Marine Scientist in Academics

Overview of career pathway

A career pathway for a marine scientist in academia is dynamic and requires continuous professional development, research excellence, and dedication to both teaching and leadership in academia. Success in this field requires the ability to adapt, build a network of collaborators, and contribute significantly to the knowledge in marine science.

Summary of career stages:

- Student
- Doctoral Student
- Postdoctoral Researcher
- Lecturer
- Senior Lecturer/ Associate Professor
- Professor
- Academic Head of Department / Faculty Director

Student

Example job titles: Intern, Research Assistant, Volunteer, Teaching Assistant

A Student will focus on gaining foundational knowledge of marine ecosystems and developing advanced research methods towards a specialised area of marine science. This will also include conducting independent research and publishing findings. Practical experience in research will be gained through participating in internships or volunteer work and teaching experience may be gained working as a graduate teaching assistant or similar.

Milestones
Key accomplishments to gain within role to progress to the next career stage:

Academic achievements and training and experience	**Experience to gain**	**How IMarEST can support you throughout your career journey**
Complete: • A bachelor's degree in marine biology, oceanography, environmental science, or a related field • A master's degree in marine science,	Complete 3 to 6 years to finish academic studies and participate in internships, volunteer positions and/or part-time research and teaching assistant roles to gain practical experience	• Join as a free student member and access learning resources, events, webinars, dedicated student sections, and a digital library with 130 years' worth of knowledge. Also

oceanography, or a specialised field such as marine ecology, marine conservation, etc.	and conduct independent research towards a thesis.	stay up to date with the latest industry news and connect with the wider community for expert support and guidance • Explore and join Special Interest Groups (SIGs) for further learning and networking opportunities with other keen professionals

Doctoral Student

Example job titles: Doctoral Candidate, Research Associate, Graduate Teaching Assistant (GTA), University Tutor

A Doctoral Student will be focusing on conducting original research that contributes new knowledge to marine science. This includes developing expertise in a niche field, publishing in academic journals and presenting at conferences.

Milestones
Key accomplishments to gain within role to progress to the next career stage:

Academic achievements/ training	**Experience to gain**	**Enhance your prospects and opportunities further**
Complete: • An academic doctorate (e.g. PhD) in marine science or a closely related field	Complete 3 to 6 years conducting original research, becoming specialised in a chosen field and publishing a thesis. Develop skills in advanced data analysis, research project management, grant writing, presenting at conferences and submitting peer-reviewed publications. Part time work may also be taking to develop teaching experience.	• Gain industry recognition with: ○ Associate Member grade (AMIMarEST) ○ Registered Marine Scientist professional registration (RMarSci) • Connect and share your experiences with a professional community through your local membership branch

Postdoctoral Researcher

Example job titles: Postdoctoral Fellow, Research Scientist, Research Fellow, Research Associate, University Tutor

At this stage it is important for a Post-Doctoral Student to deepen expertise through advanced research projects, building a strong publication record and gaining experience in mentoring and tutoring undergraduate and graduate students.

Milestones
Key accomplishments to gain within role to progress to the next career stage:

Academic achievements/ training	**Experience to gain**	**Enhance your prospects and opportunities further**
Remain up to date with latest industry trends and developments through: • Attending conferences • Research project opportunities • Specialised training programmes e.g. research leadership, grant application writing etc.	Complete 1 to 4 years deepening research expertise in a specific niche, leading and collaborating on research projects with other researchers and scientists, mentoring and potentially teaching undergraduate and graduate students and producing high-quality publications.	• Develop skills, professional reputation, and network through volunteering opportunities and SIG engagements • Develop leadership capabilities and shape the future of maritime through mentoring opportunities

Lecturer

Example job titles: Lecturer, Assistant Professor, Assistant Lecturer (in some cases)

After post-doctoral research, work as a full-time lecturer will start which will involve fulfilling teaching and service requirements whilst developing a robust research portfolio, securing funding, and publishing extensively.

Milestones
Key accomplishments to gain within role to progress to the next career stage:

Academic achievements/ training	**Experience to gain**	**Enhance your prospects and opportunities further**
Remain up to date with latest industry trends and developments through: • Attending conferences • Research project opportunities • Specialised training e.g. teaching skills, training focuses on a specialist field, grant application writing etc.	Complete 5 to 7 years building research, teaching undergraduate and graduate students, leading or significantly contributing to grant applications, producing high-quality publications, and taking part in the review for journals and external examinations for PHD theses. Receive and accept	• Gain industry recognition with: ○ Member grade (MIMarEST) ○ Chartered Marine Scientist professional registration (CSci/ CMarSci) • Engage with cross-disciplinary SIGs to

	invitations to support and work with local and national professional bodies to build a professional reputation and network.	expand knowledge and specialisms

Senior Lecturer/ Associate Professor

Example job titles: Senior Lecturer, Reader, Associate Professor

With an established and proven track-record a Senior Lecturer will continue leading research projects and teaching and mentoring students, however at a higher level with more responsibility when participating in university governance and contributing to the curriculum development.

Milestones
Key accomplishments to gain within role to progress to the next career stage:

Academic achievements/ training	**Experience to gain**	**Enhance your prospects and opportunities further**
Remain up to date with latest industry trends and developments through: • Attending conferences • Research project opportunities • Specialised training programmes e.g. advanced teaching skills, strategic leadership, developing academic curriculum etc. • Conduct significant research and publish findings to create a global reputation within a chosen field	Complete 5 to 10 years to develop high-level research management skills that allow a significant contribution to a chosen field. Continue mentoring early-career researchers and become involved in the academic governance and development of the learning curriculum. Take part in international committees and editors for reviewing and publishing journals to build a global reputation and network.	• Gain industry recognition with: ○ Fellow membership grade (FIMarEST) • Strengthen expertise and reputation through presenting at events and webinars, engaging with SIGs, contributing to publications, and/or delivering training • Expand your network and recognition of your expertise by leading or starting a Special Interest Group (SIG)

Professor

Example job titles: Professor, Chair of Department

A full Professor is a recognised leader in their field and holds extensive accomplishments in research and publications. Due to the level of expertise, a Professor will be expected to take on significant academic and administrative leadership roles including shaping their department and contributing to broader scientific and educational communities.

Milestones
Key accomplishments to gain within role to progress to the next career stage:

Academic achievements/ training	Experience to gain	Enhance your prospects and opportunities further
Complete: • Build on research and maintain a global reputation • Maintain a consistent record of high-impact publications • Remain up to date with new and emerging trends and information within chosen field to maintain expertise	Complete 1 to 5 years developing skills in strategic leadership, mentorship, influencing policy-making, and possibly engaging in interdisciplinary and international collaborations. Take on a leadership role within the academic institution, academic groups and the broader scientific community for education and innovation within a specialised field. Chair international committees which can lead to exchanging knowledge, publishing studies or setting standards.	• Become a thought leader in your field and have your say in shaping the industry through technical leadership or high-level volunteering roles (e.g. become a board member, council rep)

Academic Head of Department / Faculty Director

Example job titles: Head of Department, Dean, Pro-Vice-Chancellor, Vice-Chancellor (in some regions), Research Director,

In a role as a Head of or Director, this will include managing departments or institutions, setting strategic goals, and overseeing large research initiatives. Strong leadership skills and the ability to influence policy and academic standards at a high level will be required for this role.

Milestones
Key accomplishments to gain within role to progress to the next career stage:

Academic achievements/ training	Experience to gain	Enhance your prospects and opportunities further
• Remain up to date with new and emerging trends and information within chosen field to maintain expertise • Contribute to, participate in or lead on high-level research to build reputation as a visionary leader	Utilise skills and experience to lead entire departments, colleges, or research institutes. This will include setting strategic directions for research and education, managing large budgets, and shaping institutional policies all whilst building and maintaining an extensive professional networking. Also continue chairing international committees to leading on innovation and setting standards.	• At this level, consider opportunities to take on influential roles within governmental or non-governmental organisations focusing on marine science and policy