

COURSE DETAIL

ROADS AND AIRPORTS

Country

Spain

Host Institution

University of Alicante

Program(s)

University of Alicante

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Engineering Civil Engineering

UCEAP Course Number

122

UCEAP Course Suffix**UCEAP Official Title**

ROADS AND AIRPORTS

UCEAP Transcript Title

ROADS AND AIRPORTS

UCEAP Quarter Units

5.00

UCEAP Semester Units

3.30

Course Description

In this course, students learn the planning, design, construction, and operation of highways, traffic networks and their related infrastructure. The course is divided into the following activities: lectures, recitations (design case studies), laboratory and computer practice sessions. Students use CAD/BIM professional software for highway design. Topics include specialized vocabulary and regulatory knowledge relevant to highway engineering; the core concepts, principles, and terminology in highway design and construction; the basic characteristics of road transport supply and demand, and the main actors involved. Students gain the ability and skills to analyze, quantify and correct the traffic states in rural and urban roads, as part of the usual techniques of Traffic Engineering; skills to design urban and rural road segments, specifically including geometric design, pavement design, connections and road junctions design; the fundamental characteristics of air transport and aircrafts for its use in airport infrastructure design; and develop critical analysis capabilities, conceptual scalability, and depth of understanding applicable to this Civil Engineering specialization.

Language(s) of Instruction

Host Institution Course Number

33529

Host Institution Course Title

CARRETERAS Y AEROPUERTOS

Host Institution Course Details

<https://cvnet.cpd.ua.es/Guia-Docente/GuiaDocente/Index?wlengua=es&wcodasi=33529...>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Degree in Civil Engineering

Host Institution Department

Civil Engineering

Course Last Reviewed

2025-2026

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