UNIVERSITY OF NIŠ

Course Unit Descriptor	Faculty	Faculty of Mechanical Engineering

GENERAL INFORMATION	
Study Program	Mechanical Engineering
Study Module (if applicable)	-
Course Title	Measurements in Energy and Process Engineering
Level of Study	☐ Bachelor ☐ Master's ☒ Doctoral
Type of Course	☐ Obligatory ☒ Elective
Semester	☒ Autumn ☐ Spring
Year of Study	II
Number of ECTS Allocated	10
Name of Lecturer/Lecturers	Gradimir S. Ilić, Dragiša D. Nikodijević, Dragica R. Milenković, Mladen M. Stojiljković, Bratislav D. Blagojević, Dragoljub S. Živković, Velimir P. Stefanović, Branislav V. Stojanović, Mića V. Vukić, Gordana M. Stefanović, Jelena N. Janevski, Dejan M. Mitrović, Mirjana S. Laković-Paunović, Miloš M. Jovanović, Predrag M. Živković, Živan T. Spasić
Teaching Mode	☒ Lectures ☐ Group tutorials ☐ Individual tutorials ☒ Laboratory work ☐ Project work ☐ Seminar ☐ Distance learning ☐ Blended learning ☐ Other

Purpose and Overview (max. 5 sentences)

To gain new knowledge in the field of measurement systems, measuring equipment and measuring methods on macro and micro levels. To enable students to formulate independently and on scientific principles appropriate experimental investigation in energy and process engineering which is related to the PhD thesis.

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

1) Measurement of macro flow parameters; 2) Measurement of turbulent flow characteristics; 3) Measuring the composition of gases and liquids; 4) Measurement of physical parameters during combustion; 5) Measurement in energy and process plants; 6) Measurements of flow and heat transfer physical parameters in thermal equipment; 7) Measurements of physical parameters of flow in turbo machines and hydro mechanical equipment; 8) Measuring equipment characteristics; 9) Operational modes of instruments; 10) On-line and off-line measurement techniques; 11) Static and dynamic characteristics of instruments; 12) Measurement accuracy; 13) Measurements standards.

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			