



TRAINING FRAMEWORK ON UNDERWATER TECS AS KEY ENABLER FOR BLUE CAREERS DEVELOPMENT

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UBLUETEC: MIND THE GAP

NEEDS analysis: Technologies used in underwater (UW) missions and activities (both commercial & scientific) are vital for several critical blue economy sectors, such as:

Offshore renewable energy, Aquaculture, Marine biodiversity protection, UW Cultural Heritage, etc.

GAP: Lack of skilled personnel in using and deploying UW technologies in the context of twin (green/digital) transition

UBLUETEC Objectives

AIM: uBlueTec aims to set up, test and validate a triple transition training and skills development model (green, blue, digital skills).



BLUE CURRICULUM

Development of educational material and curriculum, linked to microcredentials, and enabling skillsbuilding in state-of-theart UW technologies from a green/digital perspective.



PILOTING

Piloting the developed assets at HE & VET levels.

Emphasis on field and hands-on experience



EU HUB on UW TECS

Establishment of a
European Hub on UW
Tecs, as a permanent
capacity-building
structure nurturing the
long-lasting
collaboration of the
involved stakeholders.



PLATFORM

Deployment of recruitment platform for blue jobs

 -facilitating demandsupply matching between current/future labour force and industries

 intelligently identifying and publishing the skillsgap at regional-national-EU levels.



CAREER PATHS

Attraction of young talents in terms of Career Days and Entrepreneurial Bootcamps.







la science et la culture . France

Organisation · Chaire UNESCO en des Nations Unies pour l'éducation, Aix-Marseille Université,

| Partners | Country | |
|--|----------|--------------------|
| AIX-MARSEILLE UNIVERSITE Centre Camille Jullian - UNESCO Chair in Maritime and Coastal Archaeology — UNESCO Unitwin network in UW archaeology Institute of Mediterranean Archaeology — ARKAIA Institute of Ocean Sciences — OCEAN CEREGE, the European Centre for Research and Teaching in Environmental Geoscience TELEMMe - Temps, espaces, langages, Europe méridionale, Méditerranée | France | University |
| ATLANTIS – Consulting Company | Greece | SME |
| University of ZAGREB – Laboratory of Underwater Systems and Technologies | Croatia | University |
| BEIA CONSULT INTERNATIONAL | Romania | SME - VET provider |
| UNIVERSITA DELLA CALABRIA Dept. Of Mechanical, Energetics and Management Engineering Dept. of Biology, Ecology and Earth Science | Italy | University |
| ANP/WWF (ASSOCIACAO NATUREZA PORTUGAL) | Portugal | NGO |
| MARITIME TECHNOLOGY CLUSTER FVG Scarl | Italy | Maritime Cluster |

















UBLUETEC CURRICULUM

Ocean literacy and legislation framework, integrated marine spatial planning and marine protected areas, UW survey, sampling, monitoring documentation techniques, coastal and marine geosciences, Impacts of climate change and geohazards and remediation actions, renewable energy sector challenges, marine biodiversity, etc.



Specific Blue skills on state-of-the-art UW robotic systems (UW navigation techs, UW positioning & communication, UW sensing tools, UW vehicles such as ROV, AUV, etc)

- **Digital skills** on 3D documentation (2D/3D photogrammetry & 3D reconstruction, VR, AR and AI applications), observation and treatment of various ocean data
 - Green skills on environmental sustainability, leveraging the impact and the potential of all the above



Project stages

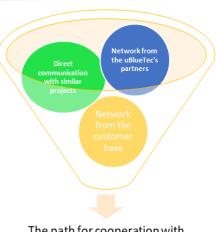


Development of the content and **educational material** of the courses and piloting phase



uBlueTec's Platform for Blue Economy

Dedicated **platform** for (but not limited to) maritime and underwater technologies and the establishment of an European **UW Tecs Hub**



The path for cooperation with other EU's project and initiatives

Liaison and cooperation with other relative EU projects, initiatives, stakeholders and building long lasting **networks** of the quadruple helix

STAGE 01 STAGE 02 STAGE 03



UBLUETEC IMPACT



- A new Blue, green and digital curriculum: Enrich existing VET programs and upgrade academia degrees in need of specialised training in state-of-art UW technologies
- Set up reskilling and upskilling schemes providing hands-on experience and learning for the blue economy labour force
- European Hub in UW Tecs: Establishment of a permanent capacity-building structure a nod point
- Increase awareness and visibility of blue careers opportunities (via the recruitement plateform), improve employability and create qualitative jobs (UW sectors initially)
- Transfer of know-how and outcomes of the project to other countries (EU, non-EU, outermost EU regions)
- Contribute to the objectives of the **UN Decade of the Ocean Science** for Sustainable Development (2021-2030) and the 2030 Agenda for Sustainable Development (SDGs 14. 13. 4. 17) via wide dissemination through the UNESCO Chair and UNESCO Unitwin network



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