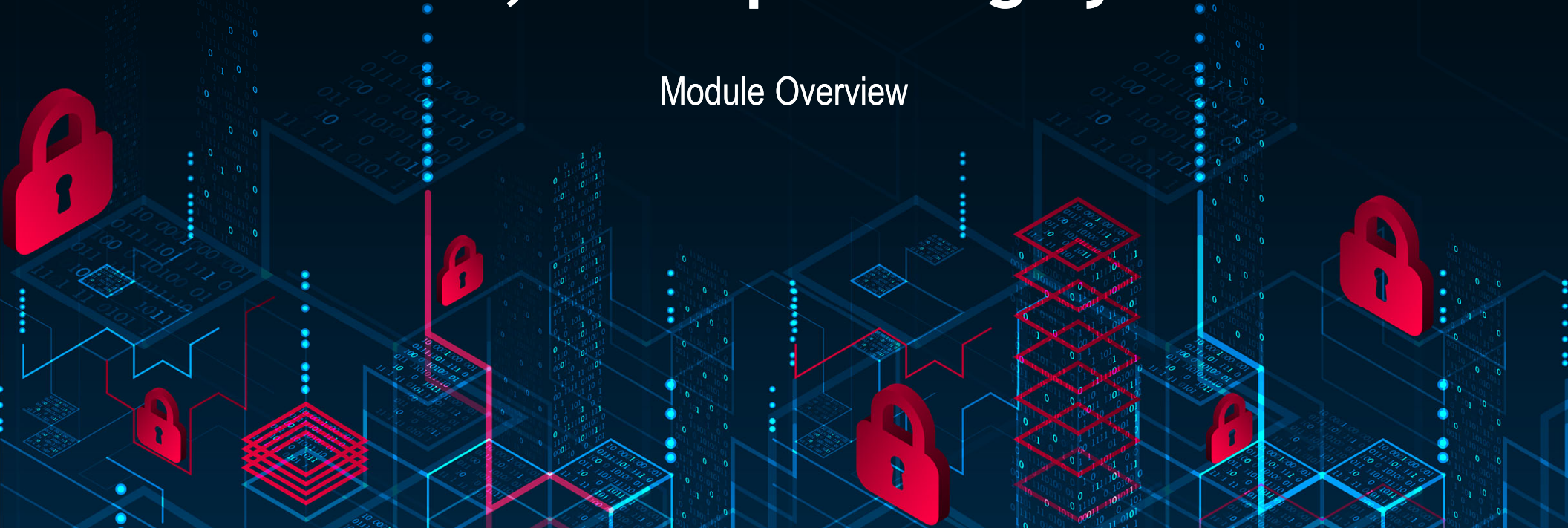


CPR E 431

## BASICS OF INFORMATION SYSTEM SECURITY

# User Authentication, Access Control, and Operating Systems

### Module Overview



# Module Objectives:

- User Authentication, Access Control, and Operating Systems
  - By the end of this module you will be able to:
    - ✓ Define user authentication, access control and operating system security
    - ✓ Understand how passwords are cracked and how to avoid it
    - ✓ Understand how token-based authentication is used
    - ✓ Identify different access control mechanisms
    - ✓ Understand how security mechanisms are implemented in operating systems
    - ✓ Apply installing packages and basic windows and Linux/Unix commands



# Introduction to Information Security

User Authentication

Access Control

Operating System

Storing passwords  
Cracking passwords  
Rainbow Tables and salting  
Token-based Authentication

Types of Access Control  
UNIX/LINUX Access Control

System security planning  
Operating system hardening  
Operating system patching  
Logging and backup

