

5_Basic_Security_Concepts

What to Learn

Cybersecurity is built on principles such as confidentiality, integrity, and availability (CIA triad). These principles ensure data is protected against misuse, tampering, and loss.

Other key concepts include defense-in-depth, least privilege, and threat modeling.

Understanding these concepts enables analysts to interpret alerts and recommend protective measures.

How to Learn

Study frameworks like NIST Cybersecurity Framework and ISO 27001, which embed security concepts into organizational practices.

Explore real-world incidents to see how failures in basic security concepts lead to breaches.

Discuss scenarios in study groups or labs to apply concepts practically.

Example / Use-Case

If a database server lacks proper access controls, an attacker could alter records. This undermines integrity and could lead to severe financial losses.