

COURSE TITLE:	COMPUTER METHODS FOR ENGINEERS
Institute/Division:	Institute of Process and Power Engineering / Faculty of Mechanical Engineering
Erasmus subject code:	06.1
Number of contact hours:	45
Course duration:	1 semester
ETCS credits:	2
Course description:	Control Volume Method, calculation of steady state and transient temperature distribution in thick-walled elements of power boilers by Fluent and ANSYS, Finite Element Method, calculation of thermal and total stresses in elements of power plant.
Literature:	J. Taler, P. Duda, Solving Direct and Inverse Heat Conduction Problems, Springer, Berlin Heidelberg 2006. Fluent 6.0, Fluent Inc., Computational Fluid Dynamics Software, Centerra Resource Park, 10 Cavendish Court, Lebanon, NH 03766, USA ANSYS User's Manual. Revision 10.0 A.
Course type:	Lectures, computer laboratory
Assessment method:	Projects and final test
Prerequisites:	Numerical methods
Primary target group:	1st year postgraduate Mechanical Engineering students
Lecturer:	Piotr Duda, PhD, DSc.
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Deadline for application:	May 31