

Course Overview

This course aims to provide training for relevant stakeholders in the deployment and management of 5G systems. The course content covers both technical training in cybersecurity applied to 5G systems, as well as training from a legal perspective within the European cybersecurity framework.

The first block of the course will present the most relevant technical concepts of 5G networks from a cybersecurity perspective, as well as the underlying infrastructure that enables their deployment.

Once the technical environment has been introduced, the regulatory framework and the initiatives followed within the EU will be described. A third block will focus on the use of Artificial Intelligence (AI) solutions to ensure the secure operation of these systems.

The course will conclude by providing a comprehensive overview of a secure 5G system, building upon the elements previously presented. A significant part of the course will be dedicated to practical activities, particularly during the technical sessions.

The course is aimed at both students of technical disciplines and professionals involved in cybersecurity, network management, and communication systems operation.

Venue



Universidad de Cantabria
Edificio de Ingeniería de
Telecomunicación
Santander, Spain



alberto.garcia@unican.es



www.5g-tactic.eu



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SUMMER SCHOOL ON 5G Network Security

JUNE, 22-24 2026

Universidad de Cantabria
Santander, SPAIN

Programme

Monday, 22nd June

10:00-12:00 5G core network Design.

Lecturer: Luis Diez (Universidad de Cantabria, Spain)
This session will comprise both theoretical introduction (1h) and hands on experience (1h).

12:00-12:30 Break

12:30-14:30 Security enforcement of 5G Core Network.

Lecturer: Alberto García (Universidad de Cantabria, Spain)
This session will comprise both theoretical introduction (1h) and hands on experience (1h).

Tuesday, 23rd June

09:30-13:00 Security validation of cloud-native MANO.

Lecturer: Maksymilian Furdek (Poznan Supercomputing and Networking Center, Poland)
This session will comprise both theoretical introduction (1h) and hands on experience (2h).

13:00- 14:30 Lunch break

14:30-16:00 NIS2 Implementation for 5G Infrastructure: Compliance and Security Measures

Lecturer: Cristian Nistor/Valentin Constantinescu(Romanian National Cyber Security Directorate, Romania)
This session comprises theory (45') and computer practice (45')

16:00- 16:30 Break

16:30-18:00 Standardization and Certification for 5G OPEN RAN systems

Lecturer: Cristian Nistor/Valentin Constantinescu (Romanian National Cyber Security Directorate, Romania)
This session comprises theory (45') and computer practice (45')

Wednesday, 24th June

09:30-11:00 Machine learning for threat detection in 5G networks

Lecturer: Marija Furdek /Fehmida Usmani (Chalmers University of Technology, Sweden)
This session comprises theory (1h) and computer practice (30')

11:00-11:30 Break

11:30-13:00 Attack mitigation in 5G Lifecycle Management

Lecturer: Fehmida Usmani/ Marija Furdek(Chalmers University of Technology, Sweden)

13:00-14:30 Lunch break

14:30-16:30 5G Security Architecture

Lecturer: Anna Tzanakaki (National and Kapodistrian University of Athens, Greece)

Registration Info

1) If you are not member of Universidad de Cantabria, first register as external user at:

<https://campusvirtual.unican.es/identificacion/externos/nuevoexterno.aspx>

2) Complete your registration through the following link:

<https://campusvirtual.unican.es/v2/cursos/Verano/Alumno>

3) Send the following documents to cv.ceu@unican.es:

- Photocopy of a valid ID or passport.
- Bank receipt (if paid in cash at the bank). Please keep the original copy.
- Payment confirmation for transactions made via credit or debit card.

