

SYLLABUS

Implementation of Geographical Information Systems 7.5 credits L0012B

Implementation av geografiska informationssystem

Course syllabus admitted: Autumn 2010 Sp 1 - Spring 2011 Sp 4

**DECISION DATE
2010-03-01**

Implementation of Geographical Information Systems 7.5 credits L0012B

Implementation av geografiska informationssystem

First cycle, L0012B

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	U G#		Geographic Informations Technology and Surveying

Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language +

Swedish upper secondary school courses Biology 1, Physics 2, Chemistry 2, Mathematics 4 (specific entry A10).

Or:

Swedish upper secondary school courses Biology A, Physics B, Chemistry B, Mathematics E (specific entry 10) and Basic Courses in Programming, for example L0002B or analogous knowledge acquired through other courses or proved practical work.

Selection

The selection is based on 1-165 credits.

Examiner

Folke Stridsman

Course Aim

The aim of the course is to give the students ability to describe and explain modern tools for development, methods for GI systems development and different types of GIS applications. The students shall also be able to add customized functionality to ArcGIS, understand and apply looping and branching in VBA They shall also be able to work with forms, variables and functions in VBA. Further more students shall be able to construct programs in ArcGIS with ArcObjects.

Contents

- Development Tools and System Development Methodologies for GIS and different types of GIS Applications
- Learning ArcGIS
- How to work with ArcObjects using VBA
- Fundamentals of Visual Basic and Visual Basic for Applications (VBA)
- Customizing ArcGIS
- Working with Variables and Functions in VBA
- Working with Forms in VBA
- Understanding Branching and Looping in VBA

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

Lectures, laboratory work. No compulsory lectures.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided. Assignment report.

Remarks

Courses followed through Internet demands access to some sort of broadband. This course is available in both English and Swedish version.

Overlap

The course L0012B is equal to ABL034

Literature. Valid from Autumn 2007 Sp 1

To be announced.

Course offered by

Department of Civil, Environmental and Natural Resources Engineering

Items/credits

Number	Type	Credits	Grade
0001	Assignment	7.5	U G#

Last revised

by 2010-03-01

Syllabus established

by Department of Civil and Environmental Engineering 2007-01-31