



## COURSE DATASHEET

<b>Semester:</b>	2016/17/1
<b>Course:</b>	Machines of Silicate Industry
<b>Code:</b>	VEMKGEB212L
<b>Responsible department:</b>	Institute of Mechanical Engineering
<b>Department code:</b>	MKGEI
<b>Responsible instructor:</b>	Dr. Sándor Verdes

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### Course objectives:

Introducing processes applied in silicate industry and connected with them and their basic machines. The role and connection of equipments.

### Course content:

Introduction. Terms. Tests. Sampling, distributions, mathematical descriptions. Basics of size-reduction and size-enlargement. Basics of materials handling. Basics of firing. Crushing and comminution machines. Milling, mills. Screens, classifiers. Separators, dust precipitators. Storage, silos, bunkers. Mixing, homogenisation. Packaging. Automation. Process control. Sizeenlarging machines. Granulation. Machines for shaping and forming. Dryers. Furnaces. Treatment of raw materials. Sand, gravel industry. Brick Cement production. Concrete industry, concrete blocks. Cereamics. Glass production. Fibre materials. Environmental protection and silicate industry. Waste treatment.

### 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 gépészek kézikönyve, Műszaki Kiadó, Budapest, 1987. Fejes – Tarján: Vegyipari gépek és műveletek, Tankönyvkiadó, Budapest, 1979. Péter Gy.: Kerámiaipari gépek, Műszaki Kiadó, Budapest, 1974.