AALBORG UNIVERSITY
DENMARK

Doctoral School of the Technical Faculty of IT and Design, Aalborg University

Online PhD course 2024: Advanced Energy Systems Analysis on the EnergyPLAN model

Aalborg University, Denmark, hosts this EnergyPLAN PhD course as a fully online course. The course gives an introduction to advanced energy system analysis using the EnergyPLAN model. The course takes place on 29 October - 26 November 2024. Registration is possible until 20 October 2024.

Contents

The course starts with an introduction to EnergyPLAN (installation, using, constructing new data sets) and proceeds to focus on the use of the model in

- sustainable cities and communities
- technical analyses of large-scale integration of wind
- analyses of exchange with external electricity markets
- combinations of different renewable energy technologies
- designing flexible energy systems using flexible technologies such as heat pumps, hydrogen storage, pumped storage etc.
- district heating systems versus individual houses and zero energy buildings
- designing energy systems based on multiple criteria

Information

Organiser: Professor Henrik Lund, lund@plan.aau.dk
Lecturers: Jakob Zinck Thellufsen, Poul Østergaard and Henrik Lund
Place: Online
Fees: PhD fellows: 120 EUR
Professionals (consultancy, industry, etc.): 1200 EUR
Registration: Via this **link** until 20 October 2024. Registration is binding.
Payment: Payment upon registration. Credit card payment is required to access course.
Website: https://energyplan.eu/our-workshops/
Contact: lund@plan.aau.dk (course) or mettes@plan.aau.dk (registration)

Timeline

Module 1
Getting ready
Oct 20 - Oct 28
These are activities required to be ready to start the course.

This includes downloading EnergyPLAN and looking into training exercises.

Online session 1
Welcome
Oct 29
Online live meeting in Teams, where we welcome you all, and you present your topics of study.

Module 2
Starting up energy system modelling
Oct 29 - Nov 11
In this period, we expect you to watch Lectures 1-3 and start up your energy system modelling in EnergyPLAN establishing reference models.

Online session 2
Q&A
Nov 12
Online Q&A session where we will answer any questions you may have on the modelling.

Module 3
Independent scenario analysis
Nov 12 - Nov 18
In this period, we expect you to watch Lectures 4-6 and continue your modelling, working on scenarios etc.

Online session 3
Q&A
Nov 19
Online Q&A session where we will answer any questions you may have on the modelling.

After this session, the final week is dedicated to finishing your models and preparing your presentations.

Online session 4
Course exam
Nov 26
At the exam, all students present their models and scenarios in a live online meeting.

See Sustainable Energy Planning research projects here.