



PLANNING AND FORECASTING IN ENERGY SYSTEMS

3 ECTS (ELECTIVE)

AGH University of Science and Technology

Course responsible: prof. dr. Wojciech Suwała

Course overview

The aim of the course is to give students basic knowledge and skills in methods used in energy planning and forecasting, especially models' building. The course is devoted to planning and forecasting methods for energy systems which are indispensable for the decisions aimed at sustainable energy development. The course consists of lectures, classes and project.

Lectures content: Aims and principles of planning and forecasting. Determinants of fuels and energy, systems development, modelling of energy systems development will be included. Methods of modelling: mathematical modelling, systems dynamics.

Classes' content: recognising elements of systems, building representation of the system, programming simple models with GAMS modelling software.

Project: Construction of simple model of fuel and energy system, use for forecasting and planning.

Outcome of the course

After this course the student should be able to

- identify fuels and energy systems elements and their relations,
- understand how to apply the methods: mathematical programming, systems dynamics,
- construct simple models of the fuel and energy system,
- analyse models results and policy recommendations.

Course coordinator & teachers

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