

**Course:** Alternative energy sources

**Lectures:** Renewable energy sources. Occurrence, resources and methods of obtaining renewable energy. Solar, water, wind and biomass energy. Geothermal energy. Energy efficiency of obtaining and processing energy from renewable sources. The usage of soil, water and air heat by heat pumps. Technical and economic aspects of obtaining renewable energy in urbanized areas. Basic technological schemes of heat sources based on RES. Systems supporting the use of energy from renewable sources. Energy storage.

**Project:** Balancing renewable energy. Estimating the potential of energy from renewable sources. Selection, calculation and design of basic technological systems of heat sources using RES.

**Responsible person:** Marzena Jasiewicz, PhD Eng.

**More info:**

<https://webapps.uz.zgora.pl/syl/index.php?/course/showCourseDetails/1286517>