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| Course: | *Theory of constructions* |
| Course id: |
| Number of ECTS: 8 |
| Teacher: | Prof. Zorica Srdjevic |
| Course status | Mandatory |
| Number of active teaching classes (weekly) |
| Lectures: 3 | Practical classes: 4 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | Statics |
| 1. Educational goal

Basic knowledge acquirement on statics and foundation of constructions, and strenght of materials, required in water management practice. |
| 1. Educational outcomes

Qualifications for professional agricultural engineering career in the field of water management. |
| 1. Course content

Influence lines for an internal force or a reaction for statically determined beams and trusses using statics and the Muller-Breslau principle. Point response due to a single concentrated live load or uniformly distributed live load. Equilibrium and support reactions of beams, shear and bending moment diagrams. Use of areal moment of inertia to predict deflection, bending and stress in beams. Moment distribution method for statically undetermined beams. Design of foundations (retaining wall, pile groups, shallow and deep foundations). |
| 1. Teaching methods

Lectures, Practice/ Practical classes, Consultations |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam (izabrati) | Mandatory | Points |
| Lecture attendance | **Yes**/No | 5 | *Theoretical part of the exam/Oral part of the exam/Written part of the exam-tasks and theory* | **Yes** | 15 |
| Test | Yes/No |  |  |
| Exercise attendance | **Yes**/No | 5 |
| *Colloquia* | **Yes**/No | 3\*25 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Srđević Z. | Zbirka zadataka iz Тeorije konstrukcija, 1. | Poljoprivredni fakultet Novi Sad, Novi Sad. | 2011. |
|  | Kassimali A. | Structural Analysis | Thomson Canada Limited, Toronto, Canada. | 2005. |
|  | Internet sources. |  |  |  |
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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 |