



## SUBJECT DATASHEET

<b>Semester:</b>	2009/10/1
<b>Subject:</b>	Machines for Silicate Industry III.
<b>Code:</b>	VEMKGEB174L
<b>Responsible department:</b>	Department of Mechanical Engineering
<b>Responsible department code:</b>	MKGE
<b>Responsible lecturer:</b>	Dr. Sándor Verdes

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### Educational objectives:

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

### Detailed content of the subject:

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:

Fulfilment of laboratory practice and 2 test-papers.

### Required and suggested references:

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