



LUND UNIVERSITY
Faculty of Science

SYLLABUS

Date
20 December 2018

Reg. Nr.
U 2018/791

Syllabus for the course Storage and analysis of city models, and relationship to BIM, NGE004F

Swedish title: Lagring och analys av stadsmodeller samt koppling mellan stads- och byggnadsmodeller

The course syllabus was confirmed by the Faculty board for graduate studies 20 December 2018. The course is in the third cycle and amounts to 4 credits.
The course syllabus is formally approved in Swedish. This is a translation.

Learning outcomes

On completion of the course, participants shall be able to:

Knowledge and understanding

- Explain international standards for city and building models.
- Describe applications of city and building models as well as integration of these.

Skills and abilities

- Use city models and building models in the urban planning/building processes and/or environmental analysis.
- Analyze accuracy/uncertainty in analyzes based on city models / 3D surface models.

Judgement and approach

- Evaluate the usefulness of using 3D geodata (city models) in relation to using 2D geodata in the urban planning/building processes and / or environmental analysis.

Course content

Background to city models and high-resolution digital surface models (DSM) and review of international standards. Applications of urban and building models in the urban planning/building process and environmental analysis. Theory and practical practice of city model analysis and environmental modeling using GIS-based raster models.

Teaching

The course starts with a series of lectures and exercises. After that, students get the time to do an individual project. The course ends with a seminar where everyone presents their individual projects.

Assessment

The examination is based on written exercises and on an individual project, the latter with both oral and written presentation.

Grading scale

Grades for the course are approved or failed. For a grade of Pass the student must pass all exercises and pass the presentations of the individual project work.

Language of instruction

English.

Entry requirements

Theoretical knowledge and practical experience of either geographic information systems (GIS) or building information models (BIM).

Additional information

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