



Accredited Africa Training Institute for Capacity Development

Unit FO409, Hatfield Plaza · 1122 Burnett St, Hatfield 0028 · Pretoria, Gauteng · South Africa

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COURSE BROCHURE

Demonstrate Understanding Of The Principles Of Flight Training

Law, Military Science and Security / Safety in Society

Unit Standard 120041 · NQF Level 5 · 6 Credits · 3 Days

COURSE OVERVIEW

The purpose of this course is to equip learners with a foundational understanding of the principles of flight, including aerodynamics, aircraft controls, and flight theory. It is designed to provide the knowledge required to operate aircraft safely and effectively, forming the basis for further pilot training.

Category	Law, Military Science and Security
Subfield	Safety in Society
Unit Standard	120041
Accreditation	SAQA Accredited · NQF Level 5 · 6 Credits
Duration	3 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Demonstrate an understanding of the basic principles of aerodynamics, including lift, weight, thrust, and drag.
- Explain the function and operation of primary and secondary flight controls.
- Analyze the forces acting on an aircraft during various phases of flight.
- Apply knowledge of aircraft stability and control to predict aircraft behavior.
- Evaluate the effects of environmental factors such as wind, temperature, and altitude on flight performance.
- Demonstrate understanding of flight instruments and their role in navigation and control.

WHO SHOULD ATTEND

- This course is intended for aspiring pilots, aviation enthusiasts, and ground crew personnel who require a theoretical understanding of flight principles.
- It is also suitable for individuals pursuing careers in aviation maintenance or operations.

COURSE OUTLINE

Day 1: Foundations of Flight Principles

- Introduction to aerodynamics: Bernoulli's principle and Newton's laws.
- The four forces of flight and their interactions.
- Aircraft axes of motion: pitch, roll, and yaw.
- Primary flight controls: ailerons, elevator, and rudder.
- Secondary flight controls: flaps, slats, and trim.
- Basic aircraft stability: static and dynamic stability.
- Factors affecting lift and drag: angle of attack, airspeed, and density altitude.
- Practical demonstration using flight simulation or models.

Day 2: Flight Performance and Human Factors

- Aircraft performance phases: takeoff, climb, cruise, descent, landing.
- Weight and balance calculations and their effect on aircraft performance.
- Load factor and maneuvering speed (V_a).
- Introduction to human factors: the SHELL model.
- Situational awareness and decision-making.
- Communication and crew resource management (CRM).
- Fatigue, stress, and their impact on pilot performance.
- Case studies of human factors-related incidents.

Day 3: Advanced Applications and Practical Integration

- Emergency procedures: engine failure, fire, and system malfunctions.
- Unusual attitude recovery and upset prevention.
- Advanced maneuvers: stalls (power-on, power-off), spins, and steep turns.
- Introduction to flight training methodologies and lesson planning.
- Safety management systems (SMS) in flight operations.
- Practical scenario-based training exercises.
- Review and assessment of key concepts.
- Course evaluation and feedback.

ASSESSMENT & CERTIFICATION

Delegates are assessed through exercises and a final test. A mark of **50% or above** earns an **AATICD Certificate of Completion**, issued digitally with a unique verification code. This course carries **6 NQF credits** at **NQF Level 5**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 18,800.00	R 18,800.00
1	In-House	R 24,500.00	R 24,500.00
1	On-Campus (Pretoria)	R 28,100.00	R 28,100.00

UPCOMING SESSIONS

Start	End	Method	Venue
11 Aug 2026	13 Aug 2026	On-Campus	Durban, South Africa
11 Aug 2026	13 Aug 2026	On-Campus	Dubai, UAE
12 Aug 2026	14 Aug 2026	On-Campus	Pretoria, South Africa
12 Aug 2026	14 Aug 2026	On-Campus	Mauritius
17 Aug 2026	19 Aug 2026	On-Campus	Durban, South Africa
17 Aug 2026	19 Aug 2026	On-Campus	Dubai, UAE
18 Aug 2026	20 Aug 2026	On-Campus	Shenzhen, China
18 Aug 2026	20 Aug 2026	On-Campus	Pretoria, South Africa

Contact us if no suitable date is listed – on-demand sessions can be arranged for groups.

HOW TO GET A QUOTE OR APPLY

- 1. Get an instant quotation online:** visit www.aaticd.co.za, open the page for this course (Unit Standard 120041) and click **Get A Quote / Apply**. Select your training method and number of delegates – your quotation is generated immediately and emailed to you with the course brochure attached.
- 2. Apply by email:** send the course title, your preferred training method (Online, In-House or On-Campus Pretoria), the number of delegates and your preferred dates to apply@aaticd.co.za – our team will reply with a formal quotation.
- 3. Apply by phone or WhatsApp:** call +27 12 004 8389 or WhatsApp +27 65 077 6310 and we will prepare your quotation and reserve your seats.
- 4. Confirm your booking:** accept the quotation and settle the invoice. As soon as payment is confirmed your delegates are enrolled and receive their AATICD LMS login details by email, along with joining instructions for their chosen training method.

Group discounts apply automatically – the more delegates you enrol, the lower the price per delegate. No payment is required to request a quotation.

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