MSc **MARRES**

MARINE RESOURCES
SCIENCE, CONSERVATION & INNOVATION

UNIVERSITÉ **CÔTE D'AZUR**

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MARINE RESOURCES *SCIENCE, CONSERVATION & INNOVATION*

UCA WITHIN ITS TERRITORY

UNIVERSITÉ CÔTE D'AZUR, AN EXPERIMENTAL UNIVERSITY

UCA has been officially recognized in 2020 as an ***experimental university***. This new status helps developing a bold and independent strategy based on breaking down the barriers between education, research and innovation, and developing agility and responsiveness to harness the amazing potential for diversity represented by its 17 members, such as SKEMA Business School.

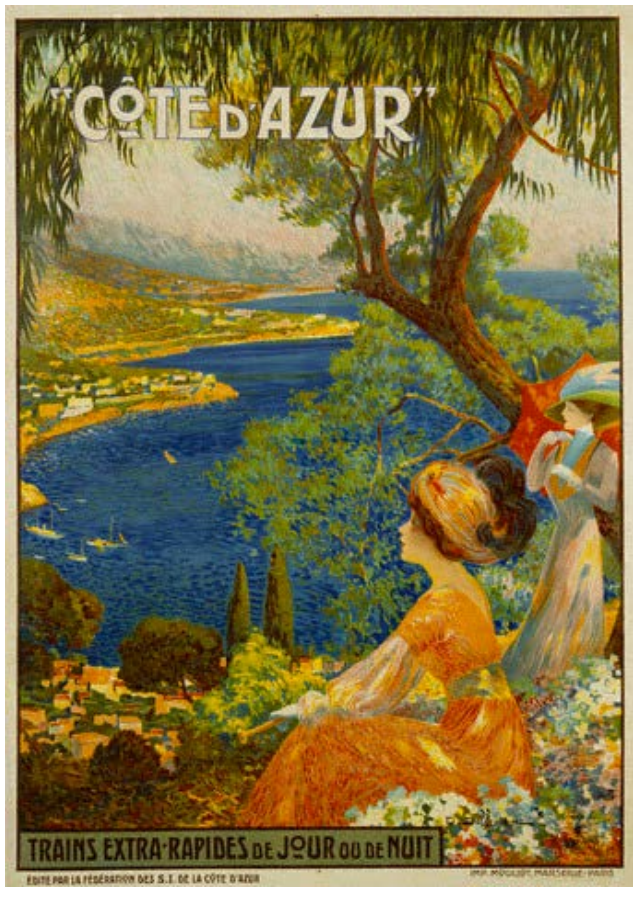
UCA won in 2016 the prestigious ***Idex label*** (Initiative d'Excellence), a distinction that positions us among the 10 best research-intensive universities in France.

In 2018, UCA opened 10 ***new education programs***, all prioritizing international development, interdisciplinary cooperation and employability. **MARRES is one such program.**

THE CÔTE D'AZUR, A BLUE TERRITORY

The ***UCA MARRES Research Institute*** studies all the facets of marine resources such as marine ecology, ecophysiology, ecotoxicology and applications to human health, marine biotechnologies, ecosystem modelling, law of the sea and blue economy.

Around the University, ***a whole socio-economic fabric is developing*** to promote and protect marine resources, with local authorities - such as the Nice Côte d'Azur Metropole and the Region Sud, start-ups and SMEs and non-profit associations.



The 18th century blue economy.
Our coastline became one of the first modern seaside resorts. It began as a winter spa for the British upper class in the late 18th century. With the arrival of the railroad in the mid-19th century, it became the destination of many international aristocrats.

The current day blue economy.
Côte d'Azur is home to an increasing number of start-ups and SMEs linked to the sea and land-sea interactions as part of sustainable development, such as aquaculture, biotechnology, tourism, blue carbon and energy.

Nice and the « Baie des Anges »

THE MARRES VISION

Engage in an interdisciplinary approach to appraise marine resources and their scientific, economic and social values

CONNECTING SCIENCE & SOCIETY

In a world that is finally beginning to understand the importance of the Ocean to our society, it is essential that scientific and socio-economic stakeholders work together.

Science seeks to better understand the relationship between marine organisms and their environment, thereby facilitating the protection of the ocean by highlighting its value to society. This better understanding opens new opportunities for the sustainable development of our societies.

MARRES aims to train the open-minded specialists our society needs to solve the current and emerging ocean issues.

OPENING STUDENTS' EMPLOYABILITY

MARRES was designed with the recent evolution of the job market in response to the emergence of the Blue growth around the world.

The skills were chosen with professionals and alumni from the public and private sectors in order to open the students to all sectors of the Blue growth. Our advisory board is regularly consulted to adjust the program as new opportunities arise.

Our interdisciplinary approach, combined with our immersion projects, expands the horizon of opportunity and guides our students toward a Blue career in research, conservation, consultancy or innovation.

the different employability sectors

RESEARCH

CONSERVATION

CONSULTANCY

INNOVATION

Check the employability opportunities for each track →

THE MARRES PROGRAMS

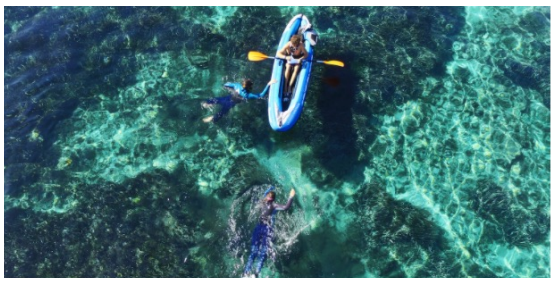
In its main 2-year track ***SCIENCE & SOCIETY***, the M.Sc. MARRES prepares students to pursue a Ph.D., as a prelude to their future research career, to develop conservation projects locally or internationally, and to join the private sector or become entrepreneurs by developing the countless marine resources that they will help to protect.

With a limited life science background, students may be interested by our ***LEVEL-UP PROGRAM*** before applying to the Science & Society track.

For professionals and for graduates from other fields who would like to redirect their career, we have designed the 1-year track ***BLUE MANAGERS.***

MSc. level programs

Certifications



SCIENCE & SOCIETY *2-year track*

To open up to all sectors of blue growth (research included).

2 years
Recommended on-site, possibly partly online

Requirements: Bachelor / Licence or equivalent diploma in a relevant discipline (Life Science, Biology, Ecology, Ocean Science, Natural Science...) or from another discipline by taking the level up training.

BLUE MANAGERS *1-year track*

To open / boost / redirect a career toward Blue Growth through one of the specializations: MPA management, Entrepreneurship & Innovation, or Human impact assessment.

1 year
Fully online - synchronous

Requirements: Master or equivalent diploma in Life science or in another discipline (such as Economics, Engineering, Communication...).

LEVEL-UP *certification*

To apply to the track "Science & Society" without a solid life science background or simply to acquire basic knowledge in natural science

Around 3 months (at your pace)
Fully online - asynchronous

Requirements: Bachelor's / Licence or equivalent diploma in a non Life science discipline

		RESEARCH		ENVIRONMENTAL MANAGEMENT			ENTREPRENEURSHIP & INNOVATION		EDUCATION	
	duration	**public sector**	**private sector**	**Conservation science**	**MPA management**	**Environmental consultancy**	**Research & Development**	**Business development**	**Higher Education**	**Awareness & Ocean literacy**
SCIENCE & SOCIETY	**2 years** from a bachelor level	✓	✓	✓	✓	✓	✓	✓	✓	✓
BLUE MANAGERS	**1 year** from a master level or 3y+ pro. exp.	✗	✗	✗	✓	✓	✗	✓	✗	✓

2-year track

SCIENCE & SOCIETY

PROGRAM

OPENING STUDENTS' EMPLOYABILITY TO ALL THE BLUE SECTORS

The ***Science & Society*** track offers an innovative and interdisciplinary way to understanding the interdependencies between scientific, societal and economic aspects of the ocean.

Duration: ***2 years*** (intake in September) - Recommended on-site, possibly partly online

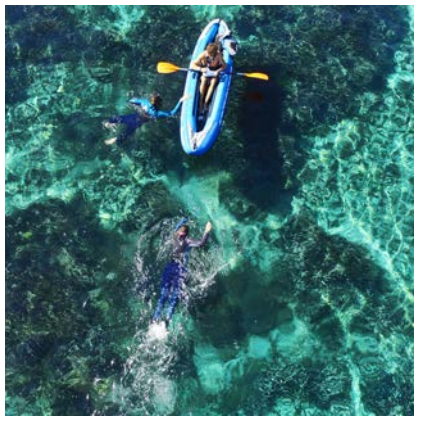
the module categories

- ***MARINE BIOLOGY***
- ***ENVIRONMENTAL DATA ANALYSIS***
- ***CHEMISTRY & BIOTECHNOLOGY***
- ***LAW***
- ***SCIENCE & SOCIETY***
- ***PERSONAL DEVELOPMENT***

HANDS-ON

Field trips and labs allow students to apply the knowledge and skills acquired in class, such as in environmental data analysis, marine biodiversity, ecotoxicology & biotechnology.

some examples of hands-on activities



In « The Scientific Adventure » students design their sampling strategy and collect data at Sea on the Lérins Archipelago.
Then, these data are analysed in class and conclusions are communicated to the public

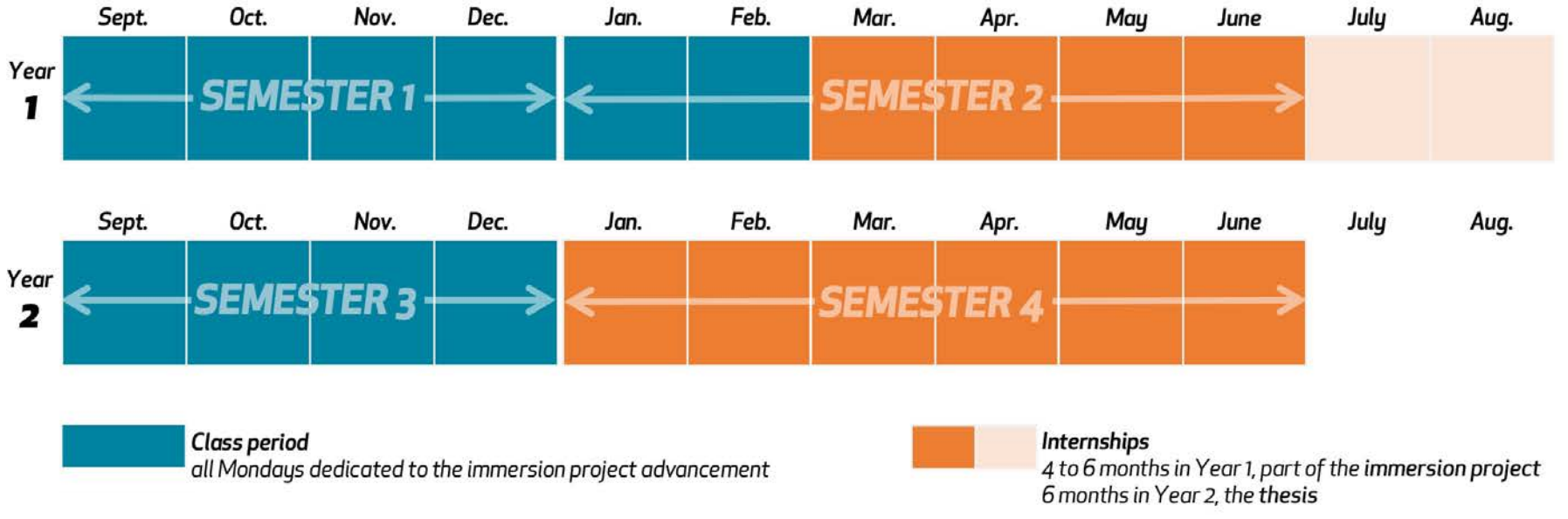
In «Depict Marine Biodiversity», students learn to identify marine organisms with the collections of the Oceanographic Museum of Monaco and they learn to collect & identify plankton in the Bay of Villefranche-sur-Mer

In «Response of Organisms to the Environment», students quantify the effect of different types of stressors on marine organisms, such as temperature, acidification and chemical pollution

In the biotechnology module, students spend one week in the lab to extract and identify bioactive molecules from marine resources to be used in cosmetics, pharmaceutics or agriculture

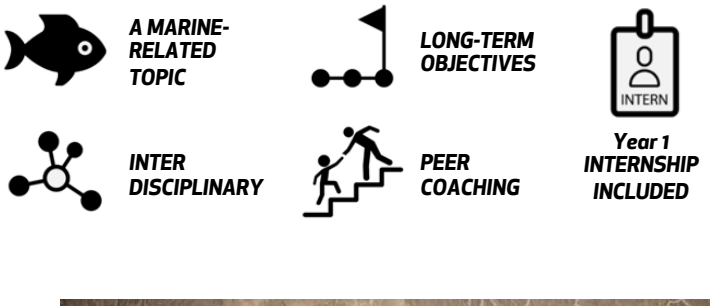
learn more online
complete course catalogue, immersion project catalogue…
app.univ-cotedazur.fr/marres

SCHEDULE

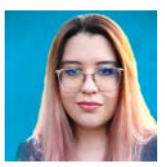


IMMERSION PROJECTS

To get students involved in the professional world from the start, we have developed together with professionals of the public and private sectors, pluriannual projects with high-scale objectives. Students prepare their 1st-year internship from the 1st semester, and upon completion use extra-time to value their work and coach those who will take over. This experience connects students together and with local and international professionals in the field of their choice. In short, the immersion projects encompass the 1st-year internship, but it's much more than that.



two examples



After Léa & Julie, Keyla joins the project led by Steeve Comeau & Nuria Teixedo (CNRS) to work on acidification impact on mediteranean corals & corraligeous algae

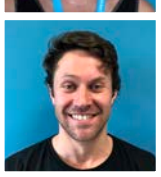
Florence chose the project developed with Antoine Mangin and the start-up ACRI-ST to combine citizen science and satellite data for marine conservation and socio-economic development

THESIS

After 10 months working on their immersion project, students perform their end-of-studies internship of 6 months called « thesis », in the field and location of their choice.

two examples

Julie performs a coral restoration study on the Easternmost point of the Seychelles, Fregate Island. She investigates the most suitable approach to ensure the development of the reef, by exploring the capacity of Mineral Accretion Technology.



At the cross-road between conservation and socio-economy, Matias evaluates with Nathalie Hilmi (CSM Monaco) the impact of climate change on the marine ecosystem services involved in the development of local communities in the Maldives.

1-Year track

BLUE MANAGERS

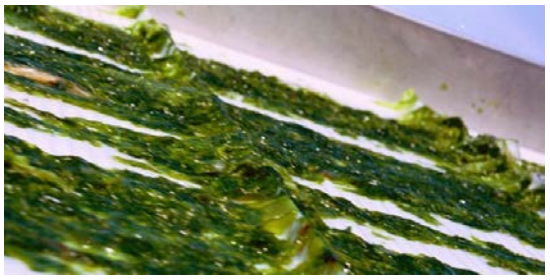
PROGRAM

REDIRECT YOUR CAREER TOWARDS BLUE GROWTH

This program offers a unique learning opportunity to redirect a career to marine science and management. It is open to English-speaking candidates with a professional experience of at least 3 years in the same field of activity and / or graduate of a master's level program in a scientific or non-scientific theme, wishing to reorient towards marine resources.

Duration: ***1 year*** (intake in September) - Fully online with synchronous periods

the 3 specializations



BIOTECHNOLOGY & INNOVATION

CONSERVATION MANAGEMENT

HUMAN IMPACT ASSESSMENT

SCHEDULE

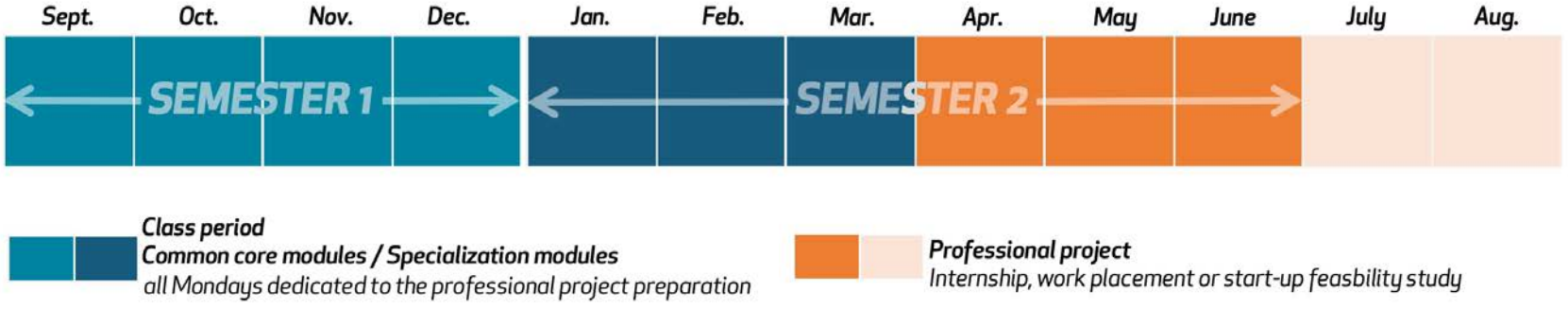
With the ***common core modules*** all students discover Blue Growth, build a background in ecology and law of the Sea, and improve their management skills,. Then, 3 ***specializations*** are proposed according to the career objective of the students.

Teachings are ***online*** with a combination of video-capsules, practical activities and remote face-to-face which generaly take place in the French afternoons.

PROFESSIONAL PROJECT

In order to ***design their (new) career*** in blue growth, students are accompanied by a coach specialized in the target field.

This new project is prepared during the first semester, and then applied within the framework of an internship, a work placement or a feasibility study for the creation of a new start-up.



LEVEL-UP certification

PROGRAM

UPGRADE YOUR SCIENCE SKILLS TO JOIN THE "SCIENCE & SOCIETY" TRACK

This training introduces ***fundamental notions in natural sciences***. This program is designed for talented students with at least an undergraduate diploma in a non natural science discipline (such as in Economics, Management, Political Science, Law, Communication, Engineering) to apply to a graduate program such as the "Science & Society" track of the MSc. MARRES or simply to (re)discover biology, ecology, chemistry & oceanography.

Duration: ***around 3 months*** (starting at any time) – Fully online & asynchronous

the 4 modules

BIOLOGY

ECOLOGY

CHEMISTRY

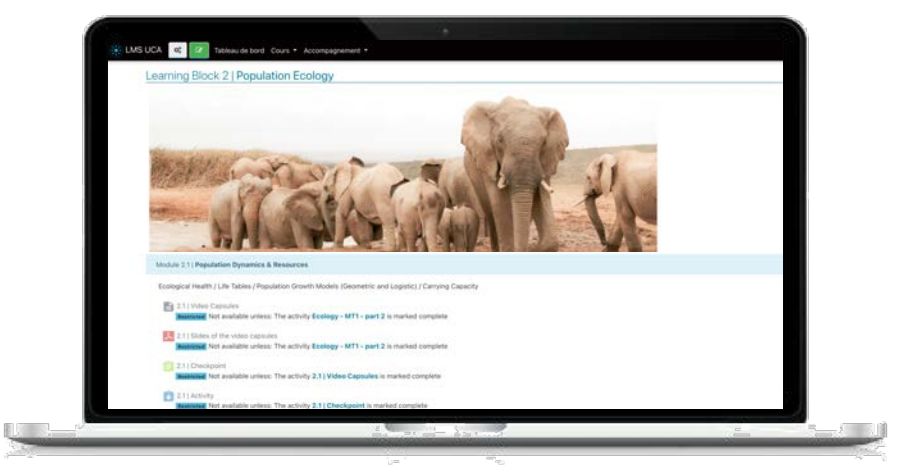
OCEANOGRAPHY

LEARNING STRATEGY

Each discipline proposes a ***personalized learning path*** thanks to learning blocks combining video clips, interactive activities, checkpoints to test knowledge acquisition and assignments. Forums allow students to exchange together and a tutoring is provided by a member of the MARRES team.

AT YOUR OWN PACE

The level-up training is a fully asynchronous program that ***can be taken at any time*** and at your own pace. Students unlock the activities as they progress through the module. We recommend targeting the spring and early summer period to best prepare the "Science & Society" track



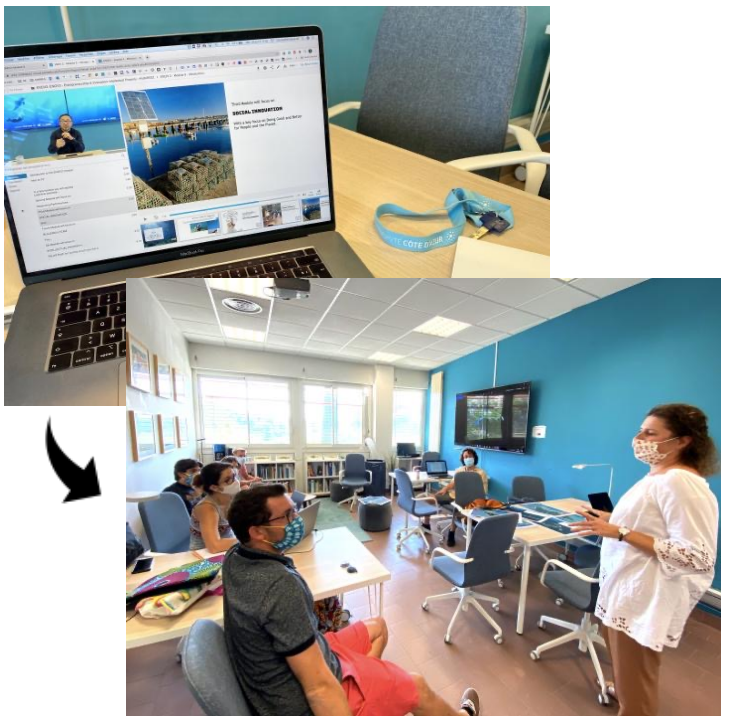
LEARNING EXPERIENCE

HYBRID STRATEGY

Our teaching modules are generally designed following a ***blended-learning*** approach articulated in learning blocks allowing students to prepare for their face-to-face interactions with instructors through prior asynchronous work.

- ***Learning blocks*** are composed of short video capsules, self-paced preparatory activities, and checkpoints for students to assess their learning progress.

- ***Face-to-face*** interactions are thus reinforced and enriched by constructive exchanges in the form of recitation, workshops and discussions.



ON CAMPUS

In the track "Science & Society", teachings take place in our dedicated facilities on the ***Sophia-Antipolis*** campus.

Lecture and study rooms are available over a wide range of hours. Students have access to a modern learning center and a university restaurant. They can access grocery stores, bars and restaurants within a few minutes walk.

Lab works are generally performed in Nice (Valrose campus) and field trips lead students to the Lerins archipelago (Cannes), Villefranche-sur-Mer, Monaco and in the Var.

ONLINE

Our interactive digital tools are used to optimize the student learning experience.

- Our ***e-learning platform*** integrates all digital tools together (documents, activities, exams).
- ***Video capsules*** use an immersive tool allowing students to easily navigate through the class, answer questions, take synchronized notes and start the discussion with the instructor.
- During ***recitations***, instructors can monitor the students' learning level in real time and associate both online and on-site students.
- For ***online face-to-face***, we use Zoom & BigBlueButton to easily interact together.
- ***Field trips & labs*** are important moments in the students' learning path. For those who cannot join us on site, an online suite is available.

> Check how we use digital tools on our website

LIFE ON THE CÔTE D'AZUR

Of course, you will want to join us because of the quality of our programs and the opportunities in terms of employability. But you might as well take advantage of the working environment...

Welcome on the Côte d'Azur!

PREPARING YOUR VENUE

Housing, Transport, Budget, Activities? Successful candidates will be invited to a ***warm-up webinar*** in July to prepare their arrival with our students and staff.

Accommodations can be found on Sophia-Antipolis (public and private residences) but most of our students prefer to live in the surrounding cities such as Antibes, Biot, Valbonne or even Nice thanks to a good public transport service.

Our students estimate their average monthly expenses between 800 to 1500 euros including housing, transport, food, activities and phone.

prepare your activities

UCA SPORT

CULTURE PASS

ENGAGEMENT CENTER

TEAM & PARTNERS

ACADEMIC BOARD

EXECUTIVE BOARD

Christophe Mocquet
Program director

Paola Furla
Deputy director
Education-to-Research bridge

Eric Rottinger
Deputy director
Research-to-Innovation bridge,
Development, International

ADVISORY BOARD

Aldine Amiel
NGO & extracurricular skills
IRCAN, Kahikai

Steeve Comeau
External expertise Research
CNRS - Sorbonne Université

Yan Grasselli
External expertise Education
SKEMA Business School

Christophe Imbert
Entrepreneurship & Innovation,
INRIA

Luisa Mangialajo
Marine Ecology,
ECOSEAS

Jean-Christophe Martin
Marine law
LADIE

Mohamed Mehiri
Marine biotechnology
ICN

Cécile Sabourault
International Relations
UCA Vice president

+2 to 4 students

COORDINATION TEAM

Juliette Gilloteaux

Crystalle Moreno

Contact the team
by email msc-marres@univ-cotedazur.fr

or book a rendez-vous on our facebook page

THE MARRES RESEARCH INSTITUTE

The Marine Resources Research Institute aims to bring together the multidisciplinary skills of UCA for the ***functional understanding, conservation and sustainable development of marine resources***.
Covering a broad spectrum, from marine resource conservation to well-being and health, it encompasses five research units

Research Federative Institute MARINE RESOURCES UNIVERSITÉ CÔTE D'AZUR · ECOSEAS · ICN · Gredeg · IRCAN · LADIE

TEACHERS & PARTNERS

A large part of the MARRES instructors are ***professors and researchers*** at Université Côte d'Azur, as well as from other French and international universities.

Numerous ***experts from the private sector*** complement this academic experience, particularly in the socio-economic fields of conservation, innovation and entrepreneurship.

> Check the full list on our website

STUDENTS & ALUMNI

STUDENTS DIVERSITY

MARRES students are themselves part of the richness of the program.

The variety of cultures, ages, backgrounds, and career goals participate in opening up students' perspectives around marine resources.

Since 2018, our 100 MARRES resident and exchange students have represented ***25 nationalities***, coming from various fields such as biology, environmental science, chemistry, oceanography, engineering, economy and communication.

MARRES TO THE WORLD

Students and friends develop the "MARRES to the World" ***outreach program*** with initiatives to promote ocean literacy and raise people awareness on marine issues. They develop podcasts, board and digital games and events of ocean literacy and citizen science.

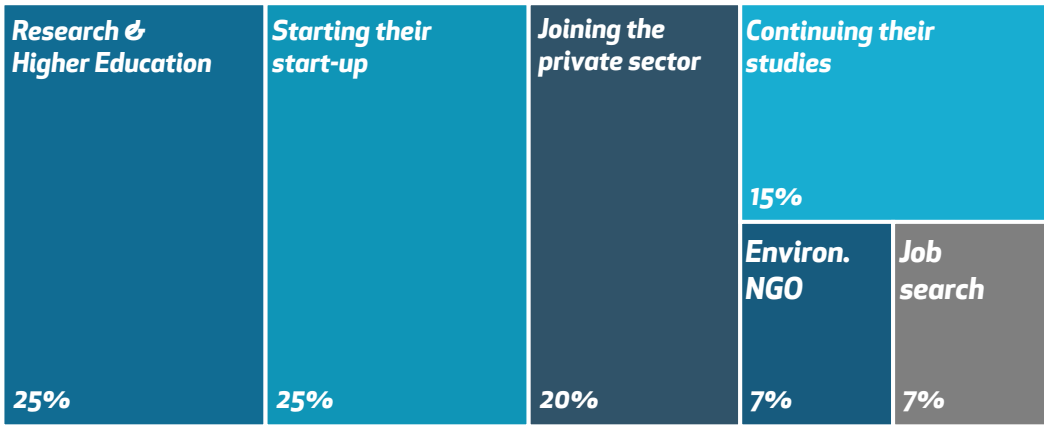
ALMUNI INTEGRATION

Graduation 2020
over 90% integration at +1 year

Coming from the USA, ***Megan*** is currently pursuing her ***Ph.D***. with Université Côte d'Azur at IRCAN lab. She's designing automated tools for monitoring coral health. She previously worked on the Tara Pacific Expedition during her master's degree.

Marie-Camille decided to join the ***private sector*** as an auditor in food quality and safety engineering, specialist in the fisheries sector.

After their graduation, ***Lionel*** (a former engineer) and ***Frédéric*** (already an entrepreneur) created *BlueLeaf Conservation*, a ***startup*** that relies on blue carbon to fight global warming and biodiversity loss by protecting and restoring coastal ecosystems.



JOIN US

EXPECTED BACKGROUND

The MSc MARRES is a graduate program. Its main track ***Science & Society*** opens to research and requires a solid background in life science obtained thanks to a 3 or 4-year bachelor or licence (French term) in a related discipline (biology, conservation and/or biochemistry). Anyway, we regularly open our program to students with other backgrounds (such as engineering, management, economy, communication), provided they can demonstrate outstanding levels of maturity, motivation and an already good knowledge of biology in general, or marine science in particular, acquired from non-academic pipelines (such as great diving experiences and marine conservation programs). Interested candidates with no life science background are expected to take the 3-month ***level-up*** certification, or could be interested instead by the 1-year track for ***Blue Managers***.

The English proficiency of applicants must correspond to a B2 level (preferentially C1). It must be recognized by an official test (such as Toefl iBT >60, Toefl ITP >520 or IELTS >6.0), by having attended successfully to an undergraduate or graduate program delivered fully in English, or by being a native speaker.

APPLICATION PROCEDURE

	REGISTRATION FEES	APPLICATION PERIOD	HOW TO APPLY
SCIENCE & SOCIETY	• Non EU students: 5000 € /year • French and EU students: 300 to 5000 € /year depending on the household income of the parents[1]	December to June 15	On e-candidat, our online platform[2] Be prepared to upload a recent picture of you, a copy of your passport, your transcripts, an english proficiency certificate (Toefl or equivalent) if not native speaker, a resume (CV), a motivation letter and 2 academic and/or professional reference letters. We will also ask you to produce a short video to introduce yourself and explore a case studay combining marine resources science, conservation and/or innovation
BLUE MANAGERS	• 6000€ for students completing the program in 1 year • 4000€ per year if taken in 2 years	December to August 15	
LEVEL UP	• 600€	All through the year	Contact msc-marres@univ-cotedazur.fr

[1] Check the registration fee table on our website
[2] Check the details of the procedure on our website and get help from the team

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MARRES channel

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app.univ-cotedazur.fr/marres

UNIVERSITÉ **CÔTE D'AZUR**

Learn more about the program online

app.univ-cotedazur.fr/marres

Contact the team

msc-marres@univ-cotedazur.fr

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UNIVERSITÉ **CÔTE D'AZUR**

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