



**ACCOBAMS Course for Highly Qualified
Marine Mammals Observers (MMO)
Passive Acoustic Monitoring operators (PAM)**

***Nave Blu, Acquario di Genova, Italy
30 November - 5 December 2026***

Program

30th November 2026

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| 9.00 – 9.15 | Welcome from the Organizational Committee |
| 9.15 – 10.15 | The MMO - PAM certificate of ACCOBAMS, existing regulations and ACCOBAMS guidelines.
<i>Barbara Mussi</i> |
| 10.15 – 11.00 | Introduction to underwater acoustics and its applications
<i>Claudio Fossati</i> |
| 11.00 – 11.30 | Coffee break |
| 11.30 – 13.00 | Introduction to underwater acoustics and its applications
<i>Claudio Fossati</i> |
| 13.00 – 15.00 | Lunch |
| 15.00 – 16.30 | PAM equipment: instruments, setup and some DSP
<i>Giovanni Caltavuturo</i> |
| 16.30 – 17.00 | Coffee break |
| 17.00 – 19.00 | Introduction to marine mammals and acoustics. Cetaceans' biology and distribution in the ACCOBAMS area.
<i>Barbara Mussi</i> |

1st December 2026

9.00 – 11.00	Introduction to marine mammals and acoustics. Cetacean vocalizations and hearings <i>Claudio Fossati</i>
11.00 – 11.30	Coffee break
11.30 – 13.00	Acoustic detections, signal identification and equipment handling <i>Giovanni Caltavuturo</i>
13.00 – 15.00	Lunch
15.00 – 16.30	Field equipment (hydrophones: types, use and installation) <i>Giovanni Caltavuturo, Claudio Fossati, Michele Manghi</i>
16.30 – 17.00	Coffee break
17.00 – 18.30	Filed equipment (hydrophones: types, use and installation) <i>Giovanni Caltavuturo, Claudio Fossati, Michele Manghi</i>

2nd December 2026

9.00 – 11.00	Introduction to the role of MMO/PAM operators. Pre-survey phase, survey phase, post-survey phase, communication with the crew, lifestyle onboard, data entry. <i>Giovanni Caltavuturo, Claudio Fossati</i>
11.00 – 11.30	Coffee break
11.30 – 13.00	Introduction and set up of sound analysis software <i>Giovanni Caltavuturo, Claudio Fossati</i>
13.00 – 15.00	Lunch
15.00 – 16.30	Acoustic Session, cetacean detection <i>Giovanni Caltavuturo, Claudio Fossati</i>
16.30 – 17.00	Coffee break
17.00 – 18.00	Introduction to Geographic Information System (GIS) to map the acoustic and visual sightings. <i>Barbara Mussi</i>

3rd December 2026

9.00 – 11.00	Using Pamguard for survey. <i>Barbara Mussi</i>
11.00 – 11.30	Coffee break
11.30 – 13.00	Setting and configuration of Pamguard software (Navigation and Sightings). <i>Barbara Mussi</i>
13.00 – 15.00	Lunch
15.00 – 16.30	Setting and configuration of Pamguard software (Species Identification). <i>Barbara Mussi</i>
16.30 – 17.00	Coffee break
17.00 – 18.30	Hands-on training with PAMGUARD. <i>Barbara Mussi</i>

4th December 2026

9.00 – 11.00	Autonomous acoustic bottom recorders <i>Michele Manghi</i>
11.00 – 11.30	Coffee break
11.30 – 13.00	The Intercet platform <i>Guido Gnone</i>
13.00 – 14.30	Lunch
14.30 – 16.30	Evaluation Test
16.30 – 17.00	Coffee break
17.00 – 18.30	Practical session (hydrophones: types and use - hands on and practical tests) <i>Giovanni Caltavuturo, Claudio Fossati, Michele Manghi</i>

5th December 2026

9.00 – 11.00	Practical session (hydrophones: types and use - hands on and practical tests) <i>Giovanni Caltavuturo, Claudio Fossati, Michele Manghi</i>
11.00 – 11.30	Coffee break



- 11.30 – 13.00 Practical session (soundcards and software: specifications and coupling with sound analysis software)
Giovanni Caltavuturo, Claudio Fossati, Michele Manghi
- 13.00 – 15.00 Lunch
- 15.00 – 18.30 Questions and Answers