# GISN04, GIS: Open Source GIS, 7.5 credits
*GIS: Öppen källkod inom GIS, 7,5 högskolepoäng*
**Second Cycle / Avancerad nivå**

## Details of approval

The syllabus was approved by Study programmes board, Faculty of Science on 2007-03-01 and was last revised on 2013-01-17. The revised syllabus applies from 2013-01-17, spring semester 2013.

## General Information

The course is an elective course for second-cycle studies for a Master of Science in geographic information science. Language of instruction: English.

| Main field of studies | Depth of study relative to the degree requirements |
| --- | --- |
| Physical Geography | A1N, Second cycle, has only first-cycle course/s as entry requirements |

## Learning outcomes

The course intends to provide advanced knowledge of open source coded software and the possibilities created by program written with open source code. The course also intends to introduce the concept of open geographic data and their use.

*Knowledge and understanding*

On completion of the course, the student should be able to:

- account for and explain the concept of open source,
- comprehensively describe and explain concept within open source,
- describe and assess different file formats and how they can be used, and
- explain the concept of open data and what they can be used for.

*Skills and ability*

On completion of the course, the student should be able to:

- analyse and evaluate program based on a user perspective

- plan choice of software based on functions needed for different geographic analyses
- contribute to open source code projects
- use documentation of software to understand functions.

*Assessment skills and approach*

On completion of the course, the student should be able to:

- critically argue for use of a specific software
- critically review documentation of software.

# Course content

The course consists of five subparts:

- Introduction to open source
- Participate in open source code projects
- Example of open source code software in GIS
- Open geographic data
- Independent advanced assignment with programming of application

# Course design

This is a distance course distributed via Internet. It is designed to be flexible to make it possible for the student to carry out the course work in a full time (100 %) or part-time (50 % or 25 %) study tempo.

# Assessment

Examination takes place through written open book examination at the end of the course combined with passed written assignments and independent advanced assignments during the course . For students who have failed the regular examination is offered additional occasion in close connection to this.

*Subcourses that are part of this course can be found in an appendix at the end of this document.*

# Grades

Marking scale: Fail, Pass.
To pass the entire course, approved examination, passed written assignments and passed reports are required from individual advanced assignments are required .

# Entry requirements

General entry requirements including English B and 90 credits including 30 credits GIS.

# Further information

The course may not be included in a higher education qualification tillsammans with GIS425 Open source within GIS, 5 credit points.

# Subcourses in GISN04, GIS: Open Source GIS

Applies from H07

0701   GIS Open Source, 7,5 hp
       Grading scale: Fail, Pass