"Thanks to the Master I have come into contact with the world of research and had the opportunity to work with the best aquaculture professionals in Spain and in the world. Furthermore it has been a fabulous personal experience for me to work in an international context."

Mouna Abad. Environmental Assessment & Management Team (EAM) Tuna.

"The Master, besides offering me the chance to choose between different areas of expertise, has also contributed to my personal development. Thanks to the unique experience I shared with people from several countries. Personally it has opened doors to the fantastic world of sea fishes."

Bruno Novelli. PhD Student GIA-UCLGC.

"Attending the course on marine culture has meant a radical change in my life. Professionally it has enabled me to work with marine fish larvae, which I am passionate about, and to become acquainted with the most advanced of the frontiers of marine aquaculture. Personally it has met some very interested people and have had the fortunate to work with people who have become some of my best friends and that will be with me for the rest of my life!"

Mauricio Moreno Aba. Hatchery Manager, Ocean Baja Labs. Costa Careyes, Jalisco, Mexico.

"Thanks to the Master I have been able to specialise in sole culture, which is what I always wanted."

Ricardo Zerolo. Director of Production CUIMAR, Cádiz, Spain.

FORMER STUDENTS’ OPINIONS ABOUT THE PROGRAMME

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SCIENTIFIC COMMITTEE

- Dr. B. BASURCO Mediterranean Agronomic Institute of Zaragoza, CIBERAM, Spain.
- Dra. M. T. DINIS University of Aveiro, Portugal.
- Dr. A. F. M. EL-SAYED University of Alexandria, Egypt.
- Dr. H. FERNÁNDEZ-PALACIOS University of Las Palmas de Gran Canaria, Spain.
- Dra. M. S. ISQUIERO University of Las Palmas de Gran Canaria, Spain.
- Dr. S. KAUSHIK INRA, 31 Pans-sur-Nièvre, France.
- Dra. A. TACON Aquatic Farms Ltd, Hawaii, USA.
- Dra. C. M. HERNÁNDEZ-CRUZ University of Las Palmas de Gran Canaria, Spain.

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SOME LECTURERS OF FORMER EDITIONS

Dr. A. TACON
University of Las Palmas de Gran Canaria, Spain.

Dr. A.F.M. EL-SAYED
University of Algarve, Faro, Portugal.

Dra. M.T. DINIS
Aquatic Farms Ltd, Hawaii, USA.

Mouna Abaab. Environmental Assessement & Management (EAM) Tuna.

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UNIVERSITY MASTER IN MARINE AQUACULTURE

October 2016 - June 2018
Las Palmas de Gran Canaria, Spain.

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1. INTRODUCTION TO AQUACULTURE (2 ECTS)


2. NUTRITION (12 ECTS)

Physiology of nutrition. Nutritional requirements and dietary ingredients: proteins, lipids, carbohydrates, vitamins and minerals, nutritional energy.

3. HEALTH MANAGEMENT (12 ECTS)


4. REPRODUCTION (4 ECTS)

Physiology and control of reproduction in shellfish and crustaceans. Physiological regulation mechanisms of reproduction in teleosts. Induced reproduction in bivalve molluscs and decapod crustaceans. Induced breeding in marine, brackish water and freshwater fish. Design of facilities. Food and nutritional requirements of broodstock.

5. GENETIC IMPROVEMENT (6 ECTS)


6. FACILITIES (3 ECTS)

Pipe water systems. Pumping systems. Aeration and oxygenation systems. Water treatment systems. Water quality control systems.

7. ECONOMICS AND MANAGEMENT (3 ECTS)


8. TECHNICAL HATCHERY PRODUCTION (8 ECTS)

Fish Breeding. Fish rearing. Fish hatchery technology. Larval development techniques. Larval nutrition techniques. Larval feeding technologies. Larval rearing technologies.

9. ON-GROWING TECHNOLOGIES (5 ECTS)


10. CULTURE TECHNIQUES (4 ECTS)

AQUACULTURE RESEARCH GROUP (GIA)

PRESENTATION

AQUACULTURE constitutes the production of food that has most grown over the past 30 years and currently is a consolidated activity able to supply the growing demand for fish, shrimp, as opposed to the stagnation of catches by fisheries from the late 80s. In 2013 world production of Aquaculture reached 97 million metric tons (algae included). Thus, almost 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50% of the aquatic products destined for human consumption, and up to 90% in species such as salmon, carp and oysters, 70% in mussels and 50%

The Master programme is jointly organized by the University of Las Palmas de Gran Canaria (ULPGC), and the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM), through the Mediterranean Agronomic Institute of Zaragoza (JAMZ).

The programme will be taught by highly skilled teachers of their host institutions and renowned guest professors belonging to research institutions and teaching, to administration and private entities in several countries.

The research project and the thesis required for obtaining the title of university Master are performed under the supervision of a research team of the integration of this Master, in line with the aims of the CIHEAM’s mission, the objectives of which are to develop joint projects, to train personnel in the Mediterranean region in the fields of agriculture, engineering, economics and environment, to ensure the quality of the Master’s content and methodology, to carry out research projects, to promote international cooperation, and to organize seminars, courses, conferences and meetings.

The training period is an introduction to applied research in aquaculture to be completed before October 2016 and June 2017.

The deadline for the submission of pre-registration applications is 6 May 2016. Afterwards, selected candidates will be informed if the ULPGC forms in the period designed by the University. The request should be accompanied by detailed curriculum vitae, together with supporting documentation of qualifications and/or, studies, work experience and language skills. It shall also state the reasons for the interest in the course.

The provisional acceptance will be communicated as soon as possible. This will become final upon the payment of the registration fees.

Registration fees will be set by the Government of the Canary Islands (approximately 30 euro per credit). These fees cover the documentation of the course, administrative fees, and costs of study tours and visits. They will not cover travel costs, lodging and food.

It is compulsory for participants to have medical insurance valid for Spain. Proof of insurance cover must be given at the beginning of the Master. For participants under 27 years of age, insurance is included in the registration fees.