error Management

### Specialisation Modules

**Module 2000 is specialisation module for Airframe (Fixed Wing).**

- 1) Structures and Repairs
- 2) Hydraulic and Pneumatic Power Systems
- 3) Air Conditioning and Pressurization Systems

**Module 2200 is specialisation module for Engine.**

- 1) Piston Engine Theory and Construction
- 2) Piston Engine Systems
- 3) Propellers
- 4) Turbine Engine Theory, Construction and Systems
- 5) Electrical and Instrument Systems

**Module 2500 is specialisation module for Airframe (Rotary Wing).**

- 1) Theory of Flight and Control
- 2) Constructional Arrangement
- 3) Flight Controls
- 4) Transmission Systems
- 5) Equipment

**Module 3000 is specialisation module for Avionics (General).**

- 1) Electrical Fundamentals
- 2) Servomechanism and Electronics
- 3) Automatic Pilot - Airplanes / Rotorcraft

**Module 3200 is specialisation module for Avionics (Instruments).**

- 1) Instrument Systems

**Module 4000 is specialisation module for Avionics (Comm & Nav).**

- 1) Radio Fundamentals 1
- 2) Radio Fundamentals 2



**Air Transport Training College**

Professional Development Centre of the Singapore Institute of Aerospace Engineers

ERF Registration Number: 199901790H

From 6 August 2010 to 5 August 2014

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## Scope of Operation

The scope in which holders of the certificate may certify CRS and ARC is described in the Certification Privilege Table for both Avionics and Mechanical shown below

### Certification Privilege Table (Avionics)

Organization Rating	Category	PCAWO Modules							
		M1000	M1000 +M3000	M1000 +M3200	M1000 +M4000	M1000 +M3000 +M3200	M1000 +M3000 +M4000	M1000 +M3200 +M4000	M1000 +M3000 +M3200 +M4000
B1 & B3	Complete Turbine Engines / APU	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B2	Complete Piston Engines	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C1	Air Conditioning & Pressurization		●			●	●		●
C2	Auto Flight		●			●	●		●
C3	Communication & Navigation				●		●	●	●
C4	Doors - Hatches		●			●	●		●
C5	Electrical Power		●			●	●		●
C6	Equipment	●	●	●	●	●	●	●	●
C7	Engines - APU		●			●	●		●
C8	Flight Controls		●			●	●		●
C9	Fuel - Airframe		●			●	●		●
C10	Helicopter - Rotors	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C11	Helicopter - Transmission	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C12	Hydraulic		●			●	●		●
C13	Instruments			●		●		●	●
C14	Landing Gear		●			●	●		●
C15	Oxygen	●	●	●	●	●	●	●	●
C16	Propellers	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C17	Pneumatic		●			●	●		●
C18	Ice / Rain / Fire Protection	●	●	●	●	●	●	●	●
C19	Windows	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C20	Structures	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

### Certification Privilege Table (Mechanical)

Organization Rating	Category	PCAWO Modules							
		M1000	M1000 +M2000	M1000 +M2200	M1000 +M2500	M1000 +M2000 +M2200	M1000 +M2000 +M2500	M1000 +M2200 +M2500	M1000 +M2000 +M2200 +M2500
B1 & B3	Complete Turbine Engines / APU			●		●		●	●
B2	Complete Piston Engines			●		●		●	●
C1	Air Conditioning & Pressurization		●			●	●		●
C2	Auto Flight	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C3	Communication & Navigation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C4	Doors - Hatches		●			●	●		●
C5	Electrical Power	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C6	Equipment	●	●	●	●	●	●	●	●
C7	Engines - APU			●		●		●	●
C8	Flight Controls		●			●	●		●
C9	Fuel - Airframe	●	●	●	●	●	●	●	●
C10	Helicopter - Rotors				●		●	●	●
C11	Helicopter - Transmission				●		●	●	●
C12	Hydraulic		●			●	●		●
C13	Instruments	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C14	Landing Gear		●			●	●		●
C15	Oxygen	●	●	●	●	●	●	●	●
C16	Propellers			●		●		●	●
C17	Pneumatic		●			●	●		●
C18	Ice / Rain / Fire Protection	●	●	●	●	●	●	●	●
C19	Windows	●	●	●	●	●	●	●	●
C20	Structures		●			●	●		●

Note: PCAWO is an integrated course designed strictly for qualifying workshop certifying staff.

The information contained in this brochure is correct as of 04 October 2011 and is subject to change without notice. ATTC reserves the right to make changes to the course structure, admission requirements, course fee, examination rules and regulations, lecturers, dates and venue of lectures.