

COMBINED COURSE MANUAL

SDI Deep Diver + Computer Nitrox + Limited Wreck Penetration

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1. Introduction

This combined training program integrates:

- * SDI Deep Diver
- * SDI Computer Nitrox Diver
- * SDI Wreck Diver (Limited Penetration)

The course is conducted over 2 days / 5 dives, using:

- * HTMS Chang Wreck
- * Coral Reef Dive Sites


Training is conducted in a flexible sequence, depending on boat logistics, while ensuring all SDI performance requirements are met.

2. Prerequisites

- * Minimum age: 18
- * Certification: Advanced Open Water (recommended)
- * Minimum dives: 25
- * Good buoyancy control
- * No inactive / refresh divers for wreck training
- * Nitrox theory completed or in progress

3. Course Structure

- * Total dives: 5
- * Wreck dives: 3 (including 1 penetration)
- * Deep dives: 2 (one up to 40 m)
- * Nitrox: integrated (analysis + application)

 SDI allows flexible structure as long as all performance requirements are completed.

4. Depth Limits

- * Deep Diver max: 40 m
 - * Dive 1 max: 30 m
 - * Reef dives: typically 18–25 m
 - * Penetration: within ambient light zone only
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5. Equipment Requirements

Standard

- * Full scuba equipment
- * Dive computer
- * SMB / DSMB
- * Compass
- * Slate

Wreck

- * Primary light
- * Backup light
- * Reel / guideline
- * Cutting device

Nitrox

- * Oxygen analyzer
 - * Nitrox cylinder
 - * Log sheet
 - * MOD marking
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6. Theory (Combined)

Deep

- * Gas consumption
- * Narcosis
- * ND_L / decompression awareness
- * Emergency procedures

Nitrox

- * MOD / PO₂
- * EAD concept
- * Analyzer use
- * Computer setup

Wreck

- * Hazards
 - * Line use
 - * Light communication
 - * Navigation & mapping
 - * Silt / disorientation
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7. Dive Planning Philosophy

The course is not planned by dive number, but by training objectives:

- ✓ Deep Dive 1 completed
 - ✓ Deep Dive 2 completed
 - ✓ 3 Wreck dives completed
 - ✓ 1 Penetration dive completed
 - ✓ Nitrox analysis + use completed
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8. Standard Procedures

- * Full briefing before every dive
 - * Gas planning required
 - * Computer monitoring mandatory
 - * Team diving enforced
 - * Controlled ascent + safety stop
 - * All dives logged
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9. Skill Development Overview

Students must demonstrate:

- * Depth control & gas management
 - * Narcosis awareness
 - * Nitrox analysis & logging
 - * Wreck orientation & mapping
 - * Team positioning
 - * Line handling (penetration)
 - * Emergency response
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10. Dive Program (5 Dives)

Dive 1 – HTMS Chang (25–30 m)

→ Deep Dive 1 + Wreck Dive 1

Dive 2 – Skill Development (18–25 m)

→ Buoyancy / gas / navigation

Dive 3 – Reef Nitrox Dive (20–25 m)

→ Nitrox application

Dive 4 – HTMS Chang (30–40 m)

→ Deep Dive 2 + Wreck Dive 2

Dive 5 – HTMS Chang

→ Wreck Dive 3 (Limited Penetration)

11. INSTRUCTOR DIVE BRIEFING CARDS

DIVE 1 CARD

HTMS Chang – Deep 1 + Wreck 1

Objective:

- * Deep familiarization
- * Wreck orientation

Depth: 25–30 m

Skills:

- * Gas planning
- * Computer check
- * Narcosis awareness
- * Basic wreck mapping
- * Team positioning

Instructor Focus:

- * Check stress at depth
 - * Trim & buoyancy
 - * Air consumption
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DIVE 2 CARD

Skill Dive (Reef or Wreck Outside)

Objective:

- * Stabilize performance

Depth: 18–25 m

Skills:

- * Buoyancy
- * Trim
- * Gas management
- * Navigation
- * Team awareness

Instructor Focus:

- * Fix problems early
 - * Prepare for deeper dive
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 **DIVE 3 CARD**

Reef – Nitrox Dive

Objective:

- * Apply nitrox safely

Pre-Dive Required:

- * Analyze cylinder
- * Log O₂ %
- * Calculate MOD
- * Set computer

Skills:

- * Monitor PO₂
- * Stay within MOD
- * NDL comparison

Instructor Focus:

- * Check understanding
 - * Computer discipline
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 **DIVE 4 CARD**

HTMS Chang – Deep 2 + Wreck 2

Objective:

- * Execute full deep dive

Depth: 30–40 m

Skills:

- * Full dive planning
- * Gas tracking
- * Narcosis test
- * Simulated emergency
- * Wreck mapping

Instructor Focus:

- * Stress / narcosis
 - * Gas reserve discipline
 - * Controlled ascent
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HTMS Chang – Limited Penetration

Objective:

- * Safe wreck entry

Skills:

- * Light use
- * Reel deployment
- * Line following
- * Team order
- * Exit control

Rules:

- * Ambient light only
- * No restrictions
- * No silt-out

Instructor Focus:

- * Calm behavior
- * Line discipline
- * Situational awareness

12. Emergency Procedures

- * Lost buddy
- * Low gas
- * Out of air
- * Narcosis response
- * Light failure
- * Lost line (abort dive)
- * Controlled ascent

13. Graduation Requirements

Students must:

- * Complete all dives
- * Demonstrate all required skills
- * Analyze at least 2 nitrox cylinders
- * Log nitrox analysis
- * Program computer correctly
- * Stay within limits
- * Show safe diving behavior

14. Certification

Upon completion, students receive:

- * SDI Deep Diver
- * SDI Computer Nitrox Diver
- * SDI Wreck Diver (Limited Penetration)