



SHORT INTENSIVE COURSES

Before and during the internship students will be trained on the specific topics / methodologies related to the internship programme by “short intensive courses” organised by the hosting institution and online courses provided by the TAURUS consortium.

Course title: MONITORING TOOLS FOR URBAN FORESTRY

Linked to the Internship programme: Vegetation monitoring based on remote sensing and GIS analysis

Edition: 2019

Academic coordinator: Prof. Anna Barbati - University of Tuscia - Viterbo, Italy

Duration: 20 hours of class lectures + 9 hours of practical training

ENTRY REQUIREMENTS:

- ✓ to be currently enrolled in one of the TAURUS partner Universities (<https://www.taurus-erasmus.eu/consortium/consortium/>)
- ✓ to have a university level knowledge on forest ecology.

COURSE STRUCTURE

Module 1: CARBON SEQUESTRATION BY URBAN FORESTS: INFORMATION NEEDS AND APPROACHES TO ESTIMATION (2 hrs) - **Lecturer:** Prof. Anna Barbati

Module 2: MACHINE LEARNING (2 hrs) - **Lecturer:** Dr. Gianluca Tramontana

Module 3: REMOTE SENSING/GIS FOR PLANT HEALTH AND PHYTOPATHOLOGY (4 hrs) - **Lecturer:** Dr. Gaia Vaglio Laurin

Module 4: REMOTE SENSING & BIOMASS ESTIMATION (2 hrs) - **Lecturer:** Dr. Gaia Vaglio Laurin

Module 5: EDDY COVARIANCE THEORY: AN OVERVIEW TO FLUX CALCULATION (4 hrs) - **Lecturers:** Dr. Simone Sabbatini & Dr. Giacomo Nicolini

Module 6: GIS-BASED ANALYSIS OF GREEN URBAN AREAS AVAILABILITY AND ACCESSIBILITY IN EUROPEAN CITIES (2 hrs) - **Lecturer:** Dr. Antonio Tomao

Module 7: URBAN SPRAWL IN EUROPE AND PERI-URBAN AGRICULTURE: THE MEDITERRANEAN EXPERIENCE (2 hrs) - **Lecturer:** Dr. Luca Salvati

ASSESSMENT & CERTIFICATION

To assess the level of skills acquired at the end of the course, the student will write a short report. Students who have participated to class activities (>75% of presence) and which obtained positive evaluations of their reports will receive a certificate of participation.

MAXIMUM NUMBER OF PARTICIPANTS: 10



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REGISTRATION

For the registration send by email your contact info (name, email, home University, course you are enrolled in, short CV) to the following address: pda@unitus.it writing as subject “TAURUS SIC 2019”

OTHER NOTES

The material for the Lectures and for the Class activities, will be provided by the organiser to the registered students.

SUGGESTED LITERATURE

An update list (when possible, also digital copies) of the most relevant books and papers will be provided to the students.
