

Invitation

Nordic PhD course in Advanced Systems Analysis: economic, technical, and societal aspects.

The course aims at a conceptual discussion of systems analysis methodologies and practical applications in different thematic fields and contexts – albeit, this year with particular focus on energy related issues and connected concerns.

Place and Time

Stockholm, Autumn term, 2015

Organizing institutions

The Department of Computer and Systems Sciences,
Stockholm University (main)
Stockholm Resilience Centre, Stockholm University
Swedish Agriculture University

Sponsors

Swedish Energy Agency (Energimyndigheten)
Swedish Research Council Formas.

Application is open until 18th of May, 2015

Nordic PhD Course in Advanced Systems Analysis: economic, technical, and societal aspects

Autumn semester 2015

Scope and objectives

The course aims at a conceptual discussion of systems analysis methodologies and practical applications in different thematic fields and contexts – albeit, this year with particular focus on energy related issues and connected concerns.

PhD students will have the opportunity to (i) deepen their knowledge on systems analysis theory and improve applied systems analysis skills in a specialised thematic context; (ii) discuss state-of-art theoretical concepts and issues with various senior researchers and peers; (iii) exercise concrete systems analysis applications. The profile of the course is multi- and interdisciplinary in character. Also, the course aims to increase professional connections in the systems analysis community.

Course outline

The course will be organised in several modules, which includes: concentrated 3,5 full time day package of high profile lectures and seminars, as well as, group work and paper writing.

Module A. Overview of systems analysis (lectures and seminars)

timeframe: 14–17 September 2015

pace: 100%, participation is mandatory for the whole time

place: Bogesundsgården hotel located in the Stockholm archipelago, (www.bogesundsgarden.se/page84.html)

accommodation: Full-board accommodation will be provided to participants for free. This includes 3 meals a day with coffee-breaks, and a twin room accommodation.

transport: We arrange a special free bus from/to the Stockholm Central Station (“Centralen”) on the arrival/departure day.

scope: a series of lectures and workshops will be provided by high-profile guest lecturers. See below list of confirmed speakers and affiliated scholars. Additionally, the topic for the paper writing assignment will be discussed with the teachers.

Module B. Applying system analysis (Assignment)

B1. Writing a paper

timeframe: September - end of November, 2015

pace: 25% (indicatively)

place: home institutions

scope: Students apply their knowledge and skills in systems analysis to a field of interest. The work can be done in small groups (2–3 students), which will be formed during the module A. This work should be done in the form of a scientific paper to be presented at the examination day (see B2).

B2. Final seminar and examination

timeframe: indicatively 1st of December, 2015

pace: full day, mandatory participation

place: DSV, Stockholm

scope: Students present their written papers to the teachers and the other students at a special seminar. The examination committee assess the works.

Examination

The full course is an equivalent of 7,5 HECs (200 hours work), which have to be translated into local credits at the respective home institution. The translation should be based on an initial agreement between the participant and his/her PhD supervisor.

The examination will be conducted at the final seminar (see B2 above). Upon successful completion of both modules A and B a recommendations by the organisers for 7,5 HECs will be issued for the participants' home institutions.

Examination committee

Prof. Uno Svedin, Stockholm University (DSV, SRC)

Prof. Hans Liljenström, Swedish University of Agricultural Sciences (SLU)

Prof. Garry Peterson, Stockholm University (SRC)

Language

The lingua franca of the course is English, this applies to lectures, report writing, and communication.

Costs

The course is free of charge for the admitted participants, which includes teaching activities, venue, accommodation, meals and transport from/to Stockholm Central.

Participants are expected to cover other expenses, e.g., travel costs to Stockholm, on their own or make arrangements with their home institutions.

Eligible participants and Application

The applicants should have been formally enrolled as PhD candidates at any faculty of any Nordic university or research institute. The applicants should preferably have passed at least one year of their PhD studies.

Circa 18 students will be selected on a competitive basis, considering skills, experience, and motivation. Additionally, we strive for thematic and national diversity in the group.

Applicants must fill in the application form (see the Appendix) along with an enclosed CV detailing their educational background and a list of current publications if available (maximum of 2 pages).

The application must be signed both by the applicant and his/her supervisor and sent to Anton Talantsev (norcosa@dsv.su.se) no later than 18th of May, 2015.

Collaborating institutions

The Department of Computer and Systems Sciences (DSV), Stockholm University (main organiser)
Stockholm Resilience Centre (SRC), Stockholm University
Swedish University of Agricultural Sciences (SLU)

Sponsors

The course is funded by the Swedish Energy Agency (Energimyndigheten) and the Swedish Research Council Formas.

Teachers and topics of the course

Title	Name	Institution	General topic at the course
Professor	Henrik Boström	Stockholm University (DSV)	Big data
Professor	Love Ekenberg (tbc)	International Institute for Applied Systems Analysis and Stockholm University (DSV)	Decision and risk analysis
Professor em.	Lars Ingelstam	Linköping University (retired)	Historical development of system analysis
Professor em.	Anders Karlqvist	Swedish Polar research Secretariat (retired)	Systems analysis and complexity
Associate Professor	Aron Larsson	Stockholm University (DSV)	Decision and risk analysis
Professor	Hans Liljenström	Swedish University of Agricultural Sciences and Agora for Biosystems	Sustainability, cognitive models
Professor	Sebastiaan Meijer	Royal Institute of Technology	Gaming and simulation
Professor	Garry Peterson	Stockholm University (SRC)	Sustainability science and resilience
Professor	Ahti Salo	Aalto University	Decision and risk analysis
Professor	Afzal Siddiqui	Stockholm University (DSV) and University College London	Energy systems analysis
Professor	Uno Svedin	Stockholm University (DSV and SRC)	Sustainability science, resilience, and decision analysis

DSV - The Department of Computer and Systems Sciences at Stockholm University
SRC - Stockholm Resilience Centre at Stockholm University

Affiliated Nordic Scholars

Norway: Professor Vegard Skirbekk, Norwegian Institute of Public Health

Denmark: Professor Per Dannemand Andersen, Technical University of Denmark

Associate Professor Josef Oehmen, Technical University of Denmark

Finland: Professor Ahti Salo, Aalto University

Questions

Questions and further details can be addressed to Anton Talantsev (norcosa@su.se).

Motivation for course attendance (max 500 words)

Why do you want to attend the Nordic PhD Course? What relevant skills do you have?
(max 500 words)

Please append your CV (max. 2 pages) detailing your educational background and a list of publications. Send the application and CV to norcosa@dsv.su.se

Applicant's signature: _____ Date: _____

Main supervisor's signature: _____ Date: _____