



Left to right: Mr Massimo Casabianca, DAN Lecturer, Ms Vania Sessa DAN Lecturer, Mr Paul Tickle, Ms Audrey Farrugia, Mr Raymond Arce, Mr Tiit Krutob BSc DSM graduates, Professor Alessandro Marroni DAN Foundation CEO and Lecturer, Dr Simon Caruana Senior Manager ITS and Lecturer, Mr Guy Thomas DAN Lecturer
Photo: Arkadiusz Srebnik.

The first cohort of graduands in BSc. Dive Safety Management in December 2023.

A Graduation, a Milestone

BY SIMON CARUANA
SENIOR LECTURER AT ITS

The 4th of December 2023 will be remembered as the first time that the Institute of Tourism Studies (ITS) celebrated the graduation ceremony for the Bachelor of Science in Diving Safety Management.

This program, so far unique in the world, is pegged at MQF/EQF level 6 and provides a pathway for further studies. The program is the result of the long-standing agreement that exists between ITS and Divers Alert Network (DAN) Foundation chaired by Professor Alessandro Marroni.

A BRIEF BACKGROUND

Work on this academic program started in 2017 when ITS represented by the CEO Mr Pierre Fenech and DAN represented by Prof. Alessandro Marroni, formalized their collaboration by the setting up of the International School of Diving Safety and Medicine (ISDSM) under which all current and future diving safety courses will be set up, designed and managed. The

setting up of the programme was largely undertaken by Dr Simon Caruana and Prof. Glen Farrugia from ITS and Mr Massimo Casabianca and Ms Vania Sessa from DAN.

The main challenge was to identify the areas of study that were to make up the course and go beyond the 'traditional' content that is normally associated with them if one takes a purely utilitarian view. Indeed, for each area, further knowledge, skills, and competences were identified and incorporated within the program to ensure that the persons reading for this degree will be able to meet the current and future challenges that were identified by the development team. The result was a program that includes within its curriculum the following areas:

1. Advanced medicine, first aid techniques and research
2. Principles of hyperbaric medicine
3. Law and legislation with respect to diving practices, diving equipment and safety

4. Workplace safety, fire safety and hazard and risk identification and assessment
5. Marine protection and sustainability within the diving industry
6. Aspects of recreational, technical and free diving.
7. Scientific diving and research techniques
8. Aspects of management (human resources, policies, marketing and use of digital tools)

One must add work placements that enable students to gain valuable experience within the industry and include a research project (dissertation) that permits students to explore an area of interest in detail, contributing towards the generation of new knowledge in the field of diving safety.

On the other hand, it was recognized that many of the students enrolled were diving professionals with years of experience and

therefore an exercise was carried out to ensure that such qualifications and experience were given due consideration through the 'Recognition for Prior Learning' (RPL) scheme. All the evidence provided by students was rigorously assessed and where the required standards were achieved duly accredited.

Our students can not only carry out the typical tasks associated with the industry such as the management of a diving resort, but they can also act as diving safety officers at any organization that requires scuba diving to be done ensuring that all the diving safety protocols are adhered to. In fact, some have also been approached to take up an audit function, whereby they can go and inspect various premises and advise resort operators accordingly.

This placed further challenges on the development team in that it had to try and find the best possible specialists to share some of the knowledge and expertise with our students. The use of blended learning facilitated this as many of these academic specialists reside all over the globe including the United Kingdom, South Africa, Italy, United Arab Emirates and Italy. Some often change locality due to their work on oceanic oil platforms and this does occasionally create additional challenges, particularly regarding online connectivity, but these past years the ITS-DAN academic support team learned to be resilient and managed to deal with such situations.

The course has a significant practical element. Many of the study units require students to carry out practical tasks. These may range from actual diving to diving simulations, dive site and dive centre visits to practical first aid and fire safety exercises simulating real-life situations that may be encountered during diving activities (recreational or otherwise).



ITS students practicing using specialized equipment at the ITS Qala Centre supervised by Dr Riccardo Pelliccia and Mr Massimo Pieri (centre, left).

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In 2021, ITS inaugurated the ISDSM research centre situated on the ITS Gozo premises in Qala in the presence of the Ministers of Tourism and Gozo respectively, underlying the support that this initiative was given by the government of Malta.

The research centre primarily serves to organize and carry out all the practical components required by the course. The Qala premises are ideal in that they also incorporate a small teaching hostel whereby foreign students and lecturers can stay overnight preparing the logistics of the practical days more manageable.

To this end, one cannot forget the constant support provided by Mr Jesmond Borg, the administrator of the ITS Gozo Centre. In the meantime, works have commenced on the new ITS campus based in Kalkara that will also incorporate a shallow pool, a small but deeper pool designed specifically for certain diving activities and a small teaching hyperbaric unit. These will not only enhance the student experience of the current course,

but will enable ISDSM to develop a series of short specialized courses that will allow existing diving practitioners to add on to their existing knowledge and expertise.

ITS students recording data under water as part of their BSc. In Dive Safety Management programme.



WAY FORWARD

This development has also attracted the interest of other parties. Indeed, by 2026 the plan is to establish a permanent research and innovation capacities building in the Blue Economy sector. This is one of the outcomes ITS being part of the BCThubs project (<https://bcthubs.eu/>) that has the aim to support underwater cultural heritage, scientific research and tourism valorization. The other Maltese partners in this initiative proposed ITS to house the permanent research hub given the investment being done in the field.

Moreover, ISDSM has embarked on a series of agreements to advance the research opportunities. The most significant is an agreement with the Professional Association of Diving Instructors (PADI), the world's leading diving training organization having over 73% of diving certifications worldwide.

At ISDSM we are confident that with this and other agreements we can reach one of the aims that had been set, namely becoming a world-wide research centre of excellence in diving safety and the blue economy in general.

LESSONS LEARNED

The course is now in its fourth year, and this provides an opportunity to reflect upon the outcomes of the course itself.

Despite the challenges associated with the launch of a degree programme that is somewhat unique, the aim behind the course itself was achieved. That is, to provide practitioners with consolidated knowledge and skills that would enable them to occupy roles related to diving safety such as diving safety officers. The academic team is currently reviewing course content and structure with the aim

of consolidating it further and based upon the feedback received, add further material that is relevant to diving safety but also to the sector. One example would be leading qualified divers that may have mobility problems. This is an area that requires specific safety considerations, at the same time, it is a diver category that is increasing its share in the market itself.

Prospective students need to be aware that it is a course that may challenge many of the common perceptions within the diving community and make it view the sector with a more objective view whether regarding existing diving practices, risk assessment and diving safety protocols. The result will provide students with the ability to take more informed decisions resulting in a higher level of safety and mitigation of risk.



Microbubble flow measurement during a dive (with another prototype being tested in the process)



The prototype taken for a dive

Malta boasts a very strong diving sector in tourism and I firmly believe that this course will be beneficial to furthering my career successfully.

(Shaun Cardona 2nd yr student)

It is not just diving, it involves instruction, procedures, health, standards and legal aspects tied to this very popular sport.

Audrey Farrugia (Graduate Class 2023)