Department 08 Geoinformatics

Course title Rapid Response Techniques in Remote Sensing for Natural Disasters

Hours per week (SWS) 4

Number of ECTS credits 5

Course objective Learn the complex framework of assessing natural hazards and the impacts of them. Application of quantitative methods as a first approach to estimate these disasters using Earth Observation Data and GIS options available.

Prerequisites Remote Sensing, Statistics


Teaching methods Classes and practices on computer. Final Project with case study of their choice. Weekly discussion of relevant scientific journals on the topic.

Assessment methods Prohject thesis

Language of instruction English

Name of lecturer MSc. Yrneh Zarit Ulloa Torrealba

Email yrneh_zarit.ulloa_torrealba@hm.edu

Link https://www.geo.hm.edu/kontakt/mitarbeiterinnen/ulloa_torrealba/index.de.html

Course content Concepts of natural hazards, risk, disaster management and the perspectives associated to their study. Projects, Services and other initiatives for mapping disasters in Europe and the world. Archives of EO and GIS data as well as associated products. Quantitative methods for estimating the occurrence, intensity and change of natural hazards in diverse environments. Disasters foreseen: windfall, forest fires, flooding. R-based classification of satellite images to detect and measure disaster areas.

Remarks Elective subject in the seventh semester.