

<b>Course title: Process Modelling</b>	<b>Neptun code: GEVT402-a</b>
<b>Course coordinator:</b> Gabor SZEPESI, full professor, PhD	
type and number of lesson: 9 lecture per semester	
method of accountability: colloquium	
curriculum location of the subject: autumn/spring	
pre-study conditions:	
<b>The task and purpose of the subject:</b>	
The aim and task of the subject is for students to gain confident knowledge in the field of model making and solving mathematical models	
<b>Course description:</b>	
Generalizable characteristics of continuous technologies, continuous technology as a system. Basic concepts of system engineering. The concept of unique behavior of system elements, factors influencing system behavior. Modeling continuous systems and investigating their behavior using simulation. System simulation methods for systems in a static and dynamic state. Issues of reliability of continuous technologies. Possibilities of optimization and optimal management. Basic concepts of computer process control.	
<b>Required literature:</b>	
<ol style="list-style-type: none"> <li>1. Raman Raghu – Chemical process computations, ISBN 0-85334-341-1</li> <li>2. Cocker, A Kayode – Fortran programs for chemical process desig, analysis and simulation. ISBN 0-88415-280-4</li> </ol>	
<b>Recommended literature:</b>	
<ol style="list-style-type: none"> <li>1. Perry- Chemical engineering handbook, 8th ed. Section 5. DOI: 10.1036/0071511288</li> </ol>	