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| Course: | ***Computer Applications in Hydraulics*** |
| Course id: ЗOUV6I42 |
| Number of ECTS: 6 |
| Teacher: | Prof. Atila Salvai, Ph.D. |
| Course status | Elective |
| Number of active teaching classes (weekly) |
| Lectures: 30 | Practical classes: 30 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | None |
| 1. Educational goal

 Introducing students to the basics of hydraulics and application in water management. |
| 1. Educational outcomes

 Ability of students to apply the fundamentals of hydraulics in water management. |
| 1. Course content

*Theory lessons:*General principles of modeling and management. Open channel Hydraulics. Hydraulic modeling tools. Planning for floodplain modeling studies. Data needs, availability, and development. Bridge modeling. Culvert modeling. Data review, calibration, and results analysis. Floodway modeling. Channel modification. Advanced floodplain modeling. Mobile boundary situations and bridge scour. Unsteady flow modeling.*Practical classes:* Working on computer programs. |
| 1. Teaching methods

 Practice, Consultations. |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam | Mandatory | Points |
| Lecture attendance | No |  | Oral part of the exam | Yes | 40 |
| Exercise attendance | No |  |  |
|  Term paper | Yes | 60 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Haestad Methods Engineering Staff | Computer Applications in Hydraulic Engineering | Haestad Methods, Inc. | 2004. |
|  | Haestad Methods, Gary Dyhouse, Jennifer Hatchett, Jeremy Benn | Floodplain Modeling Using HEC-RAS | Haestad Methods, Inc. | 2003. |

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| Znak univerziteta | UNIVERSITY OF NOVI SADFACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme AccreditationUNDERGRADUATE ACADEMIC STUDIES WATER MANAGEMENT |
| Table 5.2 Course specification |