



Remote Operating Vehicle (ROV) Pilot

Overview of career pathway

A career as an ROV Pilot, particularly within the marine technology sector, offers opportunities to work in and explore various underwater environments, including oil and gas exploration, environmental monitoring, and marine research.

Summary of career stages:

- ROV Trainee/ Apprentice
- Junior ROV Pilot/ Technician
- ROV Pilot/ Technician
- Senior ROV Pilot
- ROV Manager

ROV Trainee/ Apprentice

Example job titles: ROV Trainee, ROV Technician Apprentice, Marine Technology Intern

An ROV Trainee or Apprentice will be responsible for assisting senior ROV pilots and technicians by preparing equipment, conducting routine maintenance, and observing operations. This role is heavily focused on learning and gaining hands-on experience with ROV systems under close supervision.

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: <ul style="list-style-type: none"> • An ROV apprenticeship or training programme Qualifications and training required will vary by employer and location, but this could include: <ul style="list-style-type: none"> • Survival and safety certifications (e.g. BOSIET, helicopter underwater escape) 	Complete up to 2 years finishing academic studies and gaining hands-on experience with mechanical and electronic systems of an ROV. Develop a basic understanding of working in marine environments and underwater operations.	<ul style="list-style-type: none"> • 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 stay up to date with the latest industry news and connect with the wider

training (HUET), First aid etc.)		community for expert support and guidance <ul style="list-style-type: none"> • Explore and join Special Interest Groups (SIGs) for further learning and networking opportunities with other keen professionals
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Junior ROV Pilot/ Technician

Example job titles: Junior ROV Pilot, ROV Technician, Marine Equipment Technician, Junior Tooling Technician

Within a junior level role, responsibilities will include operating the ROV under supervision for simpler tasks, assisting in troubleshooting, and performing routine maintenance on the vehicle. The role also involves building technical skills and gaining experience in more complex operations while starting to take on more responsibility.

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: <ul style="list-style-type: none"> • A ROV pilot/ technician grade II certification Qualifications and training required will vary by employer and location, but this could include: <ul style="list-style-type: none"> • Survival and safety certifications • Location-based training • Refresher courses 	Complete 1 to 2 years piloting ROVs under supervision, problem-solving maintenance and operation scenarios and building a strong safety record and understanding of industry standards. Create a logbook to start capturing piloting hours and days of offshore working experience.	<ul style="list-style-type: none"> • Gain industry recognition with: <ul style="list-style-type: none"> ○ Associate Member grade (AMIMarEST) ○ Marine Technician professional registration (MarTech) • Connect and share your experiences with a professional community through your local membership branch

ROV Pilot/ Technician

Example job titles: ROV Pilot, ROV Pilot/ Technician Grade II, ROV Operator, Marine Robotics Technician, Tooling Technician

With experience gained, a ROV Pilot will independently operate ROVs for various underwater tasks, including inspections, data collection, and repairs. The ROV Pilot will also be managing the ROV's performance, troubleshooting issues, and ensuring safe and efficient operations in diverse environments.

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
<p>Complete:</p> <ul style="list-style-type: none"> • An advanced ROV pilot/ technician grade I certification <p>Qualifications and training required will vary by employer and location, but this could include:</p> <ul style="list-style-type: none"> • Advanced survival and safety certifications (e.g. advanced first aid, offshore medical etc.). • Refresher courses • An advanced diploma or studies towards a bachelor's degree in marine engineering, electronics, robotics, or similar fields 	<p>Complete 3 to 5 years piloting ROVs in complex underwater tasks and offshore environments and building a track record of successful missions. Develop a strong understanding of ROV systems, routine maintenance, and emergency procedures. Log at least 100 piloting hours and 180 days of offshore experience at a grade II level.</p>	<ul style="list-style-type: none"> • Gain industry recognition with: <ul style="list-style-type: none"> ○ Member grade (MIMarEST) ○ Registered Marine Technologist professional registration (RMarTech) • Engage with cross-disciplinary SIGs to expand your knowledge and specialisms • Develop skills, professional reputation, and network through volunteering opportunities and SIG engagements

Senior ROV Pilot

Example job titles: Senior ROV Pilot, ROV Pilot/ Technician Grade I, Senior ROV Tooling Technician, Lead ROV Technician, Subsea Operations Specialist

At a senior level, an ROV pilot will be leading complex ROV missions, often in challenging offshore environments, and managing a team of pilots and technicians. This role requires extensive technical expertise, leadership abilities, and the capacity to oversee high-stakes operations and projects.

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
<p>Complete:</p> <ul style="list-style-type: none"> • ROV Supervisor certification <p>Qualifications and training required will vary by employer and location, but this could include:</p> <ul style="list-style-type: none"> • Senior management/ leadership training (e.g. MBA or executive leadership programs) to 	<p>Complete 3 to 5 years managing complex underwater projects from start to finish by leading a team of ROV pilots, coordinating with other departments (e.g. engineering and safety) and problem-solving different or unexpected scenarios in high-pressure environments. Log at least 100 piloting</p>	<ul style="list-style-type: none"> • Gain industry recognition with: <ul style="list-style-type: none"> ○ Chartered Marine Technologist registration (CMarTech) • Develop your leadership capabilities and shape the future of maritime through mentoring opportunities

advance to higher leadership roles <ul style="list-style-type: none"> Specialised training e.g. deep-water operations, bespoke ROV technologies and/or systems, project management etc. 	hours along with 360 days of offshore experience working at a grade I level and 180 days working at a senior ROV level.	
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ROV Manager

Example job titles: ROV Supervisor, ROV Operations Manager, Subsea Technology Manager, ROV Superintendent

An ROV Manager oversees the entire ROV operation, including project planning, team management, and client communication. This role involves strategic decision-making, managing large-scale operations, and ensuring that projects are delivered on time and within budget.

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: <ul style="list-style-type: none"> Advanced ROV Operator certification (e.g. ROV Senior Supervisor Certification, ROV Superintendent etc.) Qualifications and training required will vary by employer and location, but this could include: <ul style="list-style-type: none"> Offshore or bespoke management certifications (e.g. risk management, financial planning, complex decision making etc.) Leadership and management training Further studies towards a master's degree in marine technology, subsea engineering, or related disciplines 	Utilise skills, experience, and strategic thinking towards developing innovative solutions and new ideas in the use of ROV technology. Lead large teams, successfully complete projects and contribute to business development, client relations, and the strategic direction of the company. Continue to record offshore experience in a logbook and capture at least 180 days working at an ROV Manager/Supervisor level.	<ul style="list-style-type: none"> Gain industry recognition with: <ul style="list-style-type: none"> Fellow membership grade (FIMarEST) Strengthen expertise and reputation through presenting at events and webinars, engaging with SIGs, contributing to publications, and/or delivering training Have your say in shaping the industry through technical leadership or high-level volunteering roles (e.g. become a board member, council rep)