

| Faculty of Civil Engineering and Environmental Sciences | | | | | | | | | | |
|---|---|----------|-----------|----------|-----------|-----------|----------|--|---------------------------------------|--|
| Field of study | Environmental Engineering | | | | | | | Degree level and programme type | Bachelor of Engineering degree | |
| Specialization/ diploma path | Sanitary networks, installations and equipment | | | | | | | Study profile | academic profile | |
| Course name | HES II Sustainable development and civilization threats | | | | | | | Course code | EE1S21061 | |
| | | | | | | | | Course type | - | |
| Forms and number of hours of tuition | L | C | LC | P | SW | FW | S | Semester | summer | |
| | 15 | 15 | | | | | | No. of ECTS credits | 3 | |
| Entry requirements | - | | | | | | | | | |
| Course objectives | Introducing students to the principles and laws of sustainable development, international conventions and protocols. Indication of civilizational threats in the modern world on a global and local scale. | | | | | | | | | |
| Course content | The basics of sustainable development. Earth Summit 1992 (Rio Declaration, Agenda 21, Convention on Climate change, Convention on Biological Diversity, Declaration on the principles of forest management). Principles and laws of sustainable development. Sustainable development indicators. Global and local causes of civilization threats (demographic growth, development of technology, development of world agriculture, natural hazards to human health) | | | | | | | | | |
| Teaching methods | lecture, class | | | | | | | | | |
| Assessment method | lecture - test; classes - evaluation of presentation | | | | | | | | | |
| Symbol of learning outcome | Learning outcomes | | | | | | | Reference to the learning outcomes for the field of study | | |
| LO1 | has knowledge about the implementation of the principles of sustainable development in the country and in the world | | | | | | | IS1_W12 | | |
| LO2 | knows the goals outlined by international conventions and protocols as well as programs to reduce anthropogenization of the environment | | | | | | | IS1_W12 | | |
| LO3 | has knowledge and assesses civilization threats on a global and local scale | | | | | | | IS1_W12, IS1_K02 | | |
| LO4 | knows and is able to apply sustainable development indicators | | | | | | | IS1_W12, IS1_U17, IS1_K07 | | |

| Symbol of learning outcome | Methods of assessing the learning outcomes | Type of tuition during which the outcome is assessed | |
|--|---|--|---------------------|
| L01 | test | L | |
| L02 | test | L | |
| L03 | evaluating the student's presentation | C | |
| L04 | test | L | |
| Student workload (in hours) | | No. of hours | |
| Calculation | participation in lecture, classes, laboratory classes, etc. | 30 | |
| | work on projects, reports, etc. | 30 | |
| | participation in student-teacher sessions related to the class / seminar / project | 5 | |
| | preparation for and participation in exams/tests | 5 | |
| | TOTAL: | 70 | |
| Quantitative indicators | | HOURS | No. of ECTS credits |
| Student workload – activities that require direct teacher participation | | 35 | 1.5 |
| Student workload – practical activities | | 35 | 1.5 |
| Basic references | 1.Allam A. World sustainable development outlook 2015 : green behavior : re-thinking policy for sustainability. Brighton: World Association for Sustainable Development, 2015. 2. Bazyli P. Towards the theory of sustainable development. Bialystok; Warsaw : Bialystok School of Economics, 2007. 3. Carley M., Christie I. Managing sustainable development. London, Earthscan Publications, 2000. | | |
| Supplementary references | 1. Borys T. Indicators for sustainable development : Polish experiences. Wyd. Ekonomia i Środowisko, 2005. 2. Żylicz T. Challenges of sustainable development in Poland. 2010, on-line: https://sendzimir.org.pl/en/publications/challenges-of-sustainable-development-in-poland-textbook/ | | |
| Organisational unit conducting the course | Department of Technology in Environmental Engineering | Date of issuing the programme | |
| Author of the programme | Ph.D., Adam Łukowski | 23.02.2023 | |

L – lecture, C – classes, LC – laboratory classes, P – project, SW – specialization workshop, FW - field work,
S – seminar