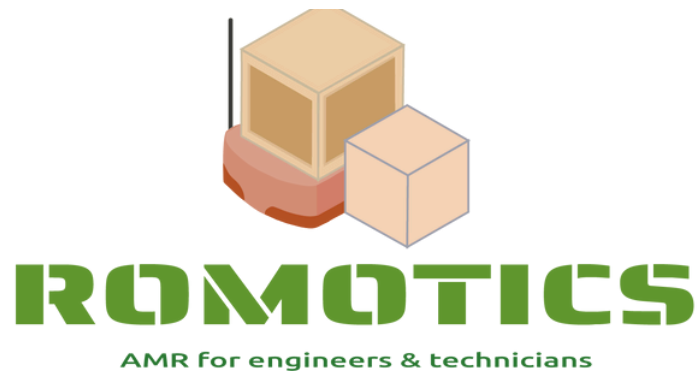


ROMOTICS TRAINING COURSE: AUTONOMOUS MOBILE ROBOTS FOR INDUSTRY 5.0

Romotics Consortium



The **ROMOTICS project**, part of the Erasmus+ initiative, focuses on creating specialized **educational materials for Engineers and Technicians studying and working in the evolving field of Industry 5.0**. It centers on **Autonomous Mobile Robots (AMR)** and its aim is to equip professionals with the skills needed to meet the demands of modern industrial environments.

The ROMOTICS training course is designed to:

1. **Develop Practical Skills:** Provide hands-on experience with AMRs like MiR, OMRON, and KUKA robots, ensuring participants are adept at working with cutting-edge robotics technologies.
2. **Enhance Technical Knowledge:** Cover theoretical concepts related to navigation and control systems in mobile robotics.
3. **Bridge Industry and Innovation:** Align training with Industry 5.0 principles, emphasizing human-centered automation, sustainability, and collaborative robotics.



Structure of the Course

The training course consists of **several modules, each focusing on key aspects of autonomous mobile robotics**, including:

- **Introduction to AMRs:** Basics of autonomous systems, sensor technologies, and operational environments.
- **Robot Programming and Control:** Hands-on sessions on programming MiR, OMRON, and KUKA robots, using industry-standard tools and interfaces.
- **Safety and Integration:** Ensuring safe operation in human-robot collaborative environments and integrating AMRs into smart factories.
- **Advanced Applications:** Exploring case studies and real-world applications of AMRs in Industry 5.0 settings.

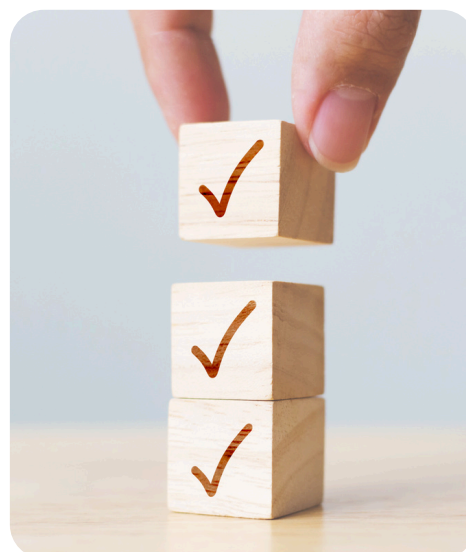
Participants will gain:

- **Expertise in deploying AMRs** effectively in industrial settings.
- **Experience that enhances career prospects** in the rapidly growing field of robotics.
- Insights into the **future of manufacturing** and the role of automation in sustainable production.



Conclusions

The **ROMOTICS** training course is a **vital step** in preparing the next generation of engineers and technicians for the technological advancements of **Industry 5.0**. By offering both theoretical knowledge and practical experience, it empowers young learners to lead innovation in autonomous mobile robotics.



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