

# **TECHNOLOGIES AND PROCESSES FOR THE ENVIRONMENT AND AGRICULTURE**

## **Courses Catalogue 2023**

All courses are open to other curricula as well as the curriculum "Technologies and processes for the environment and agriculture."

The courses will be activated, at the request of the students, upon reaching a minimum number of interested students.

### **Introduction to the hydrology of soil: water, mass and energy fluxes in the living layer of the Earth**

*Lecturers:* Stefano Barontini (stefano.barontini@unibs.it), Marco Peli (marco.peli@unibs.it), Martina Siena (martina.siena@polimi.it)

20 hours

*Year: First and/or Second*

### **Measurement uncertainty in scientific and technological research**

*Lecturer:* Nicola Zurlo (nicola.zurlo@unibs.it)

6 hours

*Year: First*

### **Statistic for the experimental and technological research**

*Lecturer:* Anna Simonetto (anna.simonetto@unibs.it)

30 hours

*Year: First*

## **Advanced technologies for the treatment of water and waste**

*Lecturers:* Giorgio Bertanza (giorgio.bertanza@unibs.it), Sabrina Sorlini (sabrina.sorlini@unibs.it), Mentore Vaccari (mentore.vaccari@unibs.it), Alessandro Abbà (alessandro.abba@unibs.it)

8 hours

*Year: First and/or Second*

## **Technologies to support the ecological transaction in the livestock farms**

*Lecturer:* Giulia Ferronato (giulia.ferronato@unibs.it)

15 hours

*Year: Second*

## **Precision feeding as instrument for the reduction of the environmental impact of the livestock sector**

*Lecturer:* Valentina Caprarulo (valentina.caprarulo@unibs.it)

15 hours

*Year: Second*

## **DNA Metabarcoding: what is it and how it changes the mode to observe the environment**

*Lecturer:* Sumer Alali (sumer.alali@unibs.it)

10 hours

*Year: First*

**OTHER TEACHING ACTIVITIES** (Seminars/laboratory and research/activity multi-inter-trans disciplinary)

**Epistemology, theory and method of science from antiquity to the contemporary**

*Lecturer:* Matteo Settura (matteosettura@gmail.com)

6 hours

*Year: First*

**Simulation of the conventional activated sludge process using advanced instruments**

*Lecturer:* Giorgio Bertanza (giorgio.bertanza@unibs.it)

4 hours

*Year: Second*

**Which is the role of traditional irrigation in climate changes scenarios?**

*Lecturer:* Stefano Barontini (stefano.barontini@unibs.it)

3 hours

*Year: Second*