



Civil Engineering for Mitigation of Risk from Natural Hazards

Course: Geomatics and GIS: I part

a.y.: 2022/2023

Lecturer: Prof. Andrea Taramelli; Emiliana Valentini; TA: Serena Sapio, Chiara Marinelli, MJ Jimenez

Date: 07/11/2022 – 16/11/2022

Classroom: See the schedule below

Course schedule

Week	Date	Lecture hours From ____ To ____	Classroom	Subject	Tot h
	07/11/2022	10-13	Aula 1-17 IUSS palazzo del Broletto	The GIS systems: Overview The structure: Vector	3
	07/11/2022	14-17	Aula 1-17 IUSS palazzo del Broletto	The structure: Raster Spatial analysis	3
	08/11/2022	9-12	Aula 1-15 IUSS palazzo del Broletto	Mapping and geographical database: Definitions and components	3
	08/11/2022	14-17 (MJ)	Aula 1-16 IUSS palazzo del Broletto	Hands-on session: Vector and raster (QGIS)	3
	09/11/2022	9-12 (MJ)	Aula 1-15 IUSS palazzo del Broletto	Hands-on session: Operating with vector Hands-on session: Reference systems (QGIS)	3
	09/11/2022	14-17 (Chiara)	Aula 1-15 IUSS palazzo del Broletto	Hands-on session: Raster algebra (QGIS)	3
2	14/11/2022	9-12 (Chiara)	Aula 1-17 IUSS palazzo del Broletto	Hands-on session: Layout (QGIS)	3
	14/11/2022	14-17	Aula 1-17 IUSS palazzo del Broletto	Thematic cartography	3
	15/11/2022	9-12	Aula 1-15 IUSS palazzo del Broletto	Motivation and applications of remote sensing Physics of remote sensing	3
	15/11/2022	14-17	Aula 1-15 IUSS palazzo del Broletto	Sensors and imaging systems: active/passive, resolutions	3
	16/11/2022	9-12 (Serena)	Aula 1-16 IUSS palazzo del Broletto	Basic Concepts of Image Processing and Analysis	3
	16/11/2022	14-17 (Serena)	Aula 1-15 IUSS palazzo del Broletto	Hands-on session: Copernicus Land, Sentinel 2, Sentinel 1, radiometric indices	3

Hands-on	Presentation date	Deadline
Hands-on session: Vector and raster (QGIS)	08/11/2022	25/11/2022
Hands-on session: Reference systems (QGIS)	09/11/2022	25/11/2022
Hands-on session: Operating with vector	10/11/2022	25/11/2022
Hands-on session: Raster algebra (QGIS)	10/11/2022	25/11/2022
Hands-on session: Layout (QGIS)	14/11/2022	01/12/2022
Hands-on session: Copernicus Land, Sentinel 2, Sentinel 1, radiometric indices	15/11/2022	01/12/2022