**Incoming student mobility**

**Name of UNIOS University Unit: FACULTY OF CIVIL ENGINEERING OSIJEK**

**COURSES OFFERED IN FOREIGN LANGUAGE**

**FOR ERASMUS+ INDIVIDUAL INCOMING STUDENTS**

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| **Department or Chair within the Faculty** | **Department for Geotechnics, Transportation and Geodesy** |

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| **Study program**  | **Undergraduate university study programme** |

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| **Study level** | ***1st cycle***  |

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| **Course title** | **Geodesy / Geodäsie (germ.)** |
| **Course code** | **2.04 -101** |
| **Language of instruction** | **German / Deutsch** |
| **Course description** | Definition of geodesy. Overview of geodetic activities. The size and shape of the Earth. The coordinate systems. The map projections. Gauss-Krüger projection (Transverse Mercator). Geodetic networks. Trigonometric and traverse network, network of lower order control points.Levelling net. Representation of the shape of the ground on the maps.Theory of errors with computation of adjustment. Geodetic computation. Geodetic instruments. Theodolite Measurement of distances by tape or chain and optical measurement of distances.Electromagnetic distance measurement. Planimetric survey (in rectangular coordinates; by bearing and distance).Level. Levelling (barometric heighting, trigonometric, geodetic and hydrostatic levelling).Photogrammetry (terrestrial, aerial and satellite photogrammetry). Cartography. Thematic and digital cartography. Printing technology. Planimetric setting out and contour setting out.  |
| **Form of teaching** | Lectures / Practical and laboratory exercises |
| **Form of assessment** | **Two colloquiums or** exam (oral and written) |
| **Number of ECTS** | **4,5** |
| **Class hours per week** | **2 + 2** |
| **Minimum number of students** | **4** |
| **Period of realization**  | ***Summer semester***  |
| **Lecturer** | **Brankica Malić, Ph.D. in Geodesy; Associate Professor** |