

# Guest Lectures Program

## Visiting Professors from the University of Coimbra (Portugal)

As part of an Erasmus+ teaching mobility, the Department of Civil Engineering and Architecture (DICAr) of the University of Catania is pleased to host two visiting professors from the University of Coimbra for a series of guest lectures on road safety, human factors, and road pavement engineering. The programme is open to students and researchers.

## PROGRAMME

### Day 1 · Tuesday · 14 July 2026 9:00 – 13:00 · Room P6 (Building 3)

#### Institutional greetings and opening of the mobility

*Welcome address by the host Department (DICAr) and introduction of the visiting professors.*

**Prof. António Lobo** — University of Coimbra

#### **Lecture 1: Emerging concepts and challenges in road safety: From road design to vehicle automation**

The lecture explores old and new road safety challenges, taking a journey through infrastructure, driver, and vehicle-related risks. It covers an overview of current strategies and trends in road design and safety, basic concepts of crash occurrence and modelling, and human-centred research and innovation approaches, with a special focus on tackling new risks and behaviours introduced by driving automation.

**Prof. Arminda Almeida** — University of Coimbra

#### **Lecture 1: Road Pavements in Portugal: An Overview (Mix Formulation, Pavement Design and Management)**

This lecture takes a journey through current Portuguese practice in road pavements, covering asphalt mix design, pavement structural design, and the management and maintenance of pavements throughout their service life. The session closes with an open discussion to exchange views and explore how practice differs between Portugal and Italy.

### Day 2 · Wednesday · 15 July 2026 9:00 – 13:00 · Room P4 (Building 3)

#### Welcome and introduction

**Prof. António Lobo** — University of Coimbra

#### **Lecture 2: Road safety and human factors: Learnings from previous research projects**

This lecture provides an overview of the main results of previous research projects analysing the interplay between human factors and road safety. It materialises some of the conceptual approaches introduced in Lecture 1, discussing risky behaviours at the wheel in naturalistic and simulated environments, the interaction between human drivers and automated systems, and drivers' preferences and attitudes towards emerging technologies.

**Prof. Arminda Almeida** — University of Coimbra

#### **Lecture 2: Foamed Bitumen Stabilised Materials: Mix and Pavement Design**

This lecture dives into foamed bitumen stabilisation, a technique gaining traction for producing mixtures made entirely from Reclaimed Asphalt Pavement (RAP), with no virgin aggregate needed. It walks through the mix and pavement design methodologies behind the technology, the key technical considerations at play, and how it is currently being used in Portugal — a compelling example of the road industry moving towards more circular and resource-efficient solutions.

The lectures will be available online:

DAY1: [Guest Lectures Programme Visiting Professors from the University of Coimbra - Erasmus+ Teaching Staff Mobility - Day 1](#) | [Partecipazione alla riunione](#) | [Microsoft Teams](#)

DAY2: [Guest Lectures Programme Visiting Professors from the University of Coimbra - Erasmus+ Teaching Staff Mobility - Day2](#) | [Partecipazione alla riunione](#) | [Microsoft Teams](#)

## THE SPEAKERS

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### **Prof. António Lobo**

*University of Coimbra · Department of Civil Engineering (DEC-UC) · CITTA*

António Lobo is an Assistant Professor at the Department of Civil Engineering of the University of Coimbra (DEC-UC) and an Integrated Member of CITTA – Research Centre for Territory, Transports and Environment. His research addresses road safety, human factors, emerging technologies, and urban mobility management, with more than 70 peer-reviewed publications and over 20 supervised MSc and PhD students. He is Associate Editor of the European Transport Research Review, an editorial board member of the Journal of Urban Mobility, a board member of the Association for European Transport (AET), and a member and auditor of the International Co-operation on Theories and Concepts in Traffic Safety (ICTCT).



### **Prof. Arminda Almeida**

*University of Coimbra · Department of Civil Engineering · CITTA*

Arminda Almeida is an Assistant Professor at the Department of Civil Engineering of the University of Coimbra, where she coordinates the Road Pavement Laboratory, and an integrated researcher at CITTA. Her work focuses on road pavement engineering, including asphalt mix design, pavement structural design, and pavement management and maintenance. She is a member of national technical standardisation committees and of CRP – the Portuguese Road and Railway Centre, a technical member of several RILEM committees (308-PAR, 323-APD and 325-APS), and a member of COST Action CA24141 – Climatic Resilience Initiative for Pavement Infrastructure (CRIPI).

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