

#### UNIVERSIDAD NACIONAL DE EDUCACION A DISTANCIA

El Rector de la Universidad Nacional de Educación a Distancia, considerando que

### **NELSON DE MATOS**

con NIF nº: 71524372F

ha superado el curso de UNED Abierta

# IA Technologies for Cybersecurity and IoT (1ed.2024)

Impartido entre el 30/11/2024 y 31/03/2025 en modalidad online. Según el programa que figura al dorso de este documento, expide el presente

### CERTIFICADO DE APROVECHAMIENTO

21 Febrero 2025

El Rector de la UNED,

Ricardo Maira

N° de créditos: 2 ECTS\* N° de horas: 50 horas

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<sup>\*</sup> Créditos ECTS: reconocibles como créditos por actividades universitarias culturales en los Grados de la UNED y en los de universidades y centros con convenio de mutuo reconocimiento.











## Program

- 1. *Module 1:* Technological foundations for IoT systems. This module provides the basic concepts necessary to understand the operation of IoT technology from its different facets. It provides the basis for understanding the following modules of the course. Special attention will be given to IoT systems deployed in the rural environment.
- 2. *Module 2:* Fundamentals of IoT cybersecurity. This module provides an introduction to the basics of IoT cybersecurity. Students will learn about the basic principles of cybersecurity, the security risks associated with IoT devices (especially when deployed in rural environments) and security best practices.
- 3. *Module 3:* Threats and vulnerabilities in IoT. This module analyzes the specific threats and vulnerabilities associated with IoT devices. Students will learn about the different types of attacks that can be targeted at IoT devices, as well as the vulnerabilities that can be exploited by attackers.
- 4. *Module 4:* Al-based security solutions. This module explores Al-based security solutions that can be used in conjunction with IoT devices, especially from a protection perspective. Students will learn about the different types of Al solutions that can be used to detect and respond to attacks against IoT devices.