SVEUČILIŠTE U SPLITU
FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE

UNIVERSITY OF SPLIT
FACULTY OF CIVIL ENGINEERING, ARCHITECTURE AND GEODESY

Introduction to GIS with practical applications

2017

University of Split

Spend your summer at
SPLIT SUMMER SCHOOL for students
of Civil Engineering, Architecture & Geodesy
CROATIA / Split

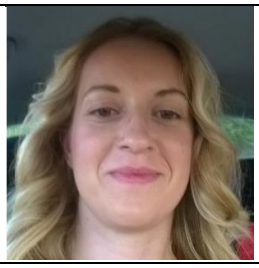
Welcome to Split Summer School!

The Course: Introduction to GIS with practical applications

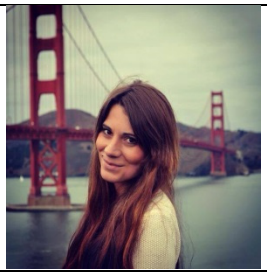
Introduction to GIS course provides a start-up for the practical use of GIS software and geospatial datasets. The motivation for conducting this course arises from a fact that knowledge of GIS capabilities and software is an essential skill for developing career in research, teaching and business. The course will provide participants with skills to use open source QGIS software and open geospatial data.

We would like to introduce you to the people organising the course and to the lecturers.

Organising committee

Boris Trogrlić Ph.D. Dean, Full professor btrogrlic@gradst.hr	Mirela Galić Ph.D. Vice Dean for International Cooperation, Full professor mgalic@gradst.hr	Ana Jeličić Mag. ing. aedif. Academic Associate ana.jelicic@gradst.hr
		

Lecturers

Martina Baučić Ph.D. Assistant professor mbaucic@gradst.hr	Jelena Kilić Mag. ing. geod. et geoinf., Assistant jkilic@gradst.hr	Ivan Racetin Mag. ing. geod. et geoinf., Assistant ivan.racetin@gradst.hr	Marina Tavra Mag. ing. geod. et geoinf., Assistant mtavra@gradst.hr
			

Program structure

Sunday, 3/9 Faculty Entry hall

19.30-21.00	Registration
20.30 - …	Welcome and address by Organising Committee

Monday, 4/9 Classroom C4, 1st floor

9.00 – 09.30	Introduction (to the course, the participants and the lecturers)
09.30 - 10.30	Lecture: Introduction to GIS (the main GIS concepts, commercial and open geospatial data and software)
10.30 - 11.00	Coffee break: cafeteria, -1st floor
11.00 - 12.30	Exercise: QGIS - main features (user interface, project file, layers, styling, open source layers plug in, print composer)
12.30 - 13.30	Lunch break: student restaurant, -1st floor
13.30 - 15.30	Final project: - definition of final project assignments for the participants (accordingly to the selected application area by the participant) - individual work with assistance (search and selection of open source data and WMS services such as Google maps, Open Street Map data, Earth explorer data catalogue etc. for the final project)
evening	Final project: - individual work

Tuesday, 5/9 Classroom C4, 1st floor

09.00 - 09.45	Lecture: Geospatial data operations and analysis (GIS data models, operations on graphic and attribute data, vector and raster data analysis concepts)
09.45 - 10.30	Exercise: Geospatial data editing, part 1 (selecting, graphical features editing, attribute editing)
10.30 - 11.00	Coffee break: cafeteria, -1st floor
11.00 - 12.30	Exercise: Geospatial data editing, part 2 (selecting, graphical features editing, attribute editing)
12.30 - 13.30	Lunch break: student restaurant, -1st floor
13.30 - 15.30	Final project: individual work with assistance (creation and editing of the project GIS database)
evening	Final project: - individual work

Wednesday, 6/9 Classroom C4, 1st floor

09.00 - 09.45	Exercise: Geospatial analysis over vector data (buffering, reclassification, overlaying)
09.45 - 10.30	Exercise: Geospatial and tabular data (joining tabular data, geoevents)
10.30 - 11.00	Coffee break: cafeteria, -1st floor
11.00 - 12.30	Exercise: Raster data: visualisation and analysis (colour schemas, reclassification, terrain analysis: slope, aspect, shadow, map algebra)
12.30 - 13.30	Lunch break: student restaurant, -1st floor
13.30 - 15.30	Final project: individual work with assistance (GIS analysis: defining and executing)
evening	Final project: - individual work

Thursday, 7/9 Classroom C4, 1st floor and Nature Park Marjan (field work)

09.00 - 09.45	Exercise: Visuallisation and web dissemination of geospatial data (on Google Earth, ….
09.45 - 10.30	Exercise: Collecting data on the field: instructions and preparation (introduction to **GPS ?**, introduction to http://www.giscloud.com/ ???? http://www.fulcrumapp.com/ ??????)
10.30 – 15.30	Data collecting in the area of Nature Park Marjan Lunch
	Free time on beach
18.00 -	City tour (Diocletian's palace)

Friday, 8/9 Classroom C4, 1st floor

09.00 – 10.30	Final project: individual work with assistance (completion of the projects and preparation of the presentations)
10.30 - 11.00	Coffee break: cafeteria, -1st floor
11.00 – 12.30	Final project: individual work with assistance (completion of the projects and preparation of the presentations)
12.30 - 13.30	Lunch break
13.30 - 15.30	Final projects presentations with assessment
	Free time
18.30-19.30	Diploma awarding
19:30 -	Dinner at Faculty restaurant

Learning materials

Online books

Introduction to GIS

http://www.itc.nl/library/papers_2009/general/PrinciplesGIS.pdf

Geographic Information Systems

http://www.geos.ed.ac.uk/~gisteac/gis_book_abridged/

Principles of Remote Sensing

http://www.itc.nl/library/papers_2009/general/PrinciplesRemoteSensing.pdf

Fundamentals of Remote Sensing

http://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/earthsciences/pdf/resource/tutor/fundam/pdf/fundamentals_e.pdf

Quantum GIS resources

QuantumGIS web page

http://www.qgis.org/en/site/

QuantumGIS version 2.8 download software

http://www.qgis.org/en/site/forusers/download.html

QuantumGIS version 2.8 documentation

http://docs.qgis.org/2.8/en/docs/index.html

Sample data and lecture notes

QGIS 2.8 software, sample data and lecture notes (in digital form) will be distributed the first day of Split Summer School.