

Course descriptions

Course name: Introduction to Matlab programming	Credits: 2
Class type: Laboratory, hours per week: 2	
Type of the exam: written	
Prerequisites (if exist): Linear Algebra I., Programming I., Discrete mathematics I.	
Course description:	
After successfully completing the course, students will be:- familiar with source control management in general and SVN in particular- familiar with the basic usage of Matlab- able to apply the learned programming techniques in Matlab,- able to solve undergraduate level engineering problems in Matlab. The course is thought by examples: the focus is on application and problem solving. Topics: SVN, Matlab expressions, functions, matrices, polynomials, equation systems, ODEs, Fourier analysis (audio), GPS and sensor data processing, Simulink.	
Required reading:	
Getting started with Matlab, Version 6, The MathWorks, Inc.; C-K. Cheung, G. E. Keough, Charles Landraitis, Robert H. Gross, Getting started with Mathematica, Wiley & Sons, 1998.	
Recommended reading:	
R. Pratap, Getting started with Matlab, A Quick Introduction for Scientists and Engineers, Version 6, Oxford University Press, 2002; Stephen Wolfram, The Mathematica Book, 4th ed., Wolfram Media/Cambridge University Press, 1999	
Lecturer (<i>name, position, degree</i>): <i>Dávid Csercsik, associate research fellow, Ph.D.</i>	
Additional lecturers , if exist (<i>name, position, degree</i>): <i>Miklós Koller, assistant professor, Ph.D.</i> <i>Tamás Zsedrovits, assistant professor, Ph.D.</i>	