UNIVERSITY OF PANNONIA

COURSE DATASHEET

Semester:	2012/13/1
Course:	Flow and Heat Engineering Machines
Code:	VEMKGEB243H
Responsible department:	Department of Mechanical Engineering
Department code:	MKGE
Responsible instructor:	Dr. András Bálint

Course objectives:

To give the students a good overview about the most important flow and heat engineering machines.

Course content:

Fuels. Fireing equipments (stokers). Furnaces. Efficiency of furnaces. Steam turbines. Gasturbines. Jet engines. Internal combustion engines.. Test. Introduction. Characterization of the fluid machinery performance. Energy conversation in the impellerchanel. Dimensionless coefficients and similarity laws in the fluid machinery. Kavitation. Selection of centrifugal pumps their types and their parts. Different types of plunger pumps. Axial and radial fans and compressors. Water turbines. Test.

Requirements, evaluation and grading:

Taking part in lectures and seminars, successful tests

Required and recommended readings:

Bálint András: Műszaki áramlástan Varga József: Hidraulikus és pneumatikus gépek. Kézikönyv. Fűzy Olivér: Áramlástechnikai gépek és rendszerek. Bohl, Willi: Strömungsmaschinen I.