

<b>Level:</b> bachelor				
<b>Course title:</b> Computational physics				
<b>Status:</b> obligatory				
<b>ECTS:</b> 3				
<b>Requirements:</b> none				
<b>Learning objectives</b> Introduction to computational physics.				
<b>Learning outcomes</b> Students should develop: General abilities: following the literature; search and using the Internet. Specific abilities: adopting the knowledge from numerical mathematics and programming in <i>Mathematica</i> .				
<b>Syllabus</b> <i>Theoretical instruction</i> Numerical methods and applications of computational physics. Computational modelling of mechanical systems, potentials and fields, waves and optical systems, random systems, molecular dynamics, and phase transitions. Interdisciplinary topics. Computer processing of results of measurement.  <i>Practical instruction</i> Seminar works.				
<b>Weekly teaching load</b>				Other:
Lectures: 2	Exercises: Abbe refractometer 1	Other forms of teaching:	Student research:	