TRAINING ACADEMY

AIRFIELD ESSENTIALS TRAINING COURSE

TRAINAIR PLUS™
Bronze Member



ADB SAFEGATE
TRAINING ACADEMY

AGL Essential training. Key aspects:

Target audience:	**Delivery format**:
Personnel involved in AGL design, installation, commissioning, maintenance & operation.	Online (asynchronous) / Classroom on request.

Pre-requisites:	**Certification**:
Age +18 | English | Airfield-related job function.	Official Completion Certificate (upon passing test)

Training Objectives

At the end of the training, participant should be able to:

- Provide an introduction to the requirements of airfield lighting
- Give a general overview of AGL products & systems (i.e. characteristics, features and functionality)
- Introduce the relevant international standards
- Explain the principles of AGL maintenance and safety

What is covered?

- The definition of visual landing aids
    - Difference between AGL and markers
- Applicable standards: ICAO, FAA, IEC
- Principles of AGL
    - AGL series circuits
    - Principle of Constant Current Regulators (CCRs)
- Airfield Operating Categories the 4 C's of AGL
    - Configuration
    - Color
    - Candela
    - Coverage
- Operational performance
    - Site survey and installation instructions
- Typical configurations and working principles
    - No CAT, CAT I, CAT II & CAT III
    - Power supply
    - Approach lighting
    - Runway lighting
    - PAPI
    - Taxiway lighting
- Products and Applications
- Introduction to safety requirements
    - Maintenance concepts
- Introduction to Service Manuals, Planned & Preventive Maintenance and Fault-Finding

Industry-standard Training

All training delivered by ADB SAFEGATE is conducted in accordance with the guidelines defined in:

EASA

- Easy Access Rules for Aerodromes, No 139-2014, latest edition

ICAO Standards and documents:

- ICAO Procedures or Air Navigation Services, document 9981 – Aerodromes
- Training Course Number 101 (Airport Engineering – Planning, Design and Construction) AGA ENG
- Training Course Number 104 (Airport Maintenance – Electrical including Airport Lighting and Power Generation) AGA MTC ELC.
- ICAO Design Manuals Parts 1, 4, 5, 6 & 9
- ICAO Annex 14

FAA circulars (current edition)

- AC150-5340-30
- AC150-5345-10/26/28/46/53

International Electro-technical Commission (IEC) documents:

- IEC 61821: Electrical installations for lighting and beaconing of aerodromes – Maintenance of aeronautical ground lighting constant current series circuits.
- IEC 61822: Electrical installations for lighting and beaconing of aerodromes – Constant Current Regulators
- IEC 61823: Electrical installations for lighting and beaconing of aerodromes – AGL series transformers
- IEC TS 61827: Electrical installations for lighting and beaconing of aerodromes – Characteristics of inset and elevated luminaires used on aerodromes and heliports
- IEC TS 62143: Aeronautical Ground Lighting – Guidelines for the development of a safety lifecycle methodology.

Target Audience

Personnel involved in the design, installation, commissioning, maintenance and/or operation of AGL products and systems.

Pre-requisites

- Minimum age: 18 years.
- Education / qualification requirements: none.
- Linguistic requirement: English for standard scheduled sessions. Events delivery in native language to be agreed upon.
- Pre-requirements: job function related to airfield environment and tasks.

Training arrangements

This training is by default delivered online asynchronously via our training platform in English.

For groups with specific language or delivery requirements, we can offer the training to be delivered in-person according to the following arrangements:

- in classroom environment, with beamer/projector, desk for the instructor, desks for the students and seats for every individual. Sound system might be necessary if the attendance size requires.
- In PowerPoint-based lecturing style alternating with various interactions, discussions, and exercises.

Training assessment

Assessments are performed at the end of the session, unless agreed differently between ADB SAFEGATE and the client. The tests are chosen among a defined list of examinations put at the disposal of the trainer, revised yearly. Assessments are:

- Online by default, in English
- Automatically corrected. These must not be corrected locally by the trainer.
- Awarding a completion certificate if the passing score is met or exceeded by the attendee.
- Invigilated by the trainer, unless agreed otherwise. Attendees might be invited to prove their identity if a doubt exists.

If the assessment criteria are not met, a certificate of attendance is granted to the attendees.

If the test is failed, the responsible training manager and client will be informed. A second attempt can be made within one week. If the second attempt is failed or not existing, the training must be passed fully again.

Adaptations to the training delivery can be made by the trainer, in accordance with the client's wishes. However, the agreed training scope during the ordering phase must be covered. Any non-coverage of planned content must be agreed at training manager level. Training content and processes are reviewed on a yearly basis.

Practical arrangements

In order to prepare your training in best conditions, you are invited to register latest 3 weeks in advance via our sales network: Country sales contacts are available here. Alternatively, please use the registration website https://airfieldtrainingacademy.com/ or create a training request on the Jira portal: Training Academy - Jira Service Management (atlassian.net)

- **Training location** is to be agreed upon: this training can be delivered either on-site or at our regional offices.

In case the training is delivered at our Belgian factory, we have lined up a few practical details so you know what to expect from us:

- **Location address:**
  ADB SAFEGATE BV,
  Salyxlaan 9100, 1830 Machelen, Belgium. Tel +32 2 722 17 11.
- **Airport pick-up and drop-off** a taxi driver will wait for you at the airport and will bring you back to the airport when returning home
- **Hotel reservation via ADB SAFEGATE** We offer hotels at corporate rates, daily taxi shuttle included. If you make your own hotel reservation please make sure to also arrange your daily transport to and from ADB SAFEGATE.
- **Daily taxi shuttle** Only included in hotel reservations made via ADB SAFEGATE. If you make your own hotel reservation, please make sure to also arrange your daily transport to and from ADB SAFEGATE.
- **Lunch at noon** We serve a variety of warm and cold buffet and make sure to respect your halal, kosher, or vegetarian preference.
- **Drinks and coffee** are available continuously during the course.
- **Course handouts** all training slides will be printed and bundled to use during the course and take home with you.

Training Reservation and Cancellation conditions

- **Attendance confirmation** is required at latest 3 weeks before the start of the training.
- **Registration** of new attendants is accepted up to 2 weeks before the start of the training.
- **Cancellations need to be communicated** to ADB SAFEGATE in written at latest 3 weeks before the start of the training. For cancellations made later than 3 weeks before the start of the training, the full training fee will be charged.
- **ADB SAFEGATE reserves the right to** cancel or postpone trainings until three weeks before the start of the training.
- **Food and hotel requirements** need to be communicated to ADB SAFEGATE at latest 3 weeks before the start of the training.
- **Arrival date & arrival time** for the airport pick-up need to be communicated to ADB SAFEGATE at latest one week before the start of the training.

Airfield Essentials training

Course Schedule

	DAY 1	DAY 2	DAY 3	DAY 4
09:00	Welcome to AGL Essentials training	Power Supply	Runway applications	Survey and installation
11:10	Introduction to Airfield Ground Lighting	Approach	Taxiway Applications	Maintenance concepts
12:20	Lunch break	Lunch break	Lunch break	Lunch break
13:10	Lighting Perception and Principles of Runway Lighting	PAPI theory	Guidance control and monitoring systems	Consolidation and Revision
14:20	Power supply	PAPI setting & location, with and without ILS	Survey and installation	Discussion & Evaluation
16:00	End	End	End	End