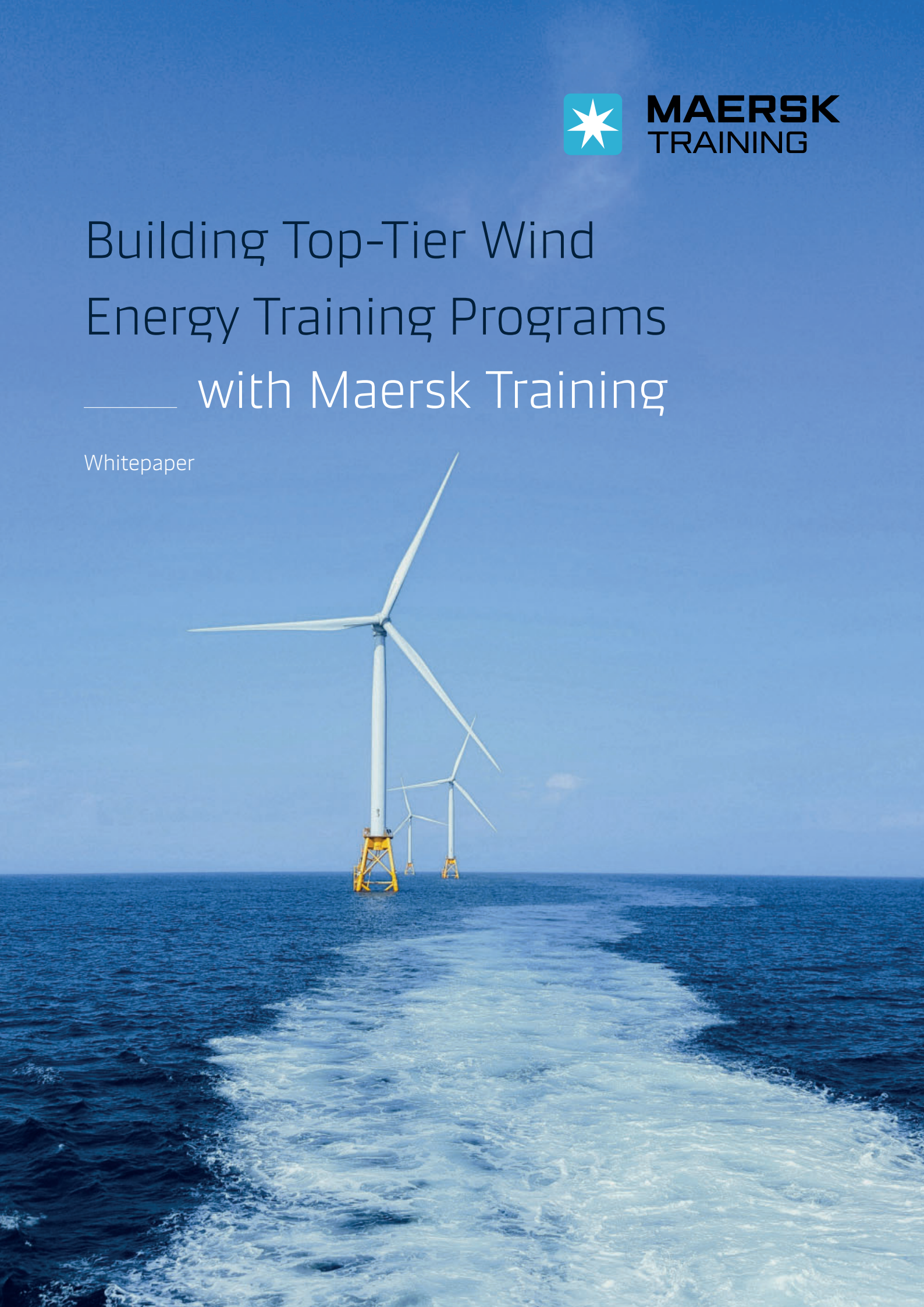
MAERSK TRAINING

Building Top-Tier Wind Energy Training Programs with Maersk Training

Whitepaper



> Many colleges lack the expertise and resources to establish wind energy training programs, hindering their ability to contribute to the development of a qualified workforce.

Executive Summary

> Maersk Training, a leader in workforce development solutions, offers a comprehensive partnership approach to help colleges overcome these challenges and build successful wind energy training programs.

The wind energy industry in the US is experiencing explosive growth, demanding a skilled workforce equipped with the knowledge and certifications to develop, operate, and maintain wind farms. Colleges play a critical role in nurturing this workforce, but many lack the internal expertise and resources to establish wind energy training programs. Maersk Training, a leader in workforce development solutions, offers a comprehensive partnership approach to help colleges overcome these challenges and build successful wind energy training programs.

This white paper explores the opportunities and challenges colleges face in entering the wind energy training landscape. It showcases the Maersk Training partnership model, highlighting the expertise and support we provide throughout the entire process – from program development and curriculum design to instructor training and facility set-up. We present a compelling case study of the National Offshore Wind Institute (NOWI) at Bristol Community College (nowi.org), a shining example of successful collaboration between Maersk Training and a visionary institution.

The Booming Wind Energy Industry and the Workforce Gap

The industry added over
10,000 jobs
in 2023 alone

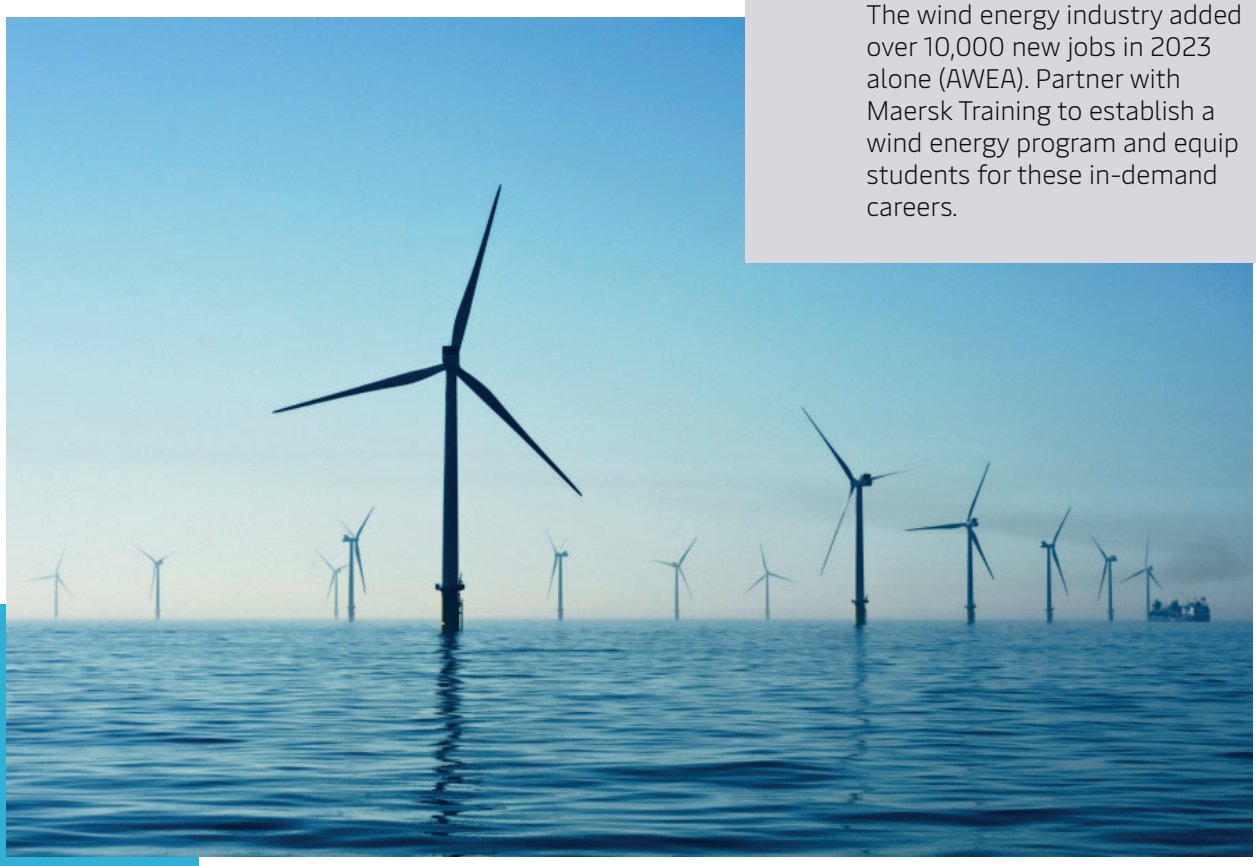
Wind energy now employs over
130,000 workers
nationwide

The US wind energy sector is undergoing a period of rapid expansion. According to the American Wind Energy Association (AWEA), the industry added over 10,000 jobs in 2023 alone, and wind energy now employs over 130,000 workers nationwide. This growth is projected to continue, creating a significant demand for skilled technicians, engineers, and other professionals.

However, this expansion is accompanied by a growing skills gap. Many colleges lack the expertise and resources to establish wind energy training programs, hindering their ability to contribute to the development of a qualified workforce.

Is Your College Missing Out?

The wind energy industry added over 10,000 new jobs in 2023 alone (AWEA). Partner with Maersk Training to establish a wind energy program and equip students for these in-demand careers.



Challenges Faced by Colleges

Colleges interested in entering the wind energy training landscape face several challenges:

- **Curriculum Development:** Developing a comprehensive wind energy curriculum that adheres to industry standards and prepares students for successful careers requires specialized knowledge and ongoing updates to reflect industry advancements.
- **Instructor Training:** Equipping faculty with the necessary skills and certifications to deliver high-quality wind energy training is crucial but can be a significant hurdle for colleges.
- **Facility Development:** Establishing a training facility with the appropriate equipment and infrastructure to simulate real-world wind energy work environments requires significant investment and planning.
- **Staying Current with Industry Standards:** The wind energy industry is constantly evolving. Colleges need to ensure their training programs keep pace with these changes and meet the evolving needs of employers.

Empower Your Faculty

Our "Train the Trainer" program equips your instructors with the skills and knowledge to deliver exceptional GWO training modules.

The Maersk Training Partnership Model

Maersk Training understands the challenges colleges face and offers a comprehensive partnership model to help them overcome these hurdles. **We collaborate with colleges throughout the entire program development process, providing the following solutions:**

- **Expert Guidance:** Our team of industry specialists will collaborate with your college leadership to define program goals, identify operational needs, and develop a clear roadmap for success.
- **Curriculum Development:** We assist in developing a curriculum that meets all Global Wind Organisation (GWO) standards, ensuring your graduates possess the necessary theoretical knowledge and practical skills for wind energy careers.
- **Instructor Training:** Our "Train the Trainer" program equips your instructors with the skills and knowledge to deliver high-quality GWO modules, fostering exceptional learning experiences for your students.
- **Facility Development and Design:** We provide guidance and support in establishing a training facility that meets industry standards and offers a realistic training environment.

Building Wind Energy Leaders

A Full Case Study of NOWI's Success with Maersk Training

In this section, we delve deeper into the inspiring story of the National Offshore Wind Institute (NOWI) at Bristol Community College (nowi.org). NOWI serves as a prime example of how Maersk Training's partnership approach empowers colleges to establish world-class wind energy training programs.

NOWI: From Vision to Reality with Maersk Training

NOWI's vision was to become a premier center for wind energy workforce development on the US East Coast. They envisioned a state-of-the-art facility offering comprehensive wind energy programs, certifications, and specialty services to cater to the growing industry demand. However, translating this vision into reality required a partner with the expertise and experience to navigate the complexities of program design, instructor training, and facility development.

The Maersk Training Difference

That's where Maersk Training stepped in. We became an integral part of NOWI's journey from the very beginning, offering a comprehensive suite of solutions:

- **Consultative Expertise:** Through a collaborative process, Maersk Training guided NOWI in identifying and executing key operational goals to achieve their vision. We worked closely with NOWI leadership to define the specific needs of the wind energy industry in the region and ensure the training program addressed those requirements effectively.

- **Seamless Operational Design:** We worked hand-in-hand with NOWI leadership and trainers to design a training environment that fosters exceptional learning experiences while meeting all GWO (Global Wind Organisation) guidelines. This included designing practicalexercises that mimicked real-world wind turbine components and operational scenarios.

- **World-Class Instruction:** Our "Train the Trainer" program equipped NOWI's instructors with the necessary skills and competencies to deliver a comprehensive portfolio of GWO modules. This included Basic Safety Training, Advanced Rescue Training, Enhanced First Aid, Basic Technical Training, and Slinger Signaller certifications. Maersk Training's experienced instructors not only provided the technical knowledge but also emphasized safety protocols and best practices crucial for wind energy careers.

NOWI's Success Story

The results speak for themselves. Thanks to Maersk Training's partnership, NOWI's state-of-the-art facility is now operational. It boasts a robust program portfolio, including the aforementioned GWO modules, preparing students for successful careers in wind energy installation, operation, and maintenance. The facility itself features cutting-edge training equipment, including turbine blade climbing simulators and nacelle mockups, providing students with a realistic training environment that mirrors what they will encounter on the job.

Flexible Partnership

We tailor our solutions to your college's specific needs and resources. No matter your starting point, Maersk Training can help you build a successful wind energy program.

A Partnership for the Future

NOWI is proud to have collaborated with Maersk Training to launch this world-class facility. They are excited about the future and look forward to even more successful projects together. NOWI's success story is a testament to the power of collaboration in building a skilled wind energy workforce and addressing the industry's growing demand for qualified professionals.

Key Takeaways for Your College

By partnering with Maersk Training, your college can emulate the success story of NOWI and establish a world-class wind energy training program. Here's what you can achieve:

- Gain access to expert guidance throughout the entire program development process.
- Develop a curriculum that meets the industry's needs and prepares students for successful careers.
- Equip your instructors with the skills to deliver high-quality, GWO-compliant training.
- Establish a state-of-the-art training facility that provides a realistic learning environment.

Conclusion

The wind energy industry presents a unique opportunity for colleges to contribute to a growing sector and prepare students for rewarding careers. By partnering with Maersk Training, colleges can overcome the challenges associated with program development and establish successful wind energy training programs. Our expertise and collaborative approach ensure a smooth journey from vision to implementation, enabling colleges to become leaders in wind energy workforce development.

Contact Maersk Training Today

Are you ready to take your college to the forefront of wind energy training? Contact Maersk Training today to discuss your specific needs and learn more about how we can help you build a successful program.

Lise-Lotte Lassen

Business Development Manager
Maersk Training Solutions

Maersk Training
lise.lassen@maersktraining.com
Direct: +45 70 227 950
Mobile: +45 25 577 222

MAERSK TRAINING

Expand Your Course Offerings

A wind energy program complements existing engineering, science, and vocational training programs at your college, offering students a well-rounded education.

Appendix

A Sample Wind Energy Training Program Curriculum

Renewables

BASIC SAFETY & TECHNICAL TRAINING

BASIC SAFETY TRAINING	DURATION
GWO Basic Safety Training Offshore (Includes GWO Sea Survival)/ Blended	5 days
GWD Basic Safety Training Offshore Refresher (Includes GWO Sea Survival/Blended	3 days
GWO First Aid	1 day
GWO First Aid Refresher	4 hours
GWO First Aid - Blended	1 day
GWO First Aid Refresher - Blended	4 hours
GWO Fire Awareness/Refresher	<0.5 days
GWO Fire Awareness/Refresher - Blended	<0.5 days
GWO Manual Handling/Refresher	<0.5 days
GWO Manual Handling/Refresher-Blended	<0.5 days
GWO Working at Height with Manual Handling Combined	2 days
GWO Working at Height with Manual Handling Combined Refresher	1 day
GWO Working at Height with Manual Handling Combined - Blended	2 days
GWO Working at Height with Manual Handling Combined Refresher - Blended	1 day
GWO Sea Survival/Refresher	1 day
GWO Sea Survival/Refresher-Blended	1 day
GWO Basic Safety Training Onshore (Excludes GWO Sea Survival) / Blended	4 days
GWO Basic Safety Training Onshore Refresher (Excludes GWO Sea Survival)/Blended	2 days
GWO Enhanced First Aid (EFA)	3 days
GWO Enhanced First Aid Refresher (EFAR)	2 days
GWO Advanced Rescue Training	3 days
GWO Advanced Rescue Training Refresher	3 days
GWO Hub Rescue	1 day
GWO Nacelle Tower Basement Rescue (NTBR)	2 days
GWO Single Rescue Hub Spinner Inside Blade	1.5 days

BST	DURATION
GWO Nacelle Tower Basement Rescue with Single Rescue (SRNTBR)	2.5 days
GWO Slinger Signaller	2 days
Boat to Transfer Piece Transfer	0.5 days

TECHNICAL	DURATION
Maersk Training Bolt Torque and Tensioning	1 day
GWO Basic Technical Training (BTT)	5 days
GWD BTT Technical Training (BTT)- Blended	5 days
GWO BTT Electrical	1.5 days
GWO BTT Hydraulics	1.5 days
GWD BTT Mechanical	2 days
GWO BTT Bolt Tightening	1 day
GWO BTT Installation	2.5 days
GWO BTT GAP Training	1 day

Safety

BASIC SAFETY & OPERATIONS

FIRST AID	DURATION
QUALSAFE Defibrillator Training	0.5 days
QUALSAFE Defibrillator Training with Oxygen	0.5 days
QUALSAFE Emergency First Aid in the Workplace (FAW)	1 day
QUALSAFE First Aid at Work (FAW)	3 days
QUALSAFE First Aid at Work Refresher (FAWR)	2 days
QUALSAFE First Aid at Work Annual Update (FAW)	0.5 days
QUALSAFE Understanding Mental Health in the Workplace	1 day
QUALSAFE Mental Health in the Workplace	2 days

CONFINED SPACE	DURATION
Confined Space Awareness	1 day
Confined Space Entry	2 days
Confined Space Entry Refresher	1 day
Confined Space Rescue	3 days

H2S	DURATION
H2S Awareness (aligned to OPITO Standard)	0.5 days
H2S Awareness with BA	1 day

SAFETY	DURATION
Abrasive Wheels	0.5 days
Manual Handling Awareness	0.5 days
Personal Fall Protection Equipment Inspector	3 days
Fire Extinguisher Training	0.5 days
Fire Warden Training	0.5 days

WORKING AT HEIGHT	DURATION
Working at Height - Unit 1 (Height Safety Awareness)	0.5 days
Working at Height - Unit 2 (Working at Height Awareness)	1 day
Working at Height - Unit 3 (Rescue)	1 day
Working at Height - Unit 4 (Managers)	1 day
Working at Height - Unit 6 (1 Day PFPE Inspection)	1 day
Working at Height - Unit 7	1 day
Harness User	2 hours

MAERSK TRAINING

Experience Matters.

Maersk Training has more than **40 years** of experience.

Going Digital

DIGITAL COURSES

	DURATION
STCW ISPS Designated Security Duties	180 mins
STCW ISPS Security Awareness	180 mins
Confined Space Awareness	75 mins
H25 Awareness	60 mins
First Aid Basics	30 mins
Fire Awareness	30 mins
Manual Handling Awareness	30 mins
Working at Height Awareness	30 mins
Transport of Dangerous Goods by Air Awareness	60 mins
Transport of Dangerous Goods by Sea	60 mins
OPITO MIST Further Full Curriculum	300 mins
Noise Awareness	30 mins
Asbestos Awareness	30 mins
Abrasive Wheels	45 mins
Hand-Arm Vibration Awareness	30 mins
Waste Management	30 mins
Chemical Awareness	60 mins
Hazard Identification and Awareness	30 mins
Electrical Safety	50 mins
Dropped Objects Awareness	45 mins
NORM Awareness	60 mins
Task Risk Assessment (TRA)	BD mins
Personal Protective Equipment (PPE) Awareness	30 mins
Slips, Trips and Falls	30 mins
Lifting Operations Awareness	30 mins
Environmental Awareness	30 mins

	DURATION
Hand and Power Tool Safety Awareness	30 mins
OPITO Authorised Gas Tester	240 mins
Energy Isolation - Lock-out Target	45 mins
GWO eBST Full Curriculum (Offshore) Initial- 5 modules - with Sea Survival	390 mins
GWO eBSTR Full Curriculum (Offshore) **Refresher**- 5 modules - with Sea Survival Refresher	390 mins
GWO eBST Full Curriculum (Onshore) Initial- 4 modules - without Sea Survival	390 mins
GWO eBSTR Full Curriculum (Onshore) **Refresher** 4 modules - without Sea Survival	390 mins
GWO eBST (Initial) First Aid	120 mins
GWO eBSTR (Refresher) First Aid	120 mins
GWO eBST (Initial) Manual Handling	60 mins
GWO eBSTR (Refresher) Manual Handling	60 mins
GWO eBST (Initial) Fire Awareness	60 mins
GWO BSTR (Refresher) Fire Awareness	60 mins
GWO eBST (Initial) Working at Height	90 mins
GWO eBST (Initial) Sea Survival	60 mins
GWO BSTR (Refresher) Sea Survival	60 mins
GWO BST (Initial) Combined Manual Handling and Working at Heights	60 mins
GWO BSTR (Refresher) Combined Manual Handling and Working at Heights	60 mins
GWO Basic Technical Training (eBTT) FULL CURRICULUM: • Mechanical • Electrical • Hydraulic • Bolt Tightening • Installation	600 mins

MAERSK
TRAINING