



INTERNATIONAL SEMESTER PROGRAM ON FORESTRY (Bachelor level) from February to July

The **University of Valladolid** (E VALLADO01, UVA) provides foreign students with the exciting opportunity to add an international perspective to their education at a Spanish University with a reputation for excellence in forestry teaching and research.

The **International Semester Program on Forestry** is offered to ERASMUS students who come to University of Valladolid in the framework of the interinstitutional agreements signed with partner universities (<http://www.relint.uva.es/>). It is taught at Higher Technical School of Agricultural Engineering located at the campus of Palencia (<http://www5.uva.es/etsiiaa/>).

The **International Semester on Forestry** is a fantastic opportunity for students with an interest in Mediterranean Forestry and Natural Resources Management. It is mainly focused on **Bachelor Forestry** students with **basic Spanish knowledge** and interested in widening their studies of the **Mediterranean Forests** improving their Spanish. Bachelor students in **Environmental and Earth Sciences, Agronomy or Biology** will also be welcome to follow the semester.

This **International Semester Program on Forestry** consists of **six subjects** entirely taught in English of **3 ECTS** each one, a **3 ECTS Forest Practicum** (field practicum) delivered in **Spanish adapted to non-native speakers**, a **6 ECTS SPANISH COURSE** taught by the language Center of the University (<https://spanishinvalladolid.com/>). The students who are in the last year of their Bachelor degree have the possibility of developing the **degree's final project** (Student's Final Project of **12 ECTS**).

The subjects offered are:

- **21 ECTS (7 courses with 3 ECTS credits each one):**
 - ❖ **“Geobotany” (3ECTS) CODE 75025.**
 - ❖ **“Forestry and Biodiversity” (3 ECTS) CODE 75026.**
 - ❖ **“Forestry and Climate Change” (3 ECTS) CODE 75027.**
 - ❖ **“Forest Practicum” *(3 ECTS) field practicu CODE 75028.**
 - ❖ **“Conservation Hydrology” (3 ECTS) CODE 75029.**
 - ❖ **“Forest Soils and Carbon Sequestration” (3 ECTS) CODE 75030.**
 - ❖ **“Molecular Markers& Diagnostic of Plant Diseases” (3 ECTS) CODE 75031.**
- **6 ECTS** corresponding to a **Spanish course (without CODE)**
- **12 ECTS** corresponding to the **Student's Final Project)CODE 75032.**

The students can follow the International Semester Program with or without *The Student's Final Project*. The International Semester Program without *The Student's Final Project* has a total of **27 ECTS** and with *The Student'S Final Project* has a total of **30 ECTS**. Only those students who are currently studying the last year of their university degree can follow the Student's Final Project. In this case the student should choice only 4 of the 7 subjects of 3 ECTS offered.



Geobotany (CODE 75025). *This course explores the biogeography and ecology of the world's main forest biomes. It provides an introduction to the earth's biological history and development of regional floras. The distribution patterns of forest biomes, from the poles to the tropics, their ecological adaptations to climate and soil, vegetation dynamics and response to disturbance will be covered. Land use and global environmental change will be also taken into account.*

Forestry and Biodiversity (CODE 75026). *The subject focuses on multifunctional silviculture understood under a biodiversity point of view. That is, silviculture focused on biodiversity conservation in forestry. The students will participate actively in the diagnosis of special study cases and present the basis of a silviculture management program for a special case.*

Forestry and Climate Change (CODE 75027). *It is a course on silvicultural methods applied under environmental change. Mitigation and adaptation to climate change effects are key in the forest management systems. During the course, students will insight on the basic aspects of the effects of climate change on forest systems and how to help mitigate its effects. In addition, the students' abilities will be strengthened to obtain, elaborate, criticize and communicate scientific ideas to specialized and non-specialized audiences.*

Forest Practicum (CODE 75028). *The course is considered a real integration of practical knowledge from several subjects applied to a real case study. During Practicum a forest is assessed in terms of edaphology, botany, ecology, silviculture, wildfire prevention, soil conservation and wildlife. The course takes place in the forests of the Cantabrian Range, North of Spain. (3 ECTS, field practicum).*

Conservation Hydrology (CODE 75029) *Hydrology applied to the conservation of water and soils in slopes and watersheds, and in rivers. This course has a marked practical approach, but without neglecting the theoretical bases essential for the correct interpretation of the hydraulic and hydrological processes under study. Software tools such as: HEC-HMS (surface hydrology; hydrographs); MODIPÉ (rainwater conservation and harvesting in afforestation schemes); RUSLE (soil erosion by water); WEPS (wind erosion) and PHABSIM (environmental river flows) will be used.*

Forest Soils and Carbon Sequestration (CODE 75030). *In the context of the actual global climate change, soils play a vital role in the carbon cycle. Understanding factors that control soil carbon sequestration, and evaluating management techniques for mitigation and adaptation to the climate change, related to soil fixation, are useful tools for forestry and environmental engineers. Quantification and evaluation of soil organic carbon stocks will be carried out through laboratory and field practices.*

Molecular Markers & Diagnostic of Plant Diseases (CODE 75031). *Molecular markers and techniques have become an essential tool in identifying agents causing diseases in all kind of organisms, including forests plants. This course will focus on the nowadays and up-to-date available molecular techniques that can be used in all aspects related to plant health: certification, control and diagnosis of pests and diseases, traceability of products, environmental monitoring,...*

Student's Final Project (CODE 75032). *The Student's Final Project consists of an original scientific work related to the competences acquired during the International Semester Program on Forestry. The student will design and plan a research project, write it and present it in written form. Finally the student will make an oral presentation. The research work carried out will be evaluated by a committee. Only those students who are in their last course of career can be enrolled in this subject.*

We would be really grateful if you could disseminate this information among prospective interested students. Please, find more details on the following link:

<http://relint.uva.es/EN/internationalSemester/agrarias2.asp?>

Should you have any enquiry concerning this subject or bilateral agreements, do not hesitate to contact Belén Turrión (bturrión@agro.uva.es), Coordinator of International Relationships of the Higher Technical School of Agricultural Engineering at Palencia