TEACHING PROJECT
Expert in NESA® Non-Invasive Neuromodulation

1. General course information

Name: Expert in NESA® Non-Invasive Neuromodulation (Private edition)
Duration: 5 months (from 3 October 2025 to 30 March 2026)
Format: 100% online
Location: NESA CAMP, NESA World® virtual campus
Organising entity: NGS Health and Mind, S.L. (NESA World®) with collaborating professors from the University of Las Palmas de Gran Canaria.

Technical-clinical direction: Ms Fabiola Molina Cedrés, Ms María Gonzalez Bueso, Dr Alejandro Medina.
Collaborating professors from the ULPGC: Dr Raquel Medina Ramírez. Dr Martín Vílchez Barrera.

2. Justification

NESA® Non-Invasive Neuromodulation is a technological and clinical innovation aimed at intervening in the autonomic nervous system using low-intensity microcurrents. This procedure, developed using XSIGNAL® medical technology, has proven useful in various areas of health sciences, contributing to the improvement of chronic pain, symptom control in complex patients, and a comprehensive approach to dysfunctions related to neurovegetative balance.

Postgraduate training in neuromodulation techniques responds to a growing demand from healthcare professionals, who require up-to-date knowledge and specific skills to integrate emerging technologies into their clinical practice. The course is also part of the international trend towards continuing education, evidence-based updating, and interdisciplinary work.

From an academic and professional perspective, this teaching project aims to consolidate a specialised training programme which, despite its private nature, maintains the standards of quality and scientific rigour necessary to guarantee professional training and knowledge transfer in the clinical field.

3. Objetives

General Objetive:

To provide students with advanced, comprehensive and multidisciplinary training in NESA® Non-Invasive Neuromodulation, consolidating the scientific, methodological and clinical foundations necessary for its correct application in professional practice.

Specific Objetives:

- Understand the physiological principles of bioelectricity and the autonomic nervous system.
- Identify the technical fundamentals of NESA® Non-Invasive Neuromodulation and differentiate it from other electrotherapy modalities.
- Analyse the scientific evidence base supporting the technique and its clinical applications.
- Design and apply intervention protocols in different healthcare areas (internal medicine, physiotherapy, clinical psychology, speech therapy, urogynaecology, dentistry, sports and sleep medicine).
- Evaluate therapeutic efficacy through the application of validated analysis methods.
- Enhance students' critical thinking skills in the interpretation of clinical and scientific results.
- Develop interdisciplinary skills that promote the integration of NESA® technology into healthcare and research teams.

4. Competencies

General Competencies:

- Learn the theoretical and clinical foundations of NESA® Non-Invasive Neuromodulation.
- Develop critical analysis and reflection skills based on available scientific evidence.
- Integrate knowledge of neuroscience applied to the autonomic nervous system into clinical practice.
- Promote interdisciplinary teamwork in the field of health.
- Recognise the ethical and legal aspects associated with the application of emerging medical technologies.

Specific Competencies:

- Differentiate NESA® Non-Invasive Neuromodulation from other electrotherapy and neuromodulation modalities.
- Safely and effectively manage XSIGNAL® technology in different clinical settings.
- Apply intervention protocols based on scientific evidence.
- Assess the effects of neuromodulation on the autonomic nervous system in different pathologies and clinical conditions.
- Integrate NESA® technology into multidisciplinary intervention programmes.
- Contribute to the generation and dissemination of knowledge in the field of non-invasive neuromodulation.

5. Programme and Contents

The teaching programme is organised into four main modules/chapters within the Virtual Campus. Students are advised to follow the order in order to develop their knowledge and learning in a correlative manner, but navigation of the campus is free, so students can access any module/chapter at any time according to their interests.

Module 1. Physiological principles of bioelectricity and the autonomic nervous system.
Module 2. Fundamentals of NESA® Non-Invasive Neuromodulation.
Module 3. Therapeutic intervention with NESA®.
Module 4. Complementary clinical aspects.

In addition, nine themed live streaming webinars/classes will be held according to the established schedule. These will be recorded and stored on the campus for the duration of the course, and will be available two days after the live broadcast in the webinar replay section or in the corresponding chapter.

6. Metodología Docente

The teaching-learning methodology combines asynchronous virtual teaching, meaning that the course and platform are available 24/7 for study. The only live/streaming activities scheduled are the nine webinars given by guest lecturers, which will be recorded and stored on the platform so that students can view them at any time. Students will have access to recorded classes, guided readings, discussion forums and interactive activities.

The pedagogical model is based on autonomous learning, interaction with teachers and access to up-to-date materials, promoting the progressive acquisition of skills.

7. Evaluation and Certification

The course will be assessed by means of:

- **It is a mandatory and essential requirement** to pass three compulsory multiple-choice tests on the contents of modules 1, 2 and 4 in order **to obtain the certificate**. The tests are multiple-choice with only one correct answer. In order to pass, students must obtain at least 75% of the total marks. The marks are out of 10, with a minimum of 7.5 required to pass. There is no limit to the number of attempts that can be made on the tests. If the student does not achieve a score of 7.5 on any of the tests, they will fail and will not be able to obtain the certificate. Students are advised to prepare and study the questions before taking the tests.

- **Viewing and use of teaching resources.** Students must view and/or mark as seen all the content in chapters 1, 2 and 4. Chapter 3 is not compulsory because it is organised by areas of health science knowledge and is flexible in terms of choosing the content that is of most interest.

It will be an essential and mandatory requirement to pass the three tests and view the content of chapters 1, 2 and 4, as these are the assessments established for obtaining the certificate issued by NESA World®. Students who do not meet the academic criteria will not be able to obtain certification.

8. Teaching staff

The teaching team is made up of specialists from various areas of health and research, with experience in neuromodulation and international academic collaboration. Among them are:

- Dr Raquel Medina – Physiotherapist, Doctor of Neuroscience. Associate professor at the ULPGC and programme coordinator.
- Dr Martín Vílchez – Clinical physiotherapist, Doctor of Applied Research. Associate professor at the ULPGC and academic coordinator.

- Dr Juan Manuel Ceballos – Neurosurgeon specialising in vascular pathology, epilepsy and demyelinating diseases.
- Prof Fabiola Molina – Clinical physiotherapist, Master's degree in Clinical and Experimental Neuroscience.
- Dr Isabel González – Dentist, Doctor of Translational Medicine, specialist in bone regeneration.
- María José Martín – Speech therapist, specialist in clinical intervention.
- Prof. María González – Clinical physiotherapist, Master's degree in pelvic floor physiotherapy.
- Albert Moreno – Physiotherapist and osteopath, specialist in sports physiotherapy.
- Dr Alejandro Medina – Specialist in internal medicine, multimorbidity and chronic patients.
- Sandra Nogues – Clinical Psychologist, Director of BeBright Barcelona.

9. Access and Admission Requirements

The course is open to professionals with a university degree in Health Sciences (Medicine, Nursing, Physiotherapy, Pharmacy, Psychology, Nutrition, Podiatry, Occupational Therapy, Dentistry, Speech Therapy and others) or in Physical Activity and Sports Sciences. Exceptionally, students without a degree who have the XSIGNAL® medical device may be admitted, subject to assessment by the organisation and depending on the regulations of their country of origin.

10. Terms and Conditions of Registration and Consent

- The total enrolment fee is €950.
- Exclusive discount for NESA clients: 100% (free) or 50% (€475), according to the organisation's criteria.
- The discount only applies to the client's first enrolment. In the event of repetition, students must pay the full enrolment fee.
- To obtain the certificate, students must complete 100% of the campus resources and pass the assessments.
- The organisation reserves the right not to issue the certificate in the event of failure to meet academic criteria.
- Students declare that they are aware of and accept the NESA World® data protection policy, available at: https://nesa.world/politica-de-privacidad/

11. Expected Outcomes

Upon completion of the course, students are expected to have acquired advanced skills in non-invasive neuromodulation of the autonomic nervous system, applying the technique safely, ethically and effectively in different clinical contexts. It is also expected that an international professional community linked to NESA® technology will be consolidated, promoting interdisciplinary research and innovation.

12. Bibliography and Support Resources

Specific bibliography, scientific articles and supplementary materials will be available on the virtual campus. Students will have access to up-to-date documentation, clinical guidelines and learning resources aimed at consolidating their theoretical and practical training.