

# Summer Internships 2024

## Navarino Environmental Observatory (NEO)

### General information about NEO

The [Navarino Environmental Observatory \(NEO\)](#) is a Mediterranean hub for research and education, which was established in 2009 as a collaboration between Stockholm University, the Academy of Athens and TEMES SA, an enterprise in Greece aiming to create sustainable tourism developments. The field station is located in SW Peloponnese, Greece, in close proximity to a Natura 2000 protected area ([Figures 1](#)). Every year the station hosts more than 250 visitors. The data and knowledge generated at NEO have been used by several European Research Infrastructures, in reports of the IPCC, and have led to more than 200 publications in international scientific journals, books and conferences so far.



**Figure 1.** A panoramic view of the area of internship (*picture captured by Paul Strehlenert*). The location of the NEO field station is also marked in the picture.

At a local scale NEO is conducting research and monitoring activities in close collaboration with local stakeholders aiming to further understand: What is the status of natural resources and habitats in the area, and which are the major threats? Which are the benefits of local nature to human well-being (locals and visitors of the area), and up to what extent do these benefits contribute to the local society and economy?

Since 2016, NEO has established a network of automated water quality monitoring stations within the Gialova Lagoon wetland. The network was updated in 2020 with the installation of more advanced sensors and the monitoring of new sites at the surrounding groundwater resources. The data collection is supplemented with field campaigns for analysis of water samples. Since 2021, NEO together with local farmers have deployed field experiments in olive orchards aiming to investigate the use of groundwater in irrigation, and the impact of farming practices on soil properties.

## Internship

The aim of the internship is to be part of the NEO field studies and conduct monitoring and basic research on important Mediterranean ecosystems such as wetlands and olive orchards close by to the NEO station (*Figure 2*).



**Figure 2.** A map with the natural ecosystems. **Green words:** Olive orchards; **Dark Green shade:** Maqui vegetation (bushes & small trees); **Gold shade:** Sand dunes & beaches, **Blue-Grey shade:** Tyflomitis groundwater aquifer & springs; **Blue lines:** Flow of rivers and streams; **Light blue shade:** Gialova Lagoon wetland; **Dark blue:** Sea. Within these natural ecosystems, several areas are of archaeological importance reveal that the area has a long history of human occupancy (e.g. Thrasimidis tomb, Paleokastro).

The purpose of the internship is to provide students with the opportunity to work at a field station and to get experience in combining practical and theoretical scientific work. The internship is based on teamwork and all interns are expected to be engaged in fieldwork activities, laboratory work, literature review and data analysis (*Figure 3*). In particular the students will be engaged at:

- Nutrient analysis in water samples (sampling and laboratory work)
- Soil analysis for the determination of arthropod biodiversity (sampling and laboratory work)
- Soil analysis for the determination of bulk density and hydraulic conductivity (fieldwork)
- Data management (e.g. harmonization of data series)
- Questionnaires
- New projects

## Practical information

<b>Time period</b>	<b>Internship period:</b> July 1 – August 2 (5 weeks)
<b>Plan</b>	<p><b>1<sup>st</sup> week:</b> Introduction to methodologies (on-line).</p> <p><b>2<sup>nd</sup> – 4<sup>th</sup> week:</b> Activities at NEO station.</p> <p><b>5<sup>th</sup> week:</b> Reporting (at NEO station or on-line).</p>
<b>Accommodation</b>	We provide accommodation at the <a href="#">NEO field station</a> (two students per room at maximum). Interns are responsible for their own food. There is a fully equipped kitchen at the station and a possibility to have free lunch at the staff canteen at the neighbouring resort (Costa Navarino).
<b>Training &amp; Equipment</b>	<p>The training period consists of presentations (on-line and at the NEO station) and hands-on training (field and laboratory work), by the NEO staff.</p> <p>All the necessary equipment for the data collection is provided by NEO. Interns should bring their own laptops.</p>
<b>Mobility</b>	The study sites are generally within biking distance from the NEO station, and using a bike to travel to and from the site is recommended. The bikes are provided by NEO. If the intern has a car and is willing to use it during fieldwork, NEO will cover for gasoline costs.
<b>Certification</b>	At the end of the internship, each intern could ask for a certificate of participation.
<b>Stockholm University</b>	<p>Students from Stockholm University have the possibility to get credits and financial support for the internships (you can combine both). For credits you can apply to do the internship as the 7,5 credit Bachelor’s course “Traineeship in Physical Geography” GE5008. Please read the information on the department’s webpage (<a href="#">Traineeship - Department of Physical Geography</a>) and indicate in your application that you want to do your internship as a traineeship course. For financial support you can apply to do the internship as an Erasmus internship (more info at SUs homepage: <a href="#">Praktik-utomlands-via-Erasmus+</a>). Last day for Erasmus applications is the 31<sup>st</sup> of May.</p> <p>Greek students, and students from other countries are encouraged to check with their departments for similar possibilities.</p>
<b>Insurance</b>	NEO in collaboration with Costa Navarino (CN) provides a basic insurance coverage.

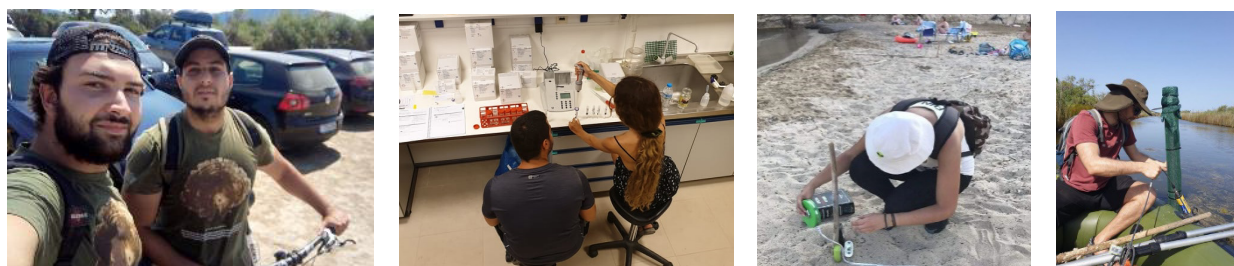


Figure 3: Previous internships @ NEO.

## Trainee profile

<b>Background</b>	The offered internships apply to <b>BSc and MSc students</b> with a background <b>in Natural and Environmental sciences</b> or similar, but they could also be of interest to students with a background <b>in Social sciences</b> who have an interest in management of natural resources.
<b>Affiliation</b>	We primarily welcome students from Stockholm University (SU) and collaborating Greek universities, but students with different affiliation are also welcome to apply.
<b>General Skills</b>	Good communication skills Ability to work individually, and to share responsibilities as part of a team Ability to work in the field and during hot conditions Able to ride a bike to cover distances up to 10-15 km during fieldwork The possibility to bring a car to support some field visits will be highly appreciated (gasoline costs for field-visits are covered by NEO). Driving licence is also a plus.

## Application

<b>How to apply</b>	Please send an e-mail with a CV and a letter of motivation to Martina Hättestrand ( <a href="mailto:martina.hattestrand@geo.su.se">martina.hattestrand@geo.su.se</a> ) and Giorgos Maneas ( <a href="mailto:giorgos.maneas@natgeo.su.se">giorgos.maneas@natgeo.su.se</a> ).
<b>Deadline</b>	Application deadline: Friday, 5 <sup>th</sup> of April. NEO management will inform all candidates latest on Friday, 19 <sup>th</sup> of April.