

General Information

Course name	Linux and Open Source GIS	ECTS Credits	3
		Semester	winter/2 hours per week

Aims

This course focuses on teaching practical skills in using open source geographic information systems software such as GRASS GIS and Quantum GIS.

Contents

Introducing the open-source idea, history of open-source, main organisations
GRASS GIS

installation, the concept of database, location and mapset, general commands,
raster data import processing, querying and analysing
interpolation of surfaces, geomorphometric analysis, 3D visualization, interpolation
vector data import, editing, querying, analysis
conversions between two coordinate systems

Quantum GIS

installation, setting the correct coordinate system, conversions, vector data import and
editing, attribute queries, choropleth maps and cartodiagrams,
Map composer – creation of map visualisations
QGIS plug-ins, Open Layers, 3D visualisation, web-based GIS outputs

Assessment Methods and Criteria

Continuous Assessment Methods and Criteria is based on student's activity in the classes and work on assignments. The course ends with an examination of practical skills.

Grading Scale (in %):

Grading System: The University recognises the following six degrees for the Assessment Methods and Criteria of the study results: a) A – excellent (excellent results) (numerical value 1) b) B – very good (above average results) (1.5) c) C – good (average results) (2) d) D – satisfactory (acceptable results) (2.5) e) E – sufficient (results meet the minimum criteria) (3) f) FX – failed (requires further work) (4)

Bibliography

7. Neteler, M., Mitasova, H. (2008). Open source GIS: a GRASS GIS approach. 3rd edition, Springer Science & Business Media, 420 p.
8. Thiede ,R., Sutton, T., Duster, H., 2013. The Quantum GIS Training Manual, Locate Press, 388 p.

