Automated Storage & Retrieval Training Course

Professional Development Training Course Outline

Category	Logistics and Supply Chain Management	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

The evolution of warehouse management has significantly accelerated with the integration of Automated Storage & Retrieval Systems (AS/RS). Modern supply chains demand precision, speed, and cost efficiency, and AS/RS provides an innovative solution that optimizes inventory management, reduces labor costs, and enhances operational productivity. Automated Storage & Retrieval Training Course focuses on equipping participants with practical knowledge of AS/RS operations, including system design, robotics integration, and performance analytics, ensuring organizations can achieve streamlined warehouse processes and improved order fulfillment accuracy.

Participants will gain hands-on experience with various types of automated storage systems, including unit-load, mini-load, and shuttle-based solutions. The course emphasizes the practical application of AS/RS technologies in real-world scenarios, focusing on reducing downtime, improving inventory accuracy, and optimizing space utilization. Trainees will also explore trends in intelligent warehousing, data-driven decision-making, and the integration of robotics and artificial intelligence for predictive maintenance. By the end of this course, participants will be prepared to implement AS/RS solutions that align with organizational goals, operational efficiency, and industry best practices.

Programme Curriculum

Automated Storage & Retrieval Training Course

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Course Objectives

1. Understand the fundamentals of Automated Storage & Retrieval Systems and their components.
2. Analyze different AS/RS types and applications in various warehouse environments.
3. Implement best practices for inventory control using AS/RS.
4. Apply robotics and automation technologies in warehouse operations.
5. Optimize warehouse layout for improved storage density and retrieval efficiency.
6. Evaluate system performance using key performance indicators (KPIs).
7. Integrate predictive maintenance strategies for automated systems.
8. Leverage software solutions for real-time inventory tracking and reporting.
9. Improve operational safety standards in automated storage environments.
10. Develop strategic plans for AS/RS deployment in large-scale operations.
11. Incorporate sustainability and energy-efficient solutions in automated warehouses.
12. Troubleshoot common operational issues and minimize downtime.
13. Enhance workforce productivity through automation and technology integration.

Organizational Benefits

- Reduced labor costs and operational inefficiencies.
- Enhanced order accuracy and inventory control.
- Increased storage density and space utilization.
- Faster retrieval and order fulfillment processes.
- Minimized human error in warehouse operations.
- Improved safety and reduced workplace accidents.
- Optimized workflow and process standardization.

- Integration with enterprise resource planning (ERP) systems.
- Reduced downtime through predictive maintenance.
- Competitive advantage through technology adoption.

Target Audiences

1. Warehouse managers and supervisors.
2. Supply chain professionals.
3. Logistics and distribution center staff.
4. Operations managers in manufacturing industries.
5. Inventory control specialists.
6. Robotics and automation engineers.
7. IT professionals supporting warehouse management systems.
8. Consultants and trainers in supply chain optimization.

Course Duration: 5 days

Course Modules

Module 1: Introduction to Automated Storage & Retrieval Systems

- Overview of AS/RS technology
- Key components and types of systems
- Historical evolution of warehouse automation
- Practical applications in different industries
- Case study: Implementation of AS/RS in a retail distribution center
- Hands-on activity: Identifying system components

Module 2: Warehouse Layout and Space Optimization

- Techniques for efficient warehouse design
- Storage density optimization strategies
- Minimizing travel and retrieval time
- Integration with AS/RS systems
- Case study: Warehouse layout improvement in an e-commerce warehouse
- Hands-on activity: Designing an optimized storage layout

Module 3: Robotics Integration in AS/RS

- Role of robotics in automated warehouses
- Types of robots and their applications
- Safety protocols for robot operations
- Coordination between robots and storage systems
- Case study: Robotic automation in a food distribution center
- Hands-on activity: Programming basic retrieval sequences

Module 4: Inventory Management and Control

- Real-time inventory tracking systems
- Data-driven decision-making techniques
- Reducing stock discrepancies
- Integration with warehouse management software
- Case study: Implementing inventory accuracy KPIs
- Hands-on activity: Inventory tracking simulation

Module 5: System Performance and Key Metrics

- Identifying KPIs for AS/RS performance
- Monitoring throughput and cycle time
- Measuring system uptime and efficiency
- Analyzing performance reports
- Case study: KPI analysis for a manufacturing warehouse
- Hands-on activity: Performance data interpretation

Module 6: Predictive Maintenance and Troubleshooting

- Preventive and predictive maintenance strategies
- Common system issues and solutions
- Reducing system downtime
- Utilizing IoT for maintenance alerts
- Case study: Maintenance optimization in a pharmaceutical warehouse
- Hands-on activity: Diagnostic exercises

Module 7: Software and Automation Tools

- Warehouse management software overview

- Automated tracking and reporting tools
- Integration with ERP systems
- Data analytics for operational efficiency
- Case study: Software-enabled warehouse optimization
- Hands-on activity: Software simulation exercises

Module 8: Safety, Compliance, and Future Trends

- Safety standards in automated warehouses
- Regulatory compliance and quality assurance
- Emerging trends in AI and robotics
- Sustainable automation practices
- Case study: Safety improvement initiatives in a logistics center
- Hands-on activity: Safety risk assessment

Training Methodology

- Interactive lectures and demonstrations
- Hands-on exercises with AS/RS equipment
- Group discussions and peer learning
- Case study analysis and problem-solving sessions
- Software simulations and practical assignments
- Assessment and feedback sessions

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

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