

Professional Certificate in Aerospace Workshop Operations

**Compulsory: Please attach highest qualification with course application form.
(Submit copy of NRIC and student enrolment form on 1st day of course)**

**JAN / APR / JUL /
SEP INTAKE**

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).

Admission Requirement

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.

Course Duration

Period : Approximately 2 - 3 months per module

Time of course : 7.00pm to 10.00pm (part-time)

Days of course : 3 nights per week (Monday, Wednesday, Friday)

Payment Mode

Cash, NETS or Cheque in Singapore Dollars

3.5% surcharge if payment by Visa / MasterCard

Course Fee (All fees quoted above are exclusive of GST)

Module M1000 - S\$2,398 (78 Hours)

Module M2000 - S\$2,289 (72 Hours)

Module M2200 - S\$2,289 (72 Hours)

Module M2500 - S\$1,962 (54 Hours)

Module M3000 - S\$1,907.50 (60 Hours)

Module M3200 - S\$2,092.80 (54 Hours)

Module M4000 - S\$2,507 (72 Hours)

The course is eligible for SkillsConnect Training Grant

(applicable to company sponsored applicants who are SCs or SPRs)

**Course Commencement is subjected to the
minimum number of participants**

Course Structure

Basic Module (M1000)

M1000A & M1000B Basic Module

Covers the following:

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

Module 2000 Airframe – Fixed Wing

M2000A & M2000B Airframe – Fixed Wing

Covers the following:

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

Module 2200 Engine

M2200A & M2200B Engine

Covers the following:

- 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 Airframe – Rotary Wing

M2500A & M2500B Airframe – Rotary Wing

Covers the following:

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

Module 3000 Avionics (General)

M3000A & M3000B Avionics (General)

Covers the following:

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

Module 3200 Avionics (Instruments)

M3200A & M3200B Avionics (Instruments)

Covers the following:

- 1) Instrument Systems

Module 4000 Avionics (Comm & Nav)

M4000A & M4000B Avionics (Comm & Nav)

Covers the following:

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



Scope of Operation

The scope in which holders of the certificate may certify CRS and ARC is described in the following table for both Mechanical and Avionics

EXAMINATION REQUIREMENTS FOR CERTIFYING STAFF			(MECHANICAL)
Organisation Rating	Category	Required CAAS Papers	Required CAAS Approved PCAWO Modules
B1 & B3	Complete Turbine Engines / APU	B11, B13, C14 & C15	M1000 + M2200
B2	Complete Piston Engines	B11, B13, C11 & C12	M1000 + M2200
C1	Air Conditioning & Pressurisation	B11 & A16	M1000 + M2000
C2	Auto Flight		
C3	Communications & Navigation		
C4	Doors – Hatches	B11 & A12	M1000 + M2000
C5	Electrical Power		
C6	Equipment	B11	M1000
C7	Engine / APU	B11 + C11 or C14	M1000 + M2200
C8	Flight Controls	B11 & B12	M1000
C9	Fuel	B11	M1000
C10	Helicopter – Rotors	B11 & A15	M1000 + M2500
C11	Helicopter – Transmission	B11 & A15	M1000 + M2500
C12	Hydraulic Power	B11 & A14	M1000 + M2000
C13	Instrument		
C14	Landing Gear	B11 & A14	M1000 + M2000
C15	Oxygen	B11	M1000
C16	Propellers	B11 & C13	M1000 + M2200
C17	Pneumatic	B11 & A14	M1000 + M2000
C18	Protection Ice / Rain / Fire	B11	M1000
C19	Windows	B11	M1000
C20	Structural	B11 & A12	M1000 + M2000

EXAMINATION REQUIREMENTS FOR CERTIFYING STAFF			(AVIONICS)
Organisation Rating	Category	Required CAAS Papers	Required CAAS Approved PCAWO Modules
B1 & B3	Complete Turbine Engines / APU		
B2	Complete Piston Engines		
C1	Air Conditioning & Pressurisation	F11 & F13	M1000 + M3000
C2	Auto Flight	F11 & I13 OR I14	M1000 + M3000
C3	Communications & Navigation	F11 & R11	M1000 + M4000
C4	Doors – Hatches	F11 & F12	M1000 + M3000
C5	Electrical Power	F11 & F12	M1000 + M3000
C6	Equipment	F11	M1000
C7	Engine / APU	F11 & F13	M1000 + M3000
C8	Flight Controls	F11 & F13	M1000 + M3000
C9	Fuel	F13	M1000 + M3000
C10	Helicopter – Rotors		
C11	Helicopter – Transmission		
C12	Hydraulic Power	F11 & F13	M1000 + M3000
C13	Instrument	F11 & I11	M1000 + M3200
C14	Landing Gear	F11 & F13	M1000 + M3000
C15	Oxygen	B11	M1000
C16	Propellers		
C17	Pneumatic	F11 & F13	M1000 + M3000
C18	Protection Ice / Rain / Fire	F11	M1000
C19	Windows		
C20	Structural		

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

The information contained in this brochure is correct as of **9 March 2018** 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.