LONDON'S GLOBAL UNIVERSITY

Civil, Environmental and Geomatic Engineering

Spatial Databases and Data Management (CEGE0052)

Description

GIS lets you map where things are but knowing where something is is much more powerful when you combine it with what and who and how and when. This module shows you how to integrate map and other data in a database (e.g. PostgreSQL, Oracle) and then run SQL queries to exploit the power of this integration to solve real world problems. We focus in particular on database design and development (SQL) of spatial databases in 2D and 3D. Advanced topics (depending on time) may include: improving database performance, NoSQL, how to share data over the internet via GeoServer, GeoBIM integration.

Learning Outcomes:

At the end of the module you will:

1. Understand how to model data and spatial data for storage in a relational database (demonstrated via UML diagram creation in class and for assignment)

2. Be able to write SQL to create, modify and query data and spatial data in a relational database (via SQL script creation in lab exercises and for assignment)

3. Be able to demonstrate how spatially-enabled relational databases can be used in practice, in the context of one real-world application (via assignment)

Key information

Year	2019/20
Credit value	15 (150 study hours)
Delivery	PGT L7, Campus-based
Reading List	View on UCL website
Tutor	Dr Claire Ellul
Term	Term 1
Timetable	View on UCL website

Assessment

Report: 100%

Find out more

For more information about the department, programmes, relevant open days and to browse other modules, visit ucl.ac.uk