**Table 5.1** Course specification to doctoral study programs

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| **Course name: Water quality** |
| **Teacher or teachers:** [**Milenković S. Slobodan**](../P%209.3%20Knjiga%20Nastavnika%20DOS%20He/21.%20Slobodan%20S.%20Milenkovic%2C%20redovni%20profesor.xlsx)**,** [**Milićević B. Dragan**](../P%209.3%20Knjiga%20Nastavnika%20DOS%20He/59.%20Dragan%20B.%20Milicevic%2C%20docent.xlsx)**,** [**Zarubica R. Aleksandra**](../P%209.3%20Knjiga%20Nastavnika%20DOS%20He/42.%20Aleksandra%20R.%20Zarubica%2C%20vanredni%20profesor.xlsx) |
| **Course status:** Elective |
| **Number of ECTS:** 10 |
| **Precondition courses:** None |
| **Educational goal**Building students’ capacity for independent professional, research and scientific work in the area of communal hydrotechnics. |
| **Educational outcomes** Active implementation of knowledge in the area of protection of watershed water quality  |
| **Course content**1. Legislative – legal acts (8)

- Water quality standards - Epidemiological aspects- Primary analysis clean water1. Water resources and protection issues (12)

- Water balance, users and polluters- Pollution concentration and propagation data - Hydrodynamical transmission factors - Water resources modeling quality 1. Measures and zones of water sources sanitary protection (16)

- Water polluters cadastre, and the analysis of the water quality status - Water protection measures - Removal of immediate causes of pollution - Reduction of the pollution source intensity - Water source sanitary protection zone 1. Design of the water quality protection system (16)

- Data and completeness evaluation - System definition - Designs of individual elements of protection - Landscape design details 1. Realization and management of water quality protection system (8)

- Realization of the system - Monitoring system - Signalization and automation  |
| **Literature**1. Miloje Milojević, Snabdevanje naselja vodom i kanalisanje**,** Beograd, 1985.2. Degremont: Tehnika prečišćavanja vode, Beograd (1974)3. UTVSI: Direktiva EU o vodama, Beograd, 2005.4. Standard Methods, APHA, AWWA, 2005.5. Voda za piće – Standardne metode za ispitivanje higijenske ispravnosti, Beograd, 1990. |
| **Number of active teaching classes (weekly)** | Lectures: 4 | Study research work: 0 |
| **Teaching methods**Lectures, mentor work, consultations, research work in laboratory and in the field, term paper. |
| **Knowledge evaluation (maximum 100 points)****Pre-examination obligations Points Final exam Points**Term paper **55** Оral part of the exam **45** |