



**REPUBLIC OF KENYA**

**COMPETENCY BASED MODULAR CURRICULUM FOR  
AIRPORT OPERATIONS KNQF LEVEL 6**

**(CYCLE 3)**

**PROGRAMME ISCED CODE: 1015 554 A**



**TVET CDACC  
P.O. BOX 15745-00100 NAIROBI**

## AIR TRAFFIC MANAGEMENT

ISCED UNIT CODE: 101555101A

TVET CDACC UNIT CODE: LOG/CU/AO/CC/01/6/MA

### Relationship to Occupational Standards

This unit addresses the Unit of Competency: **Manage Air Traffic Movement**

**Duration of Unit:** 180 Hours

### Unit Description

This unit specifies the competencies required to manage air traffic movement. It involves managing traffic flow, performing ATC services, establishing traffic sequence, demonstrating understanding of International Civil Aviation Organization (ICAO) rules, regulations and perform aeronautical integrated packages.

### Summary of Learning Outcomes

By the end of this unit, the learner should be able to:

S/No	Learning Outcomes	Duration (Hours)
1.	Manage traffic flow	30
2.	Perform ATC services	60
3.	Establish traffic sequence	30
4	Demonstrate understanding of ICAO rules and regulations	25
5	Perform Aeronautical integrated packages	35
	Total	<b>180</b>

### Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Manage traffic flow	1.1 Introduction to air traffic flow 1.2 Objectives of traffic flow 1.3 Classification of air space	<ul style="list-style-type: none"><li>• Written tests</li><li>• Observation</li><li>• Oral questions</li></ul>

	<p>1.4 Types of aircraft  1.5 Aerodrome traffic layout  1.6 Air-traffic management procedures  1.7 Airport categories  1.8 Traffic patterns.  1.9 Traffic order.  1.10 Air traffic control systems.  1.11 Phases of air traffic flight  1.12 Air traffic automation</p>	<ul style="list-style-type: none"> <li>• Third party report</li> <li>• Interviewing</li> <li>• Project and report writing</li> </ul>
<p>2. Perform ATC services</p>	<p>2.1 Meaning of terms  2.2 Functions of ATC  2.3 Types of air traffic services  2.4 Services of air traffic unit  2.5 roles of air traffic unit  2.6 Radio-telephone procedures  2.7 ATC communication procedures</p>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Observation</li> <li>• Oral questions</li> <li>• Third party report</li> <li>• Interviewing</li> <li>• Project and report writing</li> </ul>
<p>3. Establish traffic sequence</p>	<p>3.1 Meaning of terms  3.2 Importance of traffic sequence  3.3 Flight separation methods  3.4 Aircraft categories  3.5 Air Traffic management sequence patterns  3.6 Landing and taking off procedures</p>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Observation</li> <li>• Oral questions</li> <li>• Third party report</li> <li>• Interviewing</li> <li>• Project and report writing</li> </ul>
<p>4. Demonstrate understanding of ICAO rules and regulations</p>	<p>4.1 Introduction to ICAO rules and regulations  4.2 Hazards identification and mitigation  4.3 ICAO standards and recommended practises  4.4 Risk assessment and mitigation procedures</p>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Observation</li> <li>• Oral questions</li> <li>• Third party report</li> <li>• Interviewing</li> <li>• Project and report writing</li> </ul>

<p>5. Perform Aeronautical integrated packages</p>	<p>5.1 Meaning of terms  5.2 Importance of Aeronautical services  5.3 Aeronautical information services  5.4 Contents of Aeronautical services  5.5 Transmission of Aeronautical information  5.6 Promulgation of NOTAM</p>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Observation</li> <li>• Oral questions</li> <li>• Third party report</li> <li>• Interviewing</li> <li>• Project and report writing</li> </ul>
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**Suggested Methods of Delivery**

- Project
- Demonstration by trainer
- Practice by the trainee
- Discussions
- Direct instruction
- Case study
- Audio –visual aids

**Recommended Resources**

- Refuelers
- Tugs and tractors
- Ground power units
- Buses
- Container loader
- Transporters
- Air Start Unit (ASU)
- Potable water trucks
- Lavatory service vehicles
- Catering vehicle
- Belt loaders
- Passenger boarding steps/stairs
- Pushback tugs and tractors
- De/anti-icing vehicles