



Advanced ICU Infection Prevention and Device Safety Course

24 – 28 October 2027
Muscat



Advanced ICU Infection Prevention and Device Safety Course

Ref: 1485_209665 **Date:** 24 – 28 October 2027 **Location:** Muscat **Fees:** 5700 Euro

Overview

Advanced ICU Infection Prevention and Device Safety Course is a one-week advanced course for ICU nurses, critical care managers, infection prevention staff, respiratory care leaders, quality teams, and healthcare professionals. Participants build an ICU Device Infection Prevention Pack through ICU infection prevention and device safety, central line insertion and maintenance controls, urinary catheter necessity and maintenance review, ventilator and respiratory equipment infection controls, and ICU device-associated infection surveillance. Agile Leaders Training Center presents infection prevention around critical-care devices, high-acuity workflows, shared equipment, isolation, and surveillance.

Who Should Attend

- Intensive care and critical care nursing teams
- ICU managers and clinical operations leaders
- Infection prevention and surveillance personnel
- Respiratory care and equipment leads
- Quality, safety, and improvement teams supporting intensive care

The course assumes practical critical-care or infection-prevention experience. It does not confer clinical licensure, certification, treatment authority, or regulator approval.

Departments and Industries

The course supports adult, specialty, and mixed critical-care services managing invasive devices and high-risk care pathways.

- Hospital intensive and critical care units
- High-dependency and step-down services
- Respiratory care and ventilator support teams
- Infection prevention and healthcare quality functions
- Clinical engineering and environmental services interfaces

Learning Objectives

By the end of this course, participants will be able to:



- Map ICU infection risks across devices, contacts, equipment, and environment
- Apply insertion and maintenance controls for central and urinary catheters
- Coordinate respiratory-device and ventilator-interface precautions
- Control shared equipment, surfaces, isolation, and MDRO pathways
- Interpret device-day surveillance and verify infection signals
- Audit reliability and prioritize corrective improvement actions

Course Agenda

Day 1: ICU Risk Pathways and Control Governance

- Critical Care Infection Risk Pathway Map
- Device, Contact, and Environment Interface Review
- ICU Infection Prevention Responsibility Matrix
- High-Risk Patient and Procedure Profile
- Escalation and Stop-Process Decision Chart

Day 2: Central and Urinary Catheter Controls

- Central Line Insertion Readiness Checklist
- Maximal Barrier and Aseptic Practice Observation
- Central Line Maintenance Reliability Tool
- Urinary Catheter Indication and Necessity Review
- Device Access, Handover, and Removal Record

Day 3: Ventilation, Respiratory Devices, and Equipment

- Ventilator and Respiratory Circuit Interface Map
- Airway Equipment Handling Checklist
- Shared Noncritical Equipment Status Board
- Cleaning and Reprocessing Handover Log
- Condensate, Moisture, and Contamination Exception Record

Day 4: Isolation, Surveillance, and Response

- MDRO Precaution and Cohorting Decision Map
- Device-Day Denominator and Event Data Sheet
- ICU Infection Signal Verification Tool
- Cluster and Transmission Pathway Review
- Corrective Bundle and Feedback Tracker



Day 5: ICU Reliability and Improvement

- Suggested Exercise: ICU Infection Risk Mapping
- Suggested Exercise: Central Line and Catheter Observation
- Suggested Exercise: Respiratory Equipment Interface Review
- Suggested Exercise: Surveillance and Cluster Decisions
- Capstone Exercise: ICU Device Infection Prevention Pack

Practical Exercises

The course uses suggested activities with fictional medical, surgical, respiratory, and mixed intensive-care scenarios.

- Suggested activity: identify device, contact, environmental, and handover risks in an ICU pathway.
- Suggested activity: observe central-line controls and review urinary-catheter necessity.
- Suggested activity: trace respiratory equipment handling, shared-device status, and reprocessing handoffs.
- Suggested activity: calculate device-day measures, verify a signal, and coordinate corrective action.

FAQs

Who should attend advanced ICU infection prevention training?

The course suits ICU nurses, managers, infection preventionists, respiratory care personnel, quality teams, and professionals who oversee device, environment, isolation, surveillance, or improvement controls in critical care.

How does ICU infection prevention differ from general hospital IPC?

ICU prevention focuses on high device exposure, frequent access, invasive support, vulnerable patients, shared equipment, close contact, complex handoffs, intensive surveillance, and rapid escalation of control failures.

How are central-line and urinary-catheter risks controlled?

Teams use appropriate indications, trained personnel, insertion readiness, aseptic technique, maintenance observations, access control, daily necessity review, reliable handover, and prompt removal when no longer needed.

What belongs in respiratory-device infection control?

Controls cover equipment status, handling boundaries, circuit and airway interfaces, moisture and condensate risks, cleaning, reprocessing handoffs, storage, staff responsibilities, and escalation of contamination concerns.



How does surveillance support ICU improvement?

Surveillance uses clear definitions, device-day denominators, validated data, signal verification, trend review, cluster assessment, feedback, and corrective bundles while remaining distinct from bedside clinical diagnosis.

Conclusion

Participants leave with an ICU Device Infection Prevention Pack containing risk maps, insertion and maintenance tools, respiratory-equipment controls, device-status records, surveillance sheets, response arrangements, and improvement actions. The pack connects high-risk critical-care work with observable reliability. It helps multidisciplinary teams coordinate prevention around patients, devices, people, equipment, and data.