mates

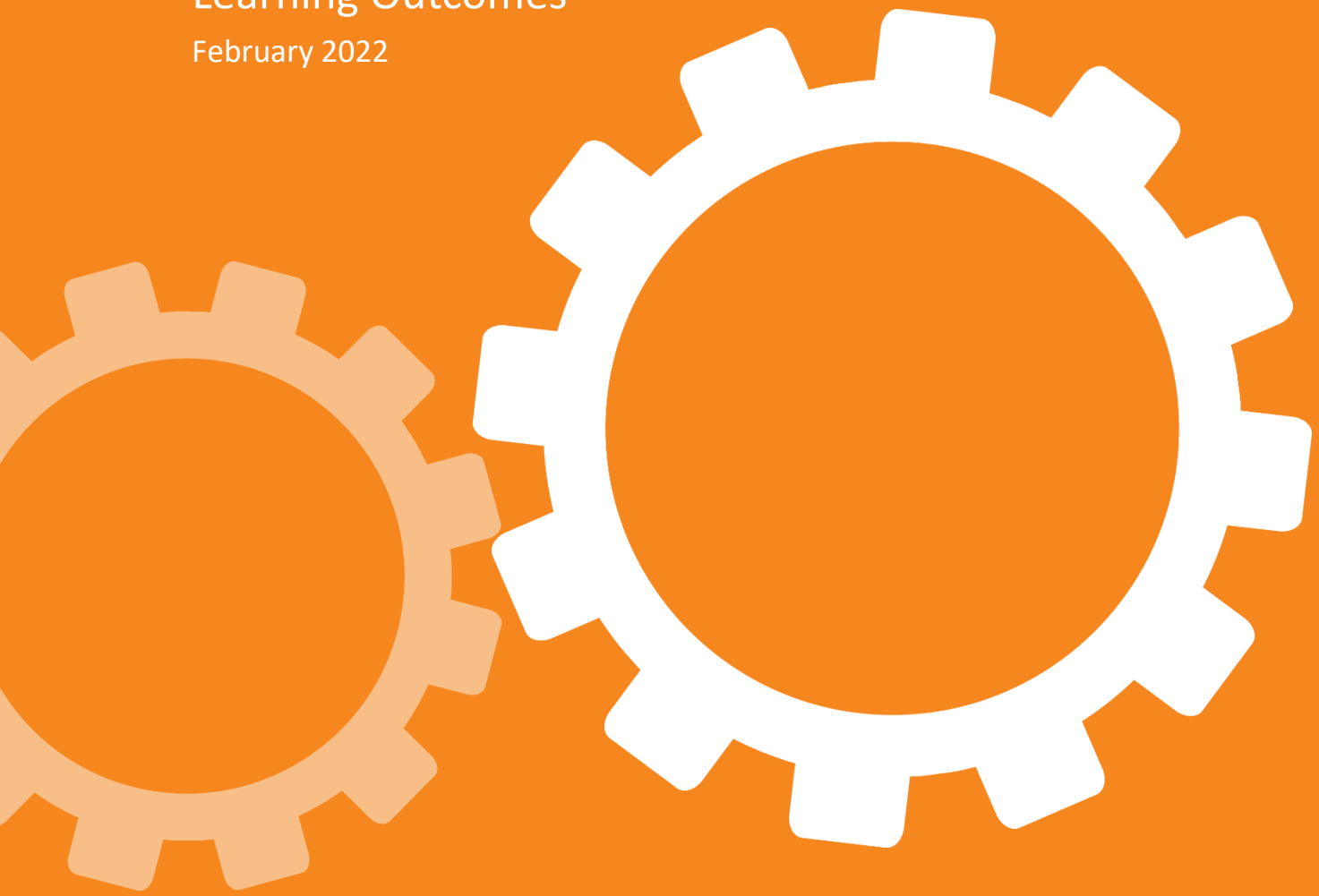
Maritime Alliance for fostering the European Blue Economy through a Marine Technology Skilling Strategy

Co-funded by the Erasmus+ Programme of the European Union

Training Seminar on Additive Manufacturing and Risk Management in the Shipbuilding and Ship-Repair Sectors

Learning Outcomes

February 2022



www.projectmates.eu

Course Title	Training Seminar on Additive Manufacturing and Risk Management in the Shipbuilding and Ship-Repair Sectors
Course Type	Short training Course
Entry Level	No prior learning required. Attendees may have a knowledge basis, gained from work experience, or a degree on any shipbuilding and ship-repair technical activities, which would facilitate the better understanding of the training materials.
Level and Relevant Framework	EQF 3-7
Delivery Method	Distance Learning 100%

Unit 1	Additive Manufacturing in the shipbuilding and ship-repair sector – Profession, skills and applications in shipping and shipbuilding
Entry Level	No prior learning required.
Optional Supplementary Information	This Unit addresses the main concepts of additive manufacturing from the perspective of its application to shipbuilding, presented by means of appropriate case studies.
Learning Outcome 1	**Knowledge of key trends linking Additive Manufacturing to the shipbuilding & ship-repair sectors.**
Knowledge & Skills	1. **Know and understand** the basics of **3D printing.** 2. **Know and understand** how it is applicable for the production of **maritime spare parts** from case studies. 3. **Discover the Qualifications and Certification processes** of Additive manufacturing parts for marine and offshore applications. 4. **Know and understand** the main trends and concepts of additive manufacturing. 5. **Know and understand** how these concepts influence changes on **current and future occupational profiles.** 6. **Know and understand** what new skills and qualifications will be necessary for 3D printing.
Evidence Requirements	As this was a one-direction workshop, the lectures (ppts) took place via PowerPoint slides. No feedback from attendees was planned.
Assessment Method	As this was a one-direction workshop, a certificate of attendance was awarded by the Port Training Institute EXANTAS which delivers training to employees in the port industry and related sectors. The EXANTA Institute which was involved in the whole process, awarded all attendees with a Certificate of Attendance.

Unit 2	Risk management in the shipbuilding and ship-repair sectors
Entry Level	No prior learning required.
Optional Supplementary Information	This course concerned (i) Risk identification; and (ii) Monitoring and control and how these processes are affected by the adoption of new technologies.
Learning Outcome 1	**Risk management processes required when adopting new technologies in the productive activities**
Knowledge & Skills	1. **Know and understand** the impact of the new technologies on risk management. 2. **Know and understand** the structure of a risk management plan, including the steps that should follow for its implementation. 3. **Identify risks involved**. 4. **Know and understand** how to manage such risks 5. **Know and understand** how to monitor the risks that challenge the shipbuilding and ship-repair sector. 6. **Know and understand** how to monitor the risks that challenge the shipbuilding and ship-repair sector.
Evidence Requirements	As this was a one-direction workshop, the lectures (ppts) took place via PowerPoint slides. No feedback from attendees was planned.
Assessment Method	As this was a one-direction workshop, a certificate of attendance was awarded by the Port Training Institute EXANTAS which delivers training to employees in the port industry and related sectors. The EXANTAS Institute which was involved in the whole process, awarded all attendees with a Certificate of Attendance.

Contact

George Tsafonias and Lila Perra, CERTH
gtsafonias@certh.gr and vmperra@certh.gr

"The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein."