

FDA131

Research preparation course in Geoinformatics (CIS)

Lectures:

32 h.

Recommended for:

Graduate students.

The course was last given:

Fall 2001.

Goals:

The purpose with this course is to give the students deeper knowledge and theoretical perspectives on Geoinformatics and perspectives on computer methods to handle spatial data. The subject Geoinformatics is interdisciplinary and share several academic and application fields. The course will give an overview of the research in the area and prepare for research.

Prerequisites

Organization

Tuition, seminars and exercises are provided concentrated between 10-15 during one day every second week to once a month between October January (totally ca 10 events). Parts of the course communication as well as access o tutorials can be provided on distance.

Contents

- Theoretical perspectives on capture, handling, preparation and analysis of geographic and other spatial data.
- Methods to analyse networks and cartographic algebra to handle and analyse spatial questions within technology, natural science, medicine, social science and humanities
- Spatal statistical methods to identify clusters and diffusion of physical as well as biological and non material properties (languages, dialects, names, habits etc)
- Methods to visualise dynamic events in two or more dimensions and multi modal communication of processes in time and space.

Tuition

Tuition, seminars and exercises are provided concentrated between 10-15 during one day every second week to once a month between October and January (totally ca 10 events). Parts of the course communication, as well as access to tutorials, can be provided on distance.

Literature

Laurini, Robert & Thompsson, Derek (1992) Fundamentals of spatial information systems. The APIC series, Academic Press, ca 700 sidor.

Worboys, M.F. "GIS: A Computing Perspective".

Ref

Chang S.K. & Jungert E. Projection for Image Information Retrieval and Spatial Reasoning, Academic Press London 1996

Teachers

Åke Sivertun , Erland Jungert, Michael LeDuc, guests.

Examiner

Åke Sivertun.

Schedule

Fall 2002.

Examination

Examination by active participation in the lectures, seminars and exercises and a written report. Publication of the report in a scientific paper or presentation at conferences are rewarded.

Credit

5 credits.