



Radar Theory and Electromagnetic Intelligence (ELINT) Course

Introduction

This course provides an overview of the background, history, and key operating principles in modern radar technology. It covers both earlier legacy systems and more recent developments, including Quantum radar and the integration of AI. Participants will learn about the role of radar in both military and civilian applications. The course includes theoretical instruction and practical demonstrations. Attendees will gain knowledge of the parameters used in modern radar systems and examine how adjustments to these parameters and physical components can affect performance and operational capabilities.

What you will learn:

- Introduction to the History of Radar
- Principles of Operation
- Antenna Theory in Radar
- Introduction to Electromagnetic Intelligence
- Types of Radar
- Radar Functions
- Interpulse Modulation Techniques
- Pulse Compression Techniques
- Measureable Radar Pulse Parameters
- Radar Calculations
- Radar against Modern Electromagnetic Support Measure (ESM) & Electromagnetic Counter Measure (ECM) Technology
- Radar in Modern warfare
- Artificial Intelligence (AI) integration in Radar
- Quantum Radar

Who should attend?

Military and government civilian EW practitioners engaged in the technical analysis of Electromagnetic Intelligence (ELINT) data. Ideally suited for experienced ELINT technical data analysts.

Key Organisations

Ministry of Defence

**HQ Joint, Army, Navy and Air Force
ELINT operators/Analysts**

All Government agencies, industries and organisations interested in operational and technical aspects of ELINT.

Course Duration

1 week

Location

Mercury EW Ltd – Training Facility