

Title of the course: Biomass production and recovery	NEPTUN-code: RKWMU1EBNE	Weekly teaching hours: $l+cw+lb$ 2+1+0	Credit: 5 Exam type: e
Course leader: Imre Biczó, Dr.	Position: master teacher	Required preliminary knowledge: -	
Curriculum:			
<p>During the semester all biomass raw materials that are used energetically in domestic and / or foreign biomass power plants will be presented.</p> <p>One of these is herbaceous and woody plants grown specifically for biomass use. These raw materials cover not only the basic aspects of cultivation, but also other environmental technology linkages such as brownfield revitalization, phytoremediation, etc.</p> <p>Wastes that can be used as biomass feedstock, waste from the biological industries, and rdf and srf from the fraction of municipal waste sorting, as feedstock for biomass and / or power plant boilers, or from so-called municipal waste. Raw materials for the "dry" biogas process will be presented in the second half of the semester. The standards, legal requirements and technical aspects of these materials as well as the technological and organizational aspects of production will also be introduced during the course.</p> <p>In addition to the main mechanical / mechanical parameters of each type of biomass firing equipment, the course material is detailed along with the main material groups.</p>			
Professional competencies:			
<p>Knowledge of the learning, knowledge acquisition, and data collection methods of the special fields of environment protection, their ethical limitations and problem solving techniques.</p> <p>Knowledge of the basics of energy management, options for energy production, their advantages and disadvantages, as well as the concept and feasibility options of sustainable development.</p> <p>Able to participate creatively in engineering work based on their multidisciplinary skills, as well as to adapt to continuously changing circumstances.</p>			
Literature:			
1.Erik Dahlquist: Biomass as Energy Source: Resources, Systems and Applications, March 31, 2017 by CRC Press, Reference - 300 Pages, ISBN 9781138073227 - CAT# K33885			
Comment:			