



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

Introduction to Aviation Concepts and Geography

Physical, Mathematical, Computer and Life Sciences / Physical Sciences

Unit Standard 261179 · NQF Level 3 · 7 Credits · 4 Days

COURSE OVERVIEW

This course provides learners with a foundational understanding of aviation concepts and geography, enabling them to navigate the aviation environment with confidence. It covers key terminology, airspace classification, navigation principles, and the geographical context of flight operations. By the end of the course, learners will be able to apply aviation concepts and interpret geographical information relevant to the industry.

Category	Physical, Mathematical, Computer and Life Sciences
Subfield	Physical Sciences
Unit Standard	261179
Accreditation	SAQA Accredited · NQF Level 3 · 7 Credits
Duration	4 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Demonstrate an understanding of fundamental aviation concepts, including aerodynamics, aircraft types, and flight principles.
- Apply knowledge of airspace classification and structure to identify different airspace types and their operational requirements.
- Interpret aeronautical charts and geographical features to plan and follow basic flight routes.
- Analyze the impact of weather and geographical factors on aviation operations.
- Evaluate the role of key aviation organizations and regulations in maintaining safety and efficiency.

WHO SHOULD ATTEND

- This course is designed for new entrants to the aviation industry, including ground staff, flight crew trainees, and administrative personnel, as well as professionals in related fields seeking to broaden their aviation knowledge.

COURSE OUTLINE

Day 1: Introduction to Aviation and Aircraft Basics

- History of aviation: key milestones and innovators.
- Overview of the aviation industry: commercial, general, and military.
- Aircraft anatomy: fuselage, wings, empennage, powerplant, landing gear.
- Principles of flight: lift, weight, thrust, drag.
- Basic aerodynamics: airfoils, angle of attack, stall.
- Aircraft classification: fixed-wing, rotary-wing, lighter-than-air.
- Introduction to aviation terminology and abbreviations.

Day 2: Aviation Geography and Navigation Fundamentals

- Earth's shape and coordinate systems: latitude, longitude.
- Time zones and their impact on flight planning.
- Major international airports and their IATA/ICAO codes.
- Air routes: domestic, regional, intercontinental.
- Navigation basics: dead reckoning, pilotage, radio navigation.
- Introduction to aeronautical charts: symbols, scales, legends.
- Weather effects on navigation: wind, visibility, pressure.

Day 3: Airspace, Regulations, and Safety

- Airspace classification: A, B, C, D, E, G – characteristics and requirements.
- Controlled vs uncontrolled airspace.
- Role of ICAO, CAA, and other regulatory bodies.
- Basic aviation regulations: flight rules, licensing, airworthiness.
- Safety management systems (SMS): hazard identification, risk assessment.
- Human factors in aviation: fatigue, communication, situational awareness.
- Emergency procedures: fire, decompression, ditching.

Day 4: Flight Operations and Practical Integration

- Phases of flight: pre-flight, takeoff, climb, cruise, descent, landing.
- Crew roles: pilot-in-command, first officer, cabin crew.
- Flight planning: route selection, fuel calculation, NOTAMs.
- Flight documentation: flight plan, load sheet, weather report.
- Communication procedures: radio telephony basics.
- Integration exercise: plan a short cross-country flight.
- Review of key concepts and preparation for practicals.

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 **7 NQF credits** at **NQF Level 3**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 20,500.00	R 20,500.00
1	In-House	R 26,600.00	R 26,600.00
1	On-Campus (Pretoria)	R 30,800.00	R 30,800.00

UPCOMING SESSIONS

No sessions are currently scheduled. Please contact us to arrange a session at a time and location that suits your team.

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 261179) 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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