Course Title: ICAO 021 Aeronautical Information Services (AIS-AIM)

Delivery Mode: Face-to-Face (United Kingdom – Takeoff Aviation Academy)**

Duration: 4 Weeks (20 Days)

Target Audience:
Personnel working in or transitioning into AIS/AIM units, including:
- AIS Officers and Assistants
- AIM Transition Managers
- CAA and ANSP personnel
- Trainees or new recruits

Course Objective:
To equip participants with a foundational understanding of Aeronautical Information Services and Management in accordance with ICAO standards and recommended practices, mapped to the European AIS Common Core Content, and to develop the ability to analyse and interpret AIS products and regulatory documentation, including the UK AIP.

Customised Course Content Outline

Week 1: Foundations of AIS and AIM
- Introduction to AIS and AIM: Evolution, definitions and responsibilities
- The role of AIS/AIM in aviation safety and air navigation
- ICAO's global ATM concept and AIS/AIM positioning
- AIS/AIM system components and stakeholders
- Overview of aeronautical data and information
- Mapping to European AIS Common Core Content

Week 2: Regulatory Framework – ICAO Annex 15 & Doc 8126
- Structure and purpose of Annex 15
- Key provisions of Annex 15 (Chapters 1–6)
- Relationship with other Annexes (e.g., Annex 4, Annex 11)
- ICAO Doc 8126: Aeronautical Information Services Manual
- Key updates in the AIS to AIM transition roadmap
- Discussion and exercises on compliance and audit requirements

Week 3: AIS Products and the UK AIP
- Types of AIS Products: AIP, NOTAM, AIC, Supplements, Charts
- Data origination, verification, validation and publication

- Introduction to the UK AIP structure
- Section-by-section breakdown of the UK AIP:
  - GEN: General
  - ENR: En-route
  - AD: Aerodromes
- Case studies: Reading and interpreting real examples from the UK AIP
- Practical exercises: Simulated publication review

Week 4: Application, Trends and Competency Development
- The AIS-AIM transition: Global trends and regional implementation
- Digital data management and SWIM (System Wide Information Management)
- European experience and implementation of SWIM
- AIM quality management principles
- Human Factors in AIS
- Introduction to Artificial Intelligence (AI) in AIM:
  - Overview of AI concepts in data processing
  - Use of AI in NOTAM management, validation, and quality control
  - Predictive analytics in aeronautical information
  - AI-driven data harmonisation and support in SWIM environments
  - European case examples of AI in operational AIS
- Group project: Drafting an AIP entry from provided aeronautical data
- Final assessment and feedback

Learning Methods:
- Classroom lectures
- Interactive exercises and group discussions
- Real-world document analysis
- Case study and simulation tasks
- Final knowledge assessment

Assessment:
- Participation and engagement
- Practical exercises and group project
- Final multiple-choice and scenario-based assessment

Certification:
Successful participants will receive a certificate of completion recognised by Takeoff Aviation Academy and aligned with ICAO standards and mapped to European AIS Core Content.

Additional Learning Access:

Participants will be provided with optional pre-course preparation material through the Takeoff Aviation Academy Learning Management System (LMS). They will also receive up to 6 months of free post-course access to LMS course content for reinforcement and further study.