

**EXTENDED RANGE NITROX DIVER** (including accelerated decompression)**Course Objectives:**

When you qualify from this course, you will be able to:

1. Assess the risks of your proposed dive(s):
  - a. Select the appropriate dive and safety equipment.
  - b. Provide appropriate back-up equipment and gas.
  - c. Provide a number of escape routes.
2. Extend your Nitrox diving range.
3. Improve your diving flexibility.
4. Use rich EANx mixes beyond 40%, and or
5. Use pure oxygen for decompression purposes:
  - a. To either improve your decompression efficacy and or
  - b. accelerate your decompression.

**SAA Qualification Award**

**Extended Range Nitrox Diver** (including accelerated decompression) maximum depth 54metres.

**Course material**

A course handbook has been prepared, which is entitled: "**The SAA Extended Range Nitrox Diver** (including accelerated decompression) **Course Notes**". In support of this book and to support divers in the field, two sets of dive tables have also been provided:

1. **SAA Bühlmann Extended Range Air Tables**; for use with the SAA Bühlmann System and the SAA Bühlmann Extended Range Nitrox System.
2. **SAA Bühlmann Extended Range EAD Tables and %CNS Tables**; For use with The SAA Bühlmann System and the SAA Extended Range Air Tables

**Course structure**

The course is structured to provide the theoretical information in a classroom setting in the form of lectures with practical planning work. The skills training commences in the swimming pool with the course instructors demonstrating the required skills and techniques (S&T), the candidates then apply these new S&T under guidance. This is followed up by private practise at the candidate's own Club swimming pool. This training is then re-enforced during open sea training lead by the course instructors. The general time scale is as follows:

1. Classroom work 1-day.
2. Pool work 2hrs + homework practise.

3. Two days of open water diving, with two dives per day. The minimum ABT per dive is 25-minutes. At the very minimum, dives three and four on day two must be sea dives. Each candidate is assessed during the third dive.
4. Written examination - 90 minutes.
5. Course debrief and final candidate assessment 30 minutes.

## SAA Extended Range Nitrox Diver Lecture Programme

Pre-amble.

1. Nitrox Revision.
2. Nitrogen and the diver.
3. Decompression and Diver Behaviour.
4. High pressure oxygen.
5. Check-out your Dive Tables.
6. Let's Try-a-Dive (Classroom work).
7. Risk Assessment. 15. Deploying a DSMB.
8. Thermal protection.
9. Equipment.
10. Recovering your tracks distance-line.
11. Decompression – supplementary.
12. Avoiding Silt-outs.
13. Analysing gas mixes.
14. Dive Management.
15. Deploying a DSMB.

## Skills Programme

1. Demonstrate correct isolation and shut-down procedures for leaking DVs etc - on every dive.
2. No mask swim: follow a line for 10m without a mask.
3. Lost mask drill: either get the spare from your pocket and refit or find your buddy with no mask.
4. Demonstrate correct buoyancy at depth when cylinders are full;  $\pm 0.5$  metres.
5. Demonstrate correct swimming trim (attitude).
6. Demonstrate correct finning technique to avoid disturbing the sea floor.
7. Demonstrate the correct use of the Run-time method of dive management.
8. Demonstrate the recovering of your tracks along a severed distance-line.
9. Demonstrate the Out-of-air drills, and then swim 20m breathing from buddy's gas source.
10. Deploy a DSMB, working as a team, to the surface using the course procedure.
11. Ascend the DSMB line, as a team, to the decompression stops and surface.
12. Change from Bottom Gas DV to Decompression DV at the appropriate stop depth.
13. Demonstrate correct buoyancy at stop depths when cylinders are near their planned back-up pressures.
14. Deploy a second DSMB (yellow) from the 6m stop requesting more breathing gas.
15. At Stage-stop remove side-mount decompression cylinder without losing buoyancy control, hold station  $\pm 0.5$ metres.

## Open Water Preparation - Candidate's Planning

Before candidates are taken to the open water skill sessions they must prepare their own dive plans for four simulated decompression dives. Details will be give at the time of the course.

## Entry requirements (prerequisites)

Student's minimum age: 18 years.

- Certification level: SAA Nitrox Diver, or equivalent.
- SAA Dive Leader or equivalent.
- Minimum number of dives: 50 (at least 20 of these using Nitrox mixture).
- Medical fitness: candidates must provide a recently completed UK Sport Diver Medical Self-certification Form confirming satisfactory medical status or hold a current Sports Diver Medical Certificate.

## Instructors

This Course is a Regional Course run by specifically trained SAA Extended Range Nitrox Instructors. The Student/Instructor ratio is 2:1 or 4:1 with a safety diver.

## Facilities

A suitable class room to match the needs of the class.

A swimming pool is required (It can be either the Instructor's or candidate's club pool) for skill demonstration & practise.

Open water site suitable for training purposes:

Dives 1 & 2 may be in sheltered water

Dives 3 & 4 must be at sea.

The course instructor will give details on the classroom theory day.

## Dive Equipment

Candidates are advised not to buy or borrow/acquire any additional diving equipment until they have completed the one day theory session. Your Instructor will discuss with you all your equipment needs regarding the fourth coming training.

## CMAS Approval

CMAS approval is being sought for this course.