



## COURSE DATASHEET

<b>Semester:</b>	2012/13/1
<b>Course:</b>	Machines for Silicate Industry I.
<b>Code:</b>	VEMKGEB112L
<b>Responsible department:</b>	Department of Mechanical Engineering
<b>Department code:</b>	MKGE
<b>Responsible instructor:</b>	Dr. Sándor Verdes

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### 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:

About silicate industrial machines. Structural materials. Basics of design. Design calculations of axes for mixing. Critical rotation speed. Driving mechanism for mixing and constructional solutions. Calculations of pressured vessels. Bended and pressed rings. Thin-walled shells, strains. Closing solutions for tanks. Accessories for vessels. (Flanges, studs) Supports. Equipments and apparatuses under different stresses (vacuum, heat, rotation). Basics of size-changing processes. Basics of classification and separation. Technologies, processes and machines. Systemtechnic approach.

### Requirements, evaluation and grading:

2 test papers and 2 homework-studies

### Required and recommended readings:

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