



SLUkurs

Syllabus

**PNG0009 Systems Analysis, Model Building and Simulation - Project,
45.0 credits**

Syllabus approved

2006-03-07

Subjects

Statistics, Computer Science and Systems Science

Education cycle

Third cycle

Grading scale

Pass / Failed

The requirements for attaining different grades are described in the course assessment criteria which are contained in a supplement to the course syllabus. Current information on assessment criteria shall be made available at the start of the course.

Language

Swedish

Prior knowledge

The three first weeks of PNS0025 Systems Analysis, Model Building and Simulation, 4 credits.

Objective, including learning outcomes

The course is intended to practice central parts of the basic course (PNS0025). During the course the individual student has the possibility to apply one of several

simulation methods on his own planned or ongoing research in form of a project. He or she may also define an interesting project in order to practice a specific method or technique.

Content

The focus is on how to carry out a systems analysis project including an operational formulation of the problem, modelling, validation, problem solving, result evaluation, result presentation and implementation. Within this frame the student is free to define his/her own project, choose an appropriate type of model, build and simulate the model, perform the analysis and present the results. Also techniques like sensitivity analysis, model fitting and optimisation may be part of the project. The project should be presented orally as well as in a written report.

The 3 credit course consists of one period on an almost full time basis. The course is co-scheduled with PNS0025 and starts three weeks after the beginning of that course.

Requirements for examination

Approved Project work for 3 credits including an oral and a written presentation.

Additional information

Extention of the course PNS0025 Systems Analysis, Model Building and Simulation, 4 credits.

Responsible department

Department of Energy and Technology