University of Plymouth

Faculty of Science and Engineering

School of Biological and Marine Sciences

Programme Specification

MRes Scientific Diving 7892

Proposed Start Date January 2026

Date of First Award FT January 2027

Date of Approval:

15 May 2025

Reviewed Date	Amended following review Yes/No	Sections amended

1. MRes Scientific Diving

Named Exit Awards including Final award title
MRes Scientific Diving on completion of 180 credits
Postgraduate Certificate Scientific Diving on completion of 60 credits

UCAS code

HECOS code 100351 - Marine Biology 67%, 100418 - Marine Sciences 33%

2. Awarding Institution: University of Plymouth

Teaching institution(s): University of Plymouth

3. Accrediting body(ies) There are no relevant accrediting bodies

4. Distinctive Features of the Programme and the Student Experience

The MRes Scientific Diving is a globally unique programme designed to provide the required skills and training for graduates who wish to participate within, or lead, scientific diving programmes in the research, conservation, government, or commercial sectors. External stakeholder's input from both academia and industry was sought during development of the programme and dissertations. Dissertation project topics are developed with external partners and students can collaborate with external partners, generating knowledge and delivering relevant and vital projects which form authentic assessments.

- The MRes draws on 30 years of experience teaching scientific diving at the University. Our nationally and internationally recognised expertise in teaching scientific diving, provides an excellent opportunity to develop a unique, MRes programme in Scientific Diving.
- No master's level programme in scientific diving is currently offered anywhere globally and discussions with industry has shown clear demand as evidenced by letters of support.
- Students have access to the UK's leading higher education, diving and boating facilities offered by Coxside Marine Station.

- The programme is highly applied and designed to give students the theoretical and practical skills to work as scientific divers and leaders.
- The programme uses the wider expertise within Plymouth, to deliver course content, including the Diving Diseases Research Centre (DDRC) and Searegs.
- The programme provides real-world experiences, with some course content provided by external, nationally, and internationally recognised experts in the field.
- The programme links strongly with the UN Sustainable Development Goal, Life Below Water 14; contributing to the sub-themes: Protect and Restore Ecosystems, Conserve Coastal and Marine Areas and Increase Scientific Knowledge, Research and Technology for Ocean Health.
- Research projects offer students the opportunity to gain experience in cutting-edge research projects, both in the UK and overseas, with the research topic driven by the industry-based or external academic project partner.

5. Relevant QAA Subject Benchmark Group(s)

The programme was developed with reference to the relevant policies and procedures related to the University of Plymouth and in addition, where relevant, alignment with the QAA subject benchmarks:

- Biosciences.

6. Programme Structure

Full time, 12 months no part time offer due to logistical constraints. All modules are Level 7.

Semester 2	**SCIDIV5003** Scientific Diving Theory and Practice (30 credits)	**SCIDIV5002** Scientific Diving Research Skills (20 credits)	**SCIDIV5001** Scientific Diving Field-course (10 credits)	**SCIDIV5000** Scientific Diving Dissertation Project (120 credits)
Summer period				
Semester 1				

The purpose of the first four weeks of SCIDIV5003 is to ensure that all students on the programme have comparable levels of commercial diving experience. Students will enter the module and if not already holding an HSE SCUBA qualification will undertake the 4-week HSE SCUBA programme. For those students who already hold the HSE SCUBA qualification, they will undertake a package of alternative courses (e.g. RYA Level 2 Powerboat, VHF radio, Personal Survival Techniques). After the first month students will re-join the same pathway.

In SCIDIV5003, neither the HSE SCUBA course, nor the alternative training courses provided by external providers will form part of the academic assessment of the module although responsibility for the external teaching will lie with the programme leader. Although students will follow slightly different pathways in this module, it is unavoidable, as we are likely to recruit both HSE SCUBA qualified and unqualified students. Although the students will have a slightly differing experience, there will broadly be, equivalence of experience, in the same way students can take differing elective modules on a degree programme.

7. Programme Aims

The general aims of the programme are to:

1. Provide a detailed grounding in the theory and practice of scientific diving that is intellectually challenging.
2. Provide students with the core skills needed to enter the academic, conservation, government or commercial scientific diving jobs market, as experienced postgraduate scientific divers, or alternatively, to follow a further postgraduate course, such as a PhD.
3. Develop students' ability to operate safely, professionally, ethically, and innovatively in a highly complex work environment.
4. Provide students with the skills to design, lead and participate in professional scientific diving projects.

8. Programme Intended Learning Outcomes (PILOs)

8.1. Knowledge and understanding

On successful completion graduates should have developed:

1) A systematic and advanced knowledge of the theory of professional scientific diving practice, while using their knowledge to incorporate interrelationships with other relevant disciplines.

2) Advanced knowledge of leadership in professional diving operations, including systematic and critical evaluation of their own, and other's capability.
3) A robust understanding of the requirements of fieldwork and expedition diving planning and delivery.

8.2. Cognitive and intellectual skills

On successful completion graduates should have developed:

1) A systematic and advanced understanding of the concepts and practice of collecting data underwater.
2) A critical understanding of experimental design and statistical analysis and its importance to scientific diving studies, as well as an ability to systematically and critically analyse and evaluate data quality and reliability.

8.3. Key and transferable skills

On successful completion graduates should have developed the ability to:

1) Work well in a small team and deliver complex objectives as a member, or leader, making appropriate use of the strongest skills of group members and manage conflict tactfully and effectively, using advanced interpersonal, team and networking skills.
2) Approach challenges in a systematic way, critically reflect on what has worked well, what has not worked so well and utilising advanced problem-solving strategies, methods, and techniques to decide how to make improvements.

8.4. Employment related skills

On successful completion graduates should have developed:

1) Confidence and competence to exercise initiative and personal responsibility, in an ethical, sustainable, and professional manner.
2) The ability to act autonomously, make strategic decisions and develop appropriate practice guidelines, whilst taking responsibility for outcomes

8.5. Practical skills

On successful completion graduates should have developed:

1) The ability to plan, communicate, lead, and deliver complex scientific diving projects.
2) The ability to analyse and present complex data, to a range of audiences.

3) A safety focussed and legally compliant approach to participating in and leading professional diving operations.

9. Admissions Criteria, including RPL and Disability Service arrangements

The Programme Leader, who is responsible for admissions, uses the following criteria for selecting candidates. All criteria must be met.

Students accepted on to the MRes require a good honours degree at 2:1 or above (or equivalent), in a relevant science subject such as biology, marine biology, marine science, or a closely related subject. Students with a lesser qualification, or a degree from other subject areas may be accepted at the discretion of the Programme Leader, if they have relevant industry experience, or equivalent.

Students for whom English is not their first language must demonstrate proficiency in English with a minimum IELTS score of 6.0 overall and a minimum of 5.5 in each area.

Prior to joining the programme all students must pass an HSE diving medical undertaken by an approved medical examiner of divers as well as gaining a First Aid at Work and Oxygen Administration qualification. **If the prospective student cannot pass these requirements, or does not obtain them, they cannot be accepted onto the programme**. It is not possible to undertake an HSE diving medical overseas. Before joining the programme, potential international students will be asked to undertake a medical examination, covering key elements of the HSE diving medical in their home country, to try and ensure they can pass the HSE diving medical when they arrive in the UK. The Programme Leader has worked with a local Approved Medical Examiners of Divers (AMED) to develop a suitable medical form format. Students must pay for their HSE diving medicals, First Aid at Work and Oxygen Administration qualifications, the costs are not included within course fees. However, help with arranging suitable courses and medicals can be provided by the University if, although, it is essential students are available in the UK to undertake these courses and medical in the week prior to induction week, if required.

In addition, all students entering the programme must be qualified to PADI Rescue Diver, or equivalent, have carried out 10 dives in cooler water environments, 5 of which should have been in a drysuit and have access to a drysuit/hood/gloves/undersuit and suitable waterproof clothing and warm clothing The aim of the minimum required diving qualification being set at PADI Rescue

Diver, or equivalent, is to ensure that all students entering the programme are competent divers and thereby minimise the risk of them failing the HSE SCUBA programme due to inexperience. **If a student fails the HSE SCUBA course they will be required to withdraw from the programme, although the likelihood of this happening should be small.**

Lastly, all students must to be able to apply for a visa tourist visa to Bali to be able to attend the field course (SCIDIV5001).

In summary the pre-requisites required to join the programme are:

1. HSE diving medical
2. First aid at work qualification
3. Oxygen administration qualification
4. PADI Rescue diver or an equivalent diving qualification
5. 10 cool water dives, 5 of which should be in a drysuit
6. Access to a drysuit/undersuit/gloves/hood and waterproof warm clothing
7. The ability to gain a tourist visa for Bali.

10. Non-Standard Regulations (NB: all non-standard regulations must be approved by QSSC)

Normal University regulations in respect of assessment are followed.

11. Transitional Arrangements for existing students looking to progress onto the programme

Not applicable.

Appendices
Programme Specification Mapping (UG) – core/elective modules
Programme Specification Mapping (PGT)

Appendix 1: (PGT) Mapping table that reflects which core modules contribute to the Programme Intended Learning Outcomes (PILOs)

Tick those Award Learning Outcomes the module contributes to through its assessed learning outcomes. Insert rows and columns as required.

MRes Scientific Diving

Module	**Credits**	**C** core **E** Elective	Programme Learning Outcomes contributed to (for more information see Section 8)																		Compensation Y/N	**Assessment element(s) and weightings** 01 -online open book assesment E1 - exam E2 - clinical exam T1 - test C1 - coursework A1 - generic assessment P1 - practical
			8.1 Knowledge & understanding				8.2 Cognitive & intellectual skills				8.3 Key & transferable skills				8.4 Employment related skills				8.5 Practical skills					
			1	2	3		1	2			1	2			1	2			1	2	3			
SCIDIV5003 Scientific Diving Theory and Practice	30	C	X	X			X				X	X			X	X			X		X		Y	C1 40% T1 40% P1 20%
SCIDIV5002 Scientific Diving Research Skills	20	C	X	X	X		X	X			X	X			X	X			X	X	X		Y	C1 40% T1 60%
SCIDIV5001 Scientific Diving Field Course	10	C	X	X	X		X	X			X	X			X	X			X	X	X		Y	C1 70% P1 30%
Learning Outcomes 30 Credits																								
SCIDIV5000 Dissertation Project	120	C	X	X	X		X	X			X	X			X	X			X	X	X		Y	C1 85% P1 15%

Learning Outcomes 120 Credits																								
Total	180																							

Postgraduate Certificate Scientific Diving

Module	**Credits**	**C** core **E** Elective	Programme Learning Outcomes contributed to (for more information see Section 8)																				Compensation Y/N	**Assessment element(s) and weightings** 01 -online open book assesment E1 - exam E2 - clinical exam T1 - test C1 - coursework A1 - generic assessment P1 - practical
			8.1 Knowledge & understanding				8.2 Cognitive & intellectual skills				8.3 Key & transferable skills				8.4 Employment related skills				8.5 Practical skills					
			1	2	3		1	2			1	2			1	2	3	4	1	2	3			
SCIDIV5003 Scientific Diving Theory and Practice	30	C	X	X			X				X	X			X	X			X		X		Y	C1 40% T1 40% P1 20%
SCIDIV5002 Scientific Diving Research Skills	20	C	X	X	X		X	X			X	X			X	X			X	X	X		Y	C1 40% T1 60%
SCIDIV5001 Scientific Diving Field Course	10	C	X	X	X		X	X			X	X			X	X			X	X	X		Y	C1 70% P1 30%
Learning Outcomes 30 Credits																								

Learning Outcomes 120 Credits																								
Total	60																							
Learning Outcomes 60 Credits																								