



UNIVERSITY OF NIŠ

Course Unit Descriptor

Faculty

Faculty of Mechanical Engineering

GENERAL INFORMATION

Study Program	Mechanical Engineering		
Study Module (if applicable)	-		
Course Title	Numerical Simulations of Transport Processes in Energy and Process Engineering		
Level of Study	<input type="checkbox"/> Bachelor	<input type="checkbox"/> Master's	<input checked="" type="checkbox"/> Doctoral
Type of Course	<input type="checkbox"/> Obligatory	<input checked="" type="checkbox"/> Elective	
Semester	<input checked="" type="checkbox"/> Autumn	<input type="checkbox"/> Spring	
Year of Study	II		
Number of ECTS Allocated	10		
Name of Lecturer/Lecturers	Žarko M. Stevanović, Mića V. Vukić, Miloš M. Jovanović, Predrag M. Živković		
Teaching Mode	<input checked="" type="checkbox"/> Lectures	<input type="checkbox"/> Group tutorials	<input type="checkbox"/> Individual tutorials
	<input type="checkbox"/> Laboratory work	<input checked="" type="checkbox"/> Project work	<input checked="" type="checkbox"/> Seminar
	<input type="checkbox"/> Distance learning	<input type="checkbox"/> Blended learning	<input type="checkbox"/> Other

Purpose and Overview (max. 5 sentences)

To gain new knowledge in the field of numerical simulations in energy and process engineering. To enable students to independently use CFD software. Carry on the experience in using CFD software.

Syllabus (brief outline and summary of topics, max. 10 sentences)

1) Concept of software for numerical simulation in energy and process engineering. 2) Structures of modern software for momentum, heat and mass transfer. 3) Specifics of numerical simulations in energy and process engineering. 4) Accuracy of numerical simulations. 5) Strategies to improve the accuracy of a numerical simulation. 6) Economic indicators of numerical simulations.

Language of Instruction

Serbian (complete course) English (complete course) Other _____ (complete course)

Serbian with English mentoring Serbian with other mentoring _____

Assessment Methods and Criteria

Pre exam Duties	Points	Final Exam	Points
Activity During Lectures	-	Written Examination	-

Practical Work	50	Oral Examination	Max. 50
Teaching Colloquia or Seminar	-	Overall Sum	100

***Final examination mark is formed in accordance with the Institutional documents**