



## COURSE DATASHEET

|                                |  |
|--------------------------------|--|
| <b>Semester:</b>               | 2014/15/1  |
| <b>Course:</b>                 | Physical Materials Treatment and Machines for Silicate Industry III. |
| <b>Code:</b>                   | VEMKGEB475F  |
| <b>Responsible department:</b> | Institute of Mechanical Engineering                                  |
| <b>Department code:</b>        | MKGEI  |
| <b>Responsible instructor:</b> | 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.  
Fibrous materials production (glass-, rock-wool).  
Silicate industry and environment protection. Waste-materials.  
Automation, process-control in silicate industry.

### Requirements, evaluation and grading:

Evaluation of the laboratory practice and 2 tests.

### Required and recommended readings:

Talabér J.: Szilikátipari kézikönyv, Műszaki Kiadó, Budapest, 1982.  
Fábry Gy.: Vegyipari gépészek kézikönyve, Műszaki Kiadó, Budapest, 1987.



# UNIVERSITY OF PANNONIA

## COURSE DATASHEET

|                                |  |
|--------------------------------|--|
| <b>Semester:</b>               | 2014/15/1  |
| <b>Course:</b>                 | Physical Materials Treatment and Machines for Silicate Industry III. |
| <b>Code:</b>                   | VEMKGEB475F  |
| <b>Responsible department:</b> | Institute of Mechanical Engineering                                  |
| <b>Department code:</b>        | MKGEI  |
| <b>Responsible instructor:</b> | Dr. Sándor Verdes  |

---

### Required and recommended readings:

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