

<b>COURSE TITLE:</b>	<b>NUMERICAL METHODS</b>
Institute/Division:	Institute of Process and Power Engineering / Faculty of Mechanical Engineering
Erasmus subject code:	06.1
Number of contact hours:	60
Course duration:	1 semester
ETCS credits:	6
Course description:	Computer numbers, error analysis, conditioning, stability of algorithms, nonlinear equations in one variable, direct and iterative methods for solving systems of linear equations, linear and nonlinear approximation, polynomial interpolation, initial value problems for ordinary differential equations, Finite Difference Method, inverse methods
Literature:	G.Engeln-Mullges, F. Uhling, Numerical Algorithms with Fortran, Springer, Berlin Heidelberg 1996 J. Taler, P. Duda, Solving Direct and Inverse Heat Conduction Problems, Springer, Berlin Heidelberg 2006.
Course type:	Lectures, classes, computer laboratory
Assessment method:	Projects and exam
Prerequisites:	Mathematics
Primary target group:	1st year postgraduate Mechanical Engineering students
Lecturer:	Piotr Duda, PhD, DSc.
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Deadline for application:	May 31