

# QGIS Class

## Module 1: Introduction to QGIS (19 – 21 January 2017)

### Day 1

#### 8.15 – 10.00: Lecture

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##### 1. Overview of free and open source software

- What is free and open source software? Why choose free software?
- Example of free software
- GIS and RS free software VS proprietary software

##### 2. Get the software, documentation, and other resources

- Installation, sample datasets, QGIS installed components
- Resources: documentation, wiki, tutorials, blogs, official groups

##### 3. QGIS interface

- Menu, Toolbars, Panels, Canvas, Status Bar
- Useful settings
- Plugins: search and install OpenLayers plugin, connect to OpenStreetMap server
- Create your first map: Map Navigation Toolbar, Decorations, Save Images

#### 10.15 – 11.45: Assignment

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Research of QGIS supporting material in Chinese language and prepare a list to share with everybody.  
Supporting material may include: Forums, Mailing lists, Tutorials (pdf, videos, ...)

#### 13.30 – 15.00 Lecture

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##### 4. Vector data - basics

- Add vector data, convert format, add excel data and save new layer
- Shapefile structure
- Layer Properties
- Explore the data, attribute table (selections, modify attributes, add/remove columns)
- Basic Styling (simple symbols, categorized)
- Editing (create and edit a new layer)
- Print Composer: create a nice map
- Save a QGIS project

#### 15.15– 17.00 Practice

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Practice QGIS with QGIS training manual (Modules 2-6) and/or other tutorials

## Day 2

### 8.15 – 10 00 Lecture

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#### 5. Importance of CRS and Projections

#### 6. Vector analysis

- Join attribute tables, spatial joins
- Selection methods
- Overview of vector tools

### 10.15 – 11 45 Practice

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QGIS training manual (Module7) and/or other tutorials

### 13.30 – 15.00 Lecture

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#### 7. Raster data – basics

- Add raster data: multiband image, adjust styles
- Add raster image: DEM, classify
- Raster calculator

### 15.15– 17.00 Practice

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QGIS training manual (Module8) and/or other tutorials

## Day 3

### 9.00 – 11.00 Lecture

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#### 8. Combining Raster and Vector

#### 9. Plugins

#### 10. Processing Toolbox

### 13.00 – ... Practice

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QGIS training manual (Module9-12) and/or other tutorials  
Module 14 uses all what you have learnt and add some more features.