UE Remote sensing and GIS project

ECTS
6 credits

Component
UFR PhITEM (physique, ingénierie, terre, environnement, mécanique)

Semester
Printemps

- **Teaching language(s):** French, English
- **Teaching type:** Lectures
- **Open to exchange students:** Yes
- **Code d'export Apogée:** PAX8GRAE

Presentation

Description

This course offers a broad and practical introduction to Earth Observation from space and to Geographic Information System (GIS). The course works on a basis of 3h lecture associated to 3h of practical work using the free software QGIS. Course are usually given in French. In addition, a project using QGIS has to be by small groups of students, including 9h (3x3h) with teacher support in computer room.
The structure of the courses is:
first part is common to all the student (from January to February winter break)
+ Introduction to GIS: 3h course + 3h practical
+ Basics of Remote Sensing (1): 3h course + 3h practical
+ Basics of Remote Sensing (2): 3h course + 3h practical
+ Classification methods: 3h course + 3h practical
The second part of the course depends of the program followed by the students :
for Geophysics, Geodynamics, Georesources and Georisks programs:
+ Remote-Sensing and GIS applied to geology: 3h course
+ Remote-Sensing and GIS applied to geophysics: 3h course
+ Remote-Sensing and GIS applied to continental surfaces: 3h course
+ Remote-Sensing and GIS applied to planetology: 3h course + 3h practical
for Hydro-resources and Atmosphere-Climate-Continental Landmass programs:

+ Remote-Sensing and GIS applied to continental surfaces: 3h course
+ Remote-Sensing and GIS applied to Digital Elevation Surface: 3h course + 3h practical
+ Remote-Sensing and GIS applied to atmosphere: 3h course
+ Remote-Sensing and GIS applied to Ocean: 3h course

Evaluation will be based on a written exam at mid-term, a written report about the project, and a final written exam covering all the lectures and practicals.

Course parts

CM	Lectures (CM)	36h
UE Remote sensing and GIS project - TP	Practical work (TP)	24h

Period : Semester 8

Useful info

Contacts

Program director

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Program director

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Place

Grenoble

Campus

Grenoble - University campus