COURSE DETAIL

PRINCIPLES AND PRACTICE OF REMOTE SENSING
Country United Kingdom - England
Host Institution University College London
Program(s) University College London
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Geography
UCEAP Course Number 164
UCEAP Course Suffix
UCEAP Official Title PRINCIPLES AND PRACTICE OF REMOTE SENSING
UCEAP Transcript Title REMOTE SENSING
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

The course provide an introduction to concepts and principles of remote sensing. It will include 3 components: 1) radiometric principles underlying remote sensing: electromagnetic radiation; basic laws of electromagnetic radiation; absorption, reflection and emission; atmospheric effects; radiation interactions with the surface, radiative transfer; 2) assumptions and trade-offs for particular applications: orbital mechanics and choices; spatial, spectral, temporal, angular and radiometric resolution; data pre-processing; scanners; and 3) time- resolved remote sensing including: RADAR principles; the RADAR equation; RADAR resolution; phase information and SAR interferometry; and LIDAR remote sensing, the LIDAR equation and applications.

Language(s) of Instruction
English

Host Institution Course Number
GEOG0040

Host Institution Course Title
PRINCIPLES AND PRACTICE OF REMOTE SENSING

Host Institution Course Details
https://www.ucl.ac.uk/module-catalogue/modules/principles-and-practice-of-remot...

Host Institution Campus
University College London

Host Institution Faculty

Host Institution Degree

Host Institution Department
Geography

Course Last Reviewed

2023-2024

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