



SUBJECT DATASHEET

Semester:	2009/10/1
Subject:	Flow and Heat Engineering Machines
Code:	VEMKGEB243H
Responsible department:	Department of Mechanical Engineering
Responsible department code:	MKGE
Responsible lecturer:	Dr. András Bálint

Educational objectives:

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

Detailed content of the subject:

Fuels. Firing 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 impellerchannel. 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:

Taking part in lectures and seminars, successful tests

Required and suggested references:

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