

UNIVERSITY OF PANNONIA

COURSE DATASHEET

Semester:	2012/13/1
Course:	Machines for Silicate Industry III.
Code:	VEMKGEB174L
Responsible department:	Department of Mechanical Engineering
Department code:	MKGE
Responsible instructor:	Dr. Sándor Verdes

Course objectives:

To make known working of machines used in silicate industry and in related areas. Calculation of main geometrical and running parameters.

Course content:

Preparation, extraction of raw materials for silicate industry, main machines. Brick and tile production machines. Shape-forming machines (screw-presses, vacuum-presses.) Problems of material pressing, their basics. Machines of fine ceramics production. Shape-forming machines in fine ceramic industry. Technology and machines in semi-dry production. Wet and dry process. Theory of dry pressing. Machines of moulding jet-moulding. Surface treatment machines in ceramic industry. Equipments of glass industry. Preparatory machines of cement industry. Equipments in cement production and handling. Concrete technology. Blocks. Fibreous materials production (glass-, rock-wool). Silicate industry and environment protection. Waste-materials. Automation, process-control in silicate industry.

Requirements, evaluation and grading:

Fulfilment of laboratory practice and 2 test-papers.

Required and recommended readings:

Talabér J.: Szilikátipari kézikönyv, Műszaki Kiadó, Budapest, 1982. Fábry Gy.: Vegyipari gépészek kézikönyve, Műszaki Kiadó, Budapest, 1987. Fejes – Tarján: Vegyipari gépek és műveletek, Tankönyvkiadó, Budapest, 1979. Péter Gy.: Kerámiaipari gépek, Műszaki Kiadó, Budapest, 1974.