

Title of Course	Fluid mechanics - laboratory		
Semester	Autumn/Spring		
Teaching Hours per Course:	Total	- Lectures:	- Tutorials:
	15		15
ECTS Credits	2		
The content of education			
Aims of Course	The course is concerned with basic knowledge of the fluid mechanics and the associated engineering applications. The aim of the course is knowledge and understanding of basic ideas, phenomena, and laws that govern of fluid flow, which may be incompressible in liquids and compressible in gases. Thermomechanics and thermodynamics are considered for that purpose. The application of the gained knowledge in industrial equipment design is considered as well. It may be done by determining of flow and thermal parameters in various industrial facilities and in environment as well.		
Program	Lab1-2 – Safety training and laboratory overview; Lab3-4 - Fluid properties measurements; Lab5-6 – Free surface in rotating vessel; Lab7-8 – Steady-state outflow from outlets and orifices; Lab9-10 – Pressure distribution around circular shape; Lab11-12 – Critical Reynolds number; Lab13-14 – Overall energy and pressure line along pipeline;		
Conditions of completion	Students are obliged to participate in laboratory classes. Continuous <u>examination at laboratory classes</u> – evaluation test prior to each class, report submission and evaluation after each class. <u>Examination at lectures</u> – evaluation test during the final lecture.		
Teacher	Prof. Dr. Krzysztof J. Wołosz		