COURSE DETAIL

SPATIAL INFORMATION SYSTEMS
Country Ireland
Host Institution University College Dublin
Program(s) University College Dublin
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Geography Computer Science
UCEAP Course Number 136
UCEAP Course Suffix
UCEAP Official Title SPATIAL INFORMATION SYSTEMS
UCEAP Transcript Title SPATIAL INFO SYSTEM
UCEAP Quarter Units 5.00
UCEAP Semester Units 3.30

Course Description

In this course, students learn the fundamentals of spatial information, spatial querying, spatial information systems, and geometric problems involved in a spatial information system. They learn details about the spatial data formats (raster and vector), spatial relations (with particular emphasis on topological relations), spatial data structures, digital terrain modelling, geometric problems arising in spatial information systems, and algorithms to solve them. They develop a critical understanding of the different approaches to storing and manipulating spatial data: the loosely coupled approach of classical GIS versus the integrated approach of spatial database management systems. Students also analyze the Oracle Spatial object-relational model for storing and indexing spatial data. These notions complement their knowledge of other types of information systems seen in other computer science courses.

Language(s) of Instruction
English

Host Institution Course Number
COMP30110

Host Institution Course Title
SPATIAL INFORMATION SYSTEMS

Host Institution Course Details
https://hub.ucd.ie/usis/!W_HU_MENU.P_PUBLISH?p_tag=MODULE&MODULE=COMP30110

Host Institution Campus
UC Dublin

Host Institution Faculty

Host Institution Degree

Host Institution Department

Computer Science

Course Last Reviewed
2023-2024

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