

BSAC Extended Range Diver Course.

This document outlines the BSAC Extended Range Diver course and provides guidance and definitions specific to the BSAC Extended Range Diver qualification.

Student Prerequisites

Minimum BSAC Sport Diver plus 20 dives with BSAC Advanced Nitrox or equivalent qualifications.

Definition of a BSAC Extended Range Diver

A BSAC Extended Range Diver is defined as a diver who is competent to:

- Plan and conduct dives requiring mandatory decompression stops up to a total maximum time of 20 minutes.
- Use nitrox mixes or 100% oxygen up to PO₂ 1.4 bar maximum to achieve accelerated decompression profiles.
- Conduct dives with an open circuit buddy who is a minimum of BSAC Ocean Diver (or equivalent), within the restrictions of the lesser conditions already encountered by either during their training or previous experience and under the supervision of a Dive Marshal.
- Conduct dives with another certified Extended Range Diver, within the restrictions of the lesser conditions already encountered by either during their training or previous experience and within the recommendations of the BSAC publication "Safe Diving Practices"
- Conduct dives with an appropriately qualified diver to expand their experience beyond that previously encountered. An appropriately qualified diver would normally be a minimum of BSAC Dive Leader or equivalent but may also be a BSAC Sports Diver who has additional relevant qualifications (e.g. Extended Range Diver, Rebreather Diver) gained through formal training with a recognised agency.
- Dive, subject to a progressive build up of depth experience beyond that encountered during their training to a depth limit dependant on their qualification.

BSAC Extended Range Diver Course Outline

The Extended Range Diver Course consists of the following elements:

- Six classroom lessons
- Two dry practical lessons
- Three Open Water lessons

All practical training Open Water includes the achievement of specific performance standards at appropriate points throughout the lessons.

Instructor Requirements

BSAC Extended Range Diver training is required to be carried out by or supervised by an Open Water Instructor who is also an approved BSAC Extended Range Diver Instructor.

Provisional Extended Range Diver Instructors

Open Water Instructors with the BSAC Extended Range Diver qualification or equivalent may act as Provisional BSAC Extended Range Instructors under the supervision of an approved BSAC Extended Range Instructor Trainer. The following levels of supervision will apply to the training delivered by a Provisional BSAC Extended Range Instructor:

- Classroom and dry practical lessons under on-site supervision
- Sheltered Water and Open Water lessons under direct (i.e. in water) supervision.

The process and pre-requisites to qualify as a BSAC Extended Range Instructor, a BSAC Extended Range Instructor Trainer, or to act as a Provisional BSAC Extended Range Instructor are defined in the relevant BSAC Extended Range Instructor Standards and Procedures.

Student/Instructor Ratio

For practical lessons, student/instructor ratios should comply with the following guidelines:

Open Water lessons

Because of the nature of the exercises being taught, the lesson contents assume a ratio of a maximum of two students per instructor, to ensure that each student receives effective tuition. If this student ratio is exceeded extra time must be allowed to ensure all students complete the skills to the required standard.

In less favourable circumstances, this ratio may need to be reduced appropriate to the water conditions and time available.

Where water conditions allow longer lessons, the above ratios may be increased to a ratio of a maximum of four students per instructor provided that:

- All students can receive effective tuition within the time available
- Underwater visibility is a minimum of 5 metres
- The instructor is of a minimum grade of BSAC Extended Range Instructor
- The instructor has the assistance of another diver, minimum qualification Dive Leader and BSAC Extended Range Diver, to monitor the safety and control of students
- The lesson briefing includes clear directions as to the role of the assisting diver during skills instruction

Dry Practical Lessons

To ensure that the student can fully participate in the exercises and receives effective tuition, the lesson contents assume a ratio of two students per instructor. If this student ratio is exceeded extra time must be allowed to ensure all students receive effective tuition.

Equipment Configuration

For Open Water lessons the equipment should include:

- Manifolded twinset with isolating valve or independent twinset with sufficient gas capacity for the planned dives
- A Buoyancy Compensating Device of sufficient volume to provide positive support on the surface for the diver and the equipment used
- Appropriate stage cylinder and regulator with contents gauge.

- Mask, fins and snorkel
- Weightbelt or integrated weights where necessary
- Depth gauge and watch/timer or decompression computer
- A delayed surface marker buoy and reel
- An additional surface detection aid (e.g. a folding flag)
- Suitable protective clothing where appropriate

Instructors

Instructors should wear similar equipment in type and configuration to their students and carry appropriate bailout gas supply, sufficient to support the students in the event of an emergency.

Definitions

Certain terms are used throughout this section of the manual which are defined as follows:

Open Water - water encompassing conditions, including a variety of topography and underwater life, and which may have noticeable water movement due to waves or current (max 0.5kn). Visibility will generally be in excess of 4m but may, on appropriate occasions, be less.

Depth should not exceed 10 metres during dive one, 20 metres for dive two and 40 metres maximum for dive three. The depth of the third dive shall be to the depth of the student's qualification, experience and abilities.

Lesson Sequencing

Classroom lessons are structured to provide the pre-requisite knowledge appropriate to their counterpart practical lessons. Classroom and practical lessons should therefore be run in an integrated sequence but the lessons have been developed to cater for differing logistics as follows:

- ERDT1 Classroom Lesson An Introduction to Extended Range Diving
- ERDT2 Classroom Lesson Personal Preparation for Extended Range Diving

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- ERDT3 Classroom Lesson Decompression Diving
- ERDP1 Dry practical Lesson Decompression Planning
- ERDT4 Classroom lesson Personal Equipment
- ERDP2 Dry practical Lesson Personal Equipment Preparation
- ERDO1 Open Water Lesson Dive one to a maximum depth of 10 metres
- ERDT5 Classroom lesson Group Equipment
- ERDT6 Classroom lesson Extended Range Dive Planning
- ERDP2 Dry practical lesson Practical Dive Planning
- ERDO2 Open Water Lesson Dive two to a maximum depth of 20 metres
- ERDO3 Open Water Lesson Dive three to a maximum depth of 40 metres depending on the students qualification, experience and abilities.

The lessons have been developed for complete flexibility; for example, the Senior Instructor may decide to run a full day's theory and dry practical sessions followed by consecutive days of open water lessons and assessments.

In addition to the above, where training has been interrupted for a significant period or was carried out in dissimilar conditions, refresher/orientation lessons may be required. This should be conducted prior to any open water training.

Open Water Lessons

To ensure that students receive experience in a range of conditions, the open water dives must include 2 conditions from the following:

- **Dive using shot line** - dive commencing with a deep-water entry, using a shot line as the only visual reference for the descent and ascent
- **Dive using a decompression lazy shot or trapeze** – dive employing the deployment and use of this equipment for group decompression procedures

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- **Small boat dive** - dive from a boat of less than 8 m overall length, where water entry is via a backward roll and egress from the water requires removal of equipment in the water
- **Large boat dive** - dive from a boat of greater than 8 m overall length, where the water entered is via a stride entry and egress from the water is accomplished via ladder without removal of any equipment except, possibly fins

Only one of the above conditions may be logged per dive.

The BSAC Extended Range Diver syllabus includes a minimum of 3 open water lessons, which should total a minimum of 120 minutes underwater time. Each lesson should have a minimum duration of 30 minutes.

When the total lessons duration time of 120 minutes cannot be achieved in 3 dives (e.g.; cold water conditions) the number of dives will require to be extended.

Depth Experience

Newly qualified Extended Range Divers, wishing to increase their depth experience, should be encouraged to do so in a progressive manner, in increments of approximately 5 metres. A diver with experience of diving to the target depth should accompany them on these dives and all such dives should be performed under the supervision of a Dive Marshall who is ideally an experienced Extended Range Diver.

Performance Assessments and Standards

BSAC Extended Range Diver training includes continuous assessment of the practical skills.

Practical Assessments

As in Diver training, where specific performance standards are required to be achieved, these are identified in the lesson notes by the words “competent and confident”. Where these words appear in the lesson content, students should have progressed sufficiently to be able to achieve the specified performance standards without supervision, as applicable to the water conditions appropriate to that lesson.

During the lessons, students should also be monitored for any deterioration in skills learned during basic Diver training. Where necessary, corrective instruction should be provided to re-establish the appropriate performance standard.

