



CALL FOR APPLICANTS

Course Mode	Blended Intensive Programme (BIP)		
Course Title	Soil protection and management of degraded and industrial lands		
Admission Profile	Bachelor's, Master or PHD degree students with technical training who wish to acquire a specialization or updated practical training in Soil protection and management of degraded and industrial lands		
Hosting Institution	Wroclaw University of Life Sciences and Environment (WUELS-Poland)		
Participant Institutions	<p>Organizer Institution: Wroclaw University of Life Sciences and Environment (WUELS-Poland)</p> <p>Co-organizers Institutions:</p> <ul style="list-style-type: none"> University of Parma (UNIPR): co-organizing university University of Extremadura (UNEX): co-organizing university University of Evora (UE): co-organizing university University of Oradea (UO): co-organizing university <p>Partners Institutions:</p> <ul style="list-style-type: none"> University of Angers (UA): partner university University of Gävle (HiG): partner university Otto von Guericke Universität Magdeburg (OVGO): partner university Atlantic Technological University (ATU, Ireland): partner university 		
Total number of participants per institution:	<p>The numbers of participants agreed by the program partners are the following:</p> <ul style="list-style-type: none"> - Wrocław University of Life Sciences and Environment 5 students - University of Parma 5 students - University of Extremadura 5 students - University of Evora 5 students - University of Oradea 5 students - University of Angers 5 students - University of Gävle 5 students - Otto von Guericke Universität Magdeburg 5 students - Atlantic Technological University 5 students - <p>Note: The BIP is open to a maximum of 45 participants. In case one of the above Universities should have less students than the maximum allowed, the places left will be made available to other universities in order to reach the planned number of participants.</p>		
Number of ECTS	6		
Language of the Programme	English		
Start and End Date of the Virtual Part	16 th to 26 th of October of 2023	Place	Online
Start and End Date of the in-Presence Part	3 rd to 7 th of July of 2023	Place	Wroclaw University of Life Sciences and Environment

Introduction

The Wrocław University of Life Sciences and Environment jointly with the University of Parma, the University of Extremadura, the Universidade de Évora and the University of Oradea offer their students the opportunity to participate in a Blended Intensive Program. The Blended Intensive Program is officially approved by the EU in the framework of the ERAMSUS+ 2021/2027.

BIPs are one of the new and innovative formats of student mobility introduced by the new Erasmus+ 2021-2027 Program. These programs, jointly developed by multiple higher education institutions, feature advanced and innovative pedagogical approaches that combine short-term face-to-face (physical) mobilities with virtual learning.

BIPs are inherently transnational and transdisciplinary, as curricula are developed and taught together by partner institutions in different countries. The combination of in-person and virtual learning spaces allows students and professors to experience and exchange highly collaborative, challenge-based, and research-steeped methods of teaching and learning.

Summary

Detailed programme of the in-presence part:

Day 1: Lectures (4h) + lab classes (4h):

- Lecture 1: Factors determining the diversity of soils (case study: Lower Silesia) 2h
- Lecture 2: Basic soil functions and ecosystem services 2h
- Lab classes: Compost and organic wastes – importance for carbon sequestration 4 h

Day 2: Lectures (4h) + lab classes (4h):

- Lecture 3: Properties of urban and industrial soils. Soil contamination 2h
- Lecture 4: Soil protection policy in EU countries 2h
- Lab classes: Biochar in carbon cycling and soil remediation 4h

Day 3-5: Field classes (24h)

- Day 3. Soil contamination and remediation measures applied in the areas affected by copper ore mining and processing. Reclamation and revitalization of copper tailings impoundments. 8h
- Day 4. Degradation and reclamation of soils contaminated by historical gold mining and arsenic industry. 8h
- Day 5. Degradation and reclamation of lands technically disturbed by mining activities - the areas disturbed by hard coal mining in Lower Silesia. 6h
Achievements and shortcomings of remediation and revitalization of degraded lands. Summary and discussion. 2h

Detailed programme of the online part:

Module 1 (M1): Main soil threats in Europe

5 h (on-line meetings) + 2.5 h (pre-recorded lectures)

- 1.1. Soil functions and ecosystem services under the influence of climate change and human activities
- 1.2. Soil erosion by water/wind
- 1.3. Decline in soil organic matter in mineral soils and organic soils (peatlands)
- 1.4. Soil sealing and compaction
- 1.5. Desertification (problems of water retention in soils)

Module 2 (M2): Management of soil protection in the areas used for food production

5 h (on-line meetings) + 2.5 h (pre-recorded lectures)

- 2.1. Soil health and the ways to keep soil healthy
- 2.2. Biodiversity in soil and decline in soil biodiversity
- 2.3. Soil nutrients - shortage and overfertilization
- 2.4. Bioeconomy – solution for restoring soil organic carbon
- 2.5. Safe food production in urban gardens

Module 3 (M3): Remediation of contaminated soils

5 h (on-line meetings) + 2.5 h (pre-recorded lectures)

- 3.1. Soil contamination. Approaches to assess soil contamination
- 3.2. Principles of environmental risk assessment
- 3.3. Techniques of remediation applied for contaminated soils
- 3.4. Bioremediation
- 3.5. Phytoremediation

Module 4 (M4): Reclamation of lands technically disturbed by mining activities
5 h (on-line meetings) + 2.5 h (pre-recorded lectures)

- 4.1. The areas affected by mining of rocky and loose raw materials
- 4.2. The areas disturbed by hard coal mining
- 4.3. The lands disturbed by opencast mining, an example of lignite mines
- 4.4. Contemporary metal ore mining and processing
- 4.5. Reclamation and revegetation of abandoned lands.

<p>Selection Criteria</p>	<p>To apply for this program, students must be regularly enrolled at one of the participating universities.</p> <p>Participation to the program is open to students of any discipline connected with contents related to the BIP.</p> <p>At the time of the application submission, applicants must demonstrate proof of English language competence at the B1/B2 level. This can be certified by the applicant's home University (Level B2 will be a preferential criterion).</p> <p>Selected students must communicate their acceptance or withdrawal within 5 days from the publication of the selection results by contacting their university program coordinator. Selected students will be contacted with further instructions upon completion of the selection procedures.</p>
<p>How to Apply</p>	<p>Students interested in participating should fill out the application form by 5th of June 2023, as well as insert the required documents in the link: https://siue.uevora.pt/</p> <p>The application form must contain the following attachments:</p> <ol style="list-style-type: none"> 1.- Copy of valid ID or passport 2.- Transcript of Records (A certificate of enrolment at the home University with a list of passed exams and grades) 3.- Language certificate 4.- Motivation letter (containing, if any, experiences abroad)
<p>Selection criteria and procedures</p>	<p>An appointed Committee will carry out the selection procedures. Selection is based on the following criteria:</p> <ul style="list-style-type: none"> - Academic performance - Motivation - English language competence - Evaluation of further qualifications and skills <p>Selected students must communicate their acceptance or withdrawal within 5 days from the publication of the selection results by contacting their university program coordinator. Selected students will be contacted with further instructions upon completion of the selection procedures.</p>
<p>Financial Support</p>	<p>The attendance of the Blended Intensive Programme may be covered by an ERASMUS+ SMS Short Mobility Grant for all mobile students (excluding students from the hosting University). This financial support may only be guaranteed by the selected student's home University. The University of origin of each selected student is fully responsible for the management of the financial aspects of the mobilities in accordance with the provisions of the competent ERASMUS+ National Agency.</p> <p>No financial support is foreseen for University of Wroclaw University of Life Sciences and Environment (hosting institution) students as they will not be travelling for the purposes of participation in this program (non-mobile participants).</p> <p>During the presential part of the BIP the accommodation and lunches are offered by the hosting University, Wroclaw University of Life Sciences and Environment,</p> <p>Please refer to your local coordinator or Erasmus/International Relations Office for any further information related to the financial support made available</p>
<p>Contacts</p>	<p>Wroclaw University of Life Sciences and Environment (Coordinator) Anna Posadowska-Malarz eugreen.bip@upwr.edu.pl</p> <p>University of Évora Prof. Gottlieb Basch gb@uevora.pt</p>