

COURSE TITLE:

TECHNOLOGIES WITH CONSCIOUS ENVIRONMENTAL PROTECTION

COURSE DESCRIPTION:

Program of the topics: Technologies with conscious environmental protection.

The physical and chemical foundations of the "production" of electrical energy. The instructive model calculations of real-life situations performed with real data helps to introduce the modern energetics and helps the students realize how to create simple mathematical tools to check on the various data displayed in news reports and statements. The basics of nuclear energy: the operating principles of nuclear power plants, the current types and their possible future.

Technologies in overview are arranged in several matrix forms. All metrics consist of technology sequences in the rows and various cross weaving interactions in the columns. In the case of the environmental focus the weaving interactions come from the natural environment: these are the main streams of the environment. In the case of industrial approach the columns are the common machine systems characteristic in an industrial constraint which forms the materials at that stage of the technology. In the case of space probe the technologies are measuring technologies, while the environmental streams are represented by the sensors taking samples from that stream.

LITERATURE:

Stanley E. Manahan (2006): Environmental Science and Technology: A Sustainable Approach to Green Science and Technology, Second Edition. CRC Press; 2 edition (October 20, 2006)

TEACHER:

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