

Incoming student mobility**Name of UNIOS University Unit: Mechanical Engineering Faculty in Slavonski Brod****COURSES OFFERED IN FOREIGN LANGUAGE
FOR ERASMUS+ INDIVIDUAL INCOMING STUDENTS**

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| Department or Chair within the UNIOS Unit | Department of Industrial Engineering |
| Study program | Mechanical Engineering |
| Study level | Graduate (master) |
| Course title | Design and Analysis of Experiments |
| Course code (if any) | D 923 |
| Language of instruction | English |
| Brief course description | Performing of experiments plays an important role in new process or product design and development as well as in improving and optimizing of existing products and processes. The students are introduced to the main activities for designing experiments: definition of the problem, selection of the design factors and responsible variable, selection of experimental design, performing of experiment and statistical analysis of the data from the experiment as well as inferences and practical suggestions. The basic statistical terms and methods, unbiased estimations and confidence intervals as well as hypothesis testing have been covered in the course. There is more emphasis on the analysis of variance for one and more design factors. The course also deals with factorial designs (full and fractional) as well as regression models useful for prediction and optimization. |
| Form of teaching | Lectures and exercises |
| Form of assessment | Written exam |
| Number of ECTS | 5 |
| Class hours per week | 2 hours of lectures + 2 hours of exercises |

ERASMUS+

EU programme for education, training, youth and sport

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| Minimum number of students | 5 |
| Period of realization | Winter semester |
| Lecturer | Assoc. Prof. Dr. Katica Šimunović |