

**Course title:** **Biofuels – selectable course**

**Institute/Division:** **FACULTY OF CHEMICAL ENGINEERING AND TECHNOLOGY**  
**Erasmus subject code:** WITCh ICHIP oIIS B6  
**Number of contact hours:** 15 hours (15h lectures)  
**Course duration:** 1 semester (spring or fall\*)  
**ETCS credits:** **1**

**Course description:** The course reviews the liquid biofuels diversity on a background of other renewable energy sources, highlighting their role in the global energy balance. The basics of Polish, European and worldwide legislation regulating the production, properties and distribution of biofuels will be given together with the most typical classification based on the physical state (biogas, biomass and liquid biofuels) and the generation (Ist, IInd, IIIrd and IVth generation); the analysis and comparison of potential raw-materials and production technologies, as well as the perspectives for further development will be discussed.

**Literature:**  
[1 ] Knothe G., Van Gerpen J., Krahl J — The Biodiesel Handbook, Illinois, 2005, AOCS Press  
[2 ] Olsson L.: — Biofuels, Berlin Heidelberg, 2007, Springer

**Assessment method:** **Final test**  
**Prerequisites:** **Basic knowledge in organic chemistry and technology**  
**Primary target group:** **All specialties students**

**Lecturer:** dr inż. E.Skrzyńska,  
**Contact person:** dr inż. E.Skrzyńska e-mail: eskrzynska@pk.edu.pl

**Deadline for application:** **15<sup>th</sup> of January for students applying for spring semester, 30<sup>th</sup> of August for students applying for winter semester**  
**Remarks:** **The course will start for at least 3-5 foreign students**