



# UNIVERSITY OF NIŠ

**Course Unit Descriptor**

**Faculty**

Faculty of Mechanical Engineering

## GENERAL INFORMATION

Study program

**Mechanical Engineering**

Study Module (if applicable)

Course title

Quality Assurance in Mechanical Engineering

Level of study

Bachelor     Master's     Doctoral

Type of course

Obligatory  Elective

Semester

Autumn     Spring

Year of study

IV

Number of ECTS allocated

5

Name of lecturer/lecturers

Stefanović-Marinović D. Jelena

Teaching mode

Lectures     Group tutorials     Individual tutorials  
 Laboratory work     Project work     Seminar  
 Distance learning     Blended learning     Other

## PURPOSE AND OVERVIEW (max. 5 sentences)

Students will be introduced with theoretical basis, defining and management of mechanical system quality. Also machine system testing and standards for quality insurance are the parts of the course.

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

- Quality planning and development. Quality characteristics and their classification
- Development and design process analyze
- Product quality management. Basis of TQM
- Level of mmechanical system quality. The method estimates the level of quality. Quality at the stages of production.
- Basics of metrology and testing of mechanical systems. The principle of measurement of physical quantities electrically. Experimental determination of stress and strain.
- Standardization and quality assurance of mechanical systems. International, national and internal standardization. Standards and models for product quality assurance. ISO 9000 series of 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**

<b>Pre exam duties</b>	<b>Points</b>	<b>Final exam</b>	<b>points</b>
<b>Activity during lectures</b>	<b>5</b>	<b>Written examination</b>	
<b>Practical teaching</b>		<b>Oral examination</b>	<b>40</b>
<b>Teaching colloquia</b>	<b>55</b>	<b>OVERALL SUM</b>	<b>100</b>

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