



# UNIVERSITY OF NIŠ

**Course Unit Descriptor**

**Faculty**

Faculty of Mechanical Engineering

## GENERAL INFORMATION

Study Program	<b>Mechanical Engineering</b>
Study Module (if applicable)	-
Course Title	Engineering statistic
Level of Study	<input checked="" type="checkbox"/> Bachelor <input type="checkbox"/> Master's <input 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	III
Number of ECTS Allocated	6
Name of Lecturer/Lecturers	Melanija Mitrović
Teaching Mode	<input checked="" type="checkbox"/> Lectures <input checked="" type="checkbox"/> Group tutorials <input checked="" type="checkbox"/> Individual tutorials <input type="checkbox"/> Laboratory work <input type="checkbox"/> Project work <input type="checkbox"/> Seminar <input type="checkbox"/> Distance learning <input type="checkbox"/> Blended learning <input type="checkbox"/> Other

## Purpose and Overview (max. 5 sentences)

Introduce students to the basics of the engineering statistics. A typical engineering statistics course covers statistical study, descriptive statistics (collection, description, analysis, and summary of data), probability, and the binomial and normal distributions, test of hypotheses and confidence intervals, analysis of variance, linear regression, and correlation. The course is targeting both the theoretical and practical aspects of the topics.

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

- 1) Introduction to Probability;
- 2) Random variables;
- 3) Numerical characteristics of random variables;
- 4) Basic elements of statistics;
- 5) Parameter estimation;
- 6) Testing parameter hypotheses;
- 7) Nonparametric testing;
- 8) Analysis of variance
- 9) Linear regression.

## Language of Instruction

- Serbian (complete course)       English (complete course)       Other \_\_\_\_\_ (complete course)  
 Serbian with English mentoring       Serbian with other mentoring \_\_\_\_\_

**Assessment Methods and Criteria**

<b>Pre exam Duties</b>	<b>Points</b>	<b>Final Exam</b>	<b>Points</b>
<b>Activity During Lectures</b>	<b>10</b>	<b>Written Examination</b>	<b>60</b>
<b>Practical Teaching</b>		<b>Oral Examination</b>	<b>Max. 30 (depending on Teaching Colloquia)</b>
<b>Teaching Colloquia</b>	<b>90</b>	<b>Overall Sum</b>	<b>100</b>

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