

Scientific Diving

Approximately 71 percent of our planet are covered by oceans and thus deprived of a direct exploration. This means that we know the surface of the moon or Mars better than the sea floor of our planet. The deep sea can only be explored with the help of underwater vehicles, but the flat areas of the ocean – to a depth of about 40 meters – can be examined by diving scientists. The exploration of greater depths is possible with the application of trimix and rebreather. For the various topics and areas of applications underwater, purposive working methods are necessary and imparted by us. Also, the enhancement/strengthening of social competences like self-confidence, team spirit and the sense of responsibility belong to the education.

Fields of application

- Earth science
- Natural science
- Environmental science
- Engineering science
- Economics
- Citizen Science projects

Key aspects of the education

- Safety during working underwater
- Direct and indirect observation
- Mapping of investigation areas
- Taking of gas, water and rock samples as well as (micro)biota
- Measuring of thermodynamic and physiochemical properties (temperature, pH, volume flow rate) and development of underwater measuring instruments
- Documentation: digital (photo/video) and analogue (writing board)
- Working with lifting back, transect and other underwater tools
- Communication and working in a team

Working groups

- Earth science
- Gas and water chemistry
- Microbiology/biomineralization
- Heat and material transport
- Measuring devices – development and application
- Photo and video documentation

All of these qualifications are crucial advantages over unmanned systems for the exploration of shallow marine systems. The certificate of a Scientific Diver displays the graduate as an educated "scientific diver" all over the world.

Education structure

