**SWARM COURSES**

**Project title:** Strengthening of master curricula in water resources management for the Western Balkans HEIs and stakeholders

**Acronym:** SWARM

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**Project number:**

597888-EPP-1-2018-1-RS-EPPKA2-CBHE-JP



**Number of new and updated courses per curricula**

| **WB HEI** | **Undergraduate** | | | **Master** | |
| --- | --- | --- | --- | --- | --- |
|  | **New courses** | | **Upgrade/improve of existing courses** | **New courses** | **Upgrade/improve of existing courses** |
| **University of Pristina in Kosovska Mitrovica/ Faculty of Technical Sciences (UPKM)** | 3 | | 1 | 2 |  |
| **Academy of Applied Studies of Kosovo and Metohija (AASKM)** |  | |  | 3 |  |
| **University of Montenegro/ Faculty of Civil Engineering (UoM)** |  | |  |  | 4 |
| **University of Novi Sad/ Faculty of Technical Sciences (UNS)** |  | |  | 5 | 1 |
| **Dzemal Bijedic University of Mostar/ Faculty of Civil Engineering (UNMO)** |  | |  | 1 | 2 |
| **University of Nis/ Faculty of Civil Engineering and Architecture (UNI)** | 4 | |  | 2 |  |
| **University of Sarajevo/ Faculty of Civil Engineering** **(UNSA)** |  | |  |  | 4 |
| **TOTAL** | **7** | **1** | | **13** | **11** |

**SWARM undergraduate study programme courses**

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| --- | --- | --- | --- |
| **WB HEI** | **Course title** | **Type of course** | **ECTS** |
| UNI | 1. Hydrotechnical Facilities (HO) | Mandatory | 5 |
| 2. Water energy management (UEV) | Elective | 5 |
| 3. Water Supply and Sewerage of Buildings (WSSB) | Elective | 5 |
| 4. Municipal Hydrotechnics (MH) | Elective | 5 |
| UPKM | 5. Water Resources Management (WRM) | Mandatory | 5 |
| 6. Modern methods in the preparation of drinking water (MMDW) | Mandatory | 6 |
| 7. Advanced techniques in wastewater treatment (ATWT) | Mandatory | 6 |
| 8. Protection and water resources management (PWRM) | Elective | 5 |

**SWARM master study programme courses**

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| **WB HEI** | **Course title** | **Type of course** | **ECTS** |
| UNI | 9. Water Resources Management (UVR) | Elective | 5 |
| 10. Hydrological Risks Management (HRM) | Elective | 4 |
| UNS | 11. Environmental Practicum (EP) | Elective | 7 |
| 12. Groundwater Flow (GF) | Elective | 7 |
| 13. Alternative Separation Processes in Water Treatment (ASPWT) | Mandatory | 7 |
| 14. Water Quality Management and Methods for Sediment Remediation (WQM) | Mandatory | 6 |
| 15. Open Channel Hydraulics (OCH) | Mandatory | 6 |
| 16. Fundamentals in hydrotechnics, hydromechanics and geotechnics (FHH) | Elective | 6 |
| UNSA | 17. Sewage Systems (SS) | Mandatory | 5 |
| 18. Water Protection I (WPI) | Mandatory | 5 |
| 19. Treatment of drinking water (TDW) | Mandatory | 6 |
| 20. Integral Water Resources Management (IWRM) | Elective | 5 |
| UNMO | 21. Sustainable Management of Communal Water Supply Enterprises (SMCW) | Mandatory | 6 |
| 22. Water Protection (WP) | Elective | 5 |
| 23. Urban hydrology (UH) | Elective | 5 |
| UPKM | 24. Groundwater use, protection and management (GPM) | Elective | 6 |
| 25. Water treatment technologies in industry (WTTI) | Elective | 5 |
| UoM | 26. Hydraulic Engineering (HE) | Mandatory | 5 |
| 27. Groundwater hydraulics (GH) | Mandatory | 5 |
| 28. Measurements in hydrotechnics (MH) | Mandatory | 5 |
| 29. River Engineering (RE) | Mandatory | 5 |
| AASKM | 30. Basic Principles of Water Resources Management and Policy (BPWRM) | Mandatory | 6 |
| 31. Fundamentals of Water Resources Protection (FWRP) | Mandatory | 6 |
| 32. Water and Wastewater Treatment Methods and Technologies (WWT) | Mandatory | 6 |