ASFAN

VOCATIONAL TRAINING SIMULATION LIBRARY

By ASFAN

Check it on our website
www.asfanco.com



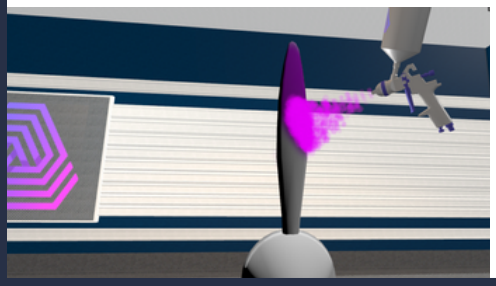
VOCATIONAL TRAINING LIBRARY:

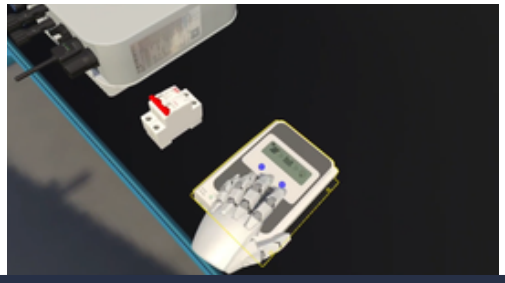
A New Standard in Technical Training

ASFAN presents the Vocational Training Library, an immersive training platform designed to modernize vocational and engineering education through interactive 3D experiences.

All training modules are accessible via Virtual Reality (VR) headsets or Desktop PC, allowing trainees to safely practice real-world technical skills in a controlled, cost-effective environment.

The library covers a wide range of vocational fields including construction, electrical and solar energy, HVAC, plumbing, automotive, aviation, welding, and safety training supporting skill development, procedural accuracy, and workplace readiness.







Key Benefits



- **Zero-Risk Safety**

Safely practice high-risk procedures in a controlled virtual environment.



- **Real Tools, Real Techniques**

Simulates actual equipment, workflows, and industry-standard procedures.



- **Performance Tracking**

Monitor trainee accuracy, speed, and error rates for effective assessment.



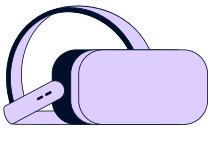
- **Dual Language Support**

Available in Arabic and English, with expansion capability.



- **Modular Training Design**

Train individual skills or complete job processes.



Multi-Platform Compatibility

Works on VR headsets and Desktop PCs.


Training Modules & Scenarios

Gypsum Board

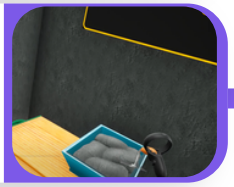
Simulation-based gypsum board training provides a hands-on learning environment where trainees practice installation techniques, cutting, framing, and finishing within realistic digital simulations. The training allows full interaction without the need for physical materials.

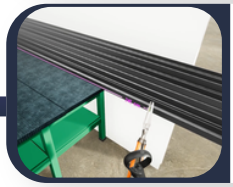
Training Experiences (5)



Double Slab Installation

Mechanical Plastering Machine





Wall linings

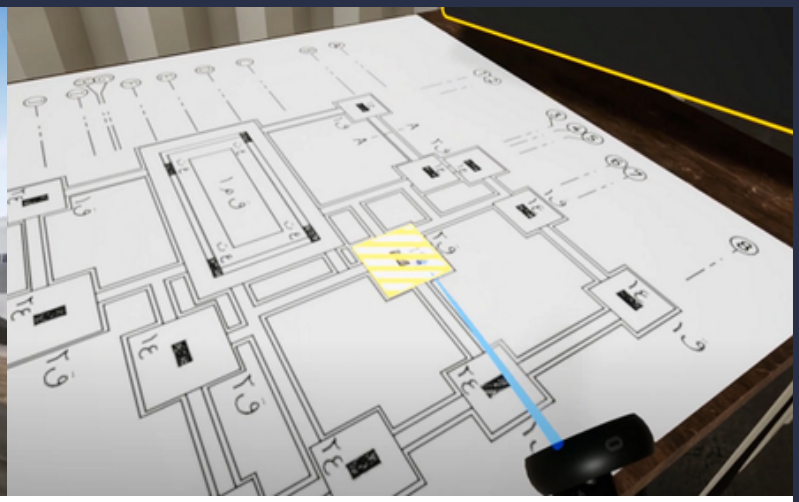
Slab Installation





Exercise Health and Safety Test

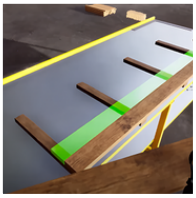




Formwork Training

Simulation-based formwork training provides construction professionals with a practical learning environment to practice formwork assembly and disassembly in a realistic simulated setting. The simulation is designed for workers involved in reinforced concrete construction, allowing hands-on training without the risks of on-site work.

Training Experiences (5)



Ring Formwork



Staircase Formwork



Slab Formwork



Executive Drawing



Health & Safety

Plumbing Training

Simulation-based plumbing training offers a modern approach to developing essential skills by allowing trainees to practice installing, repairing, and troubleshooting plumbing systems within realistic 3D environments. The simulation replicates real-world scenarios, enabling safe, hands-on learning without the risks of on-site training.

Training Experiences (4)



Installing the Solar Heater



Electric Heater Installation



Extension of Hot and Cold Water Network



Cutting & Straightening Steel Pipes



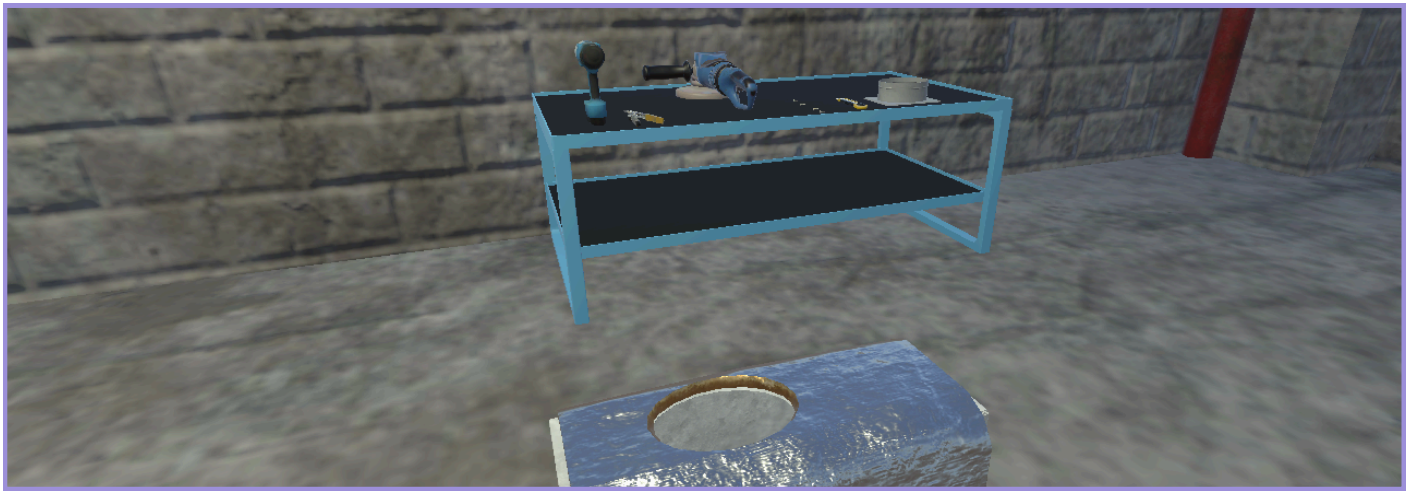
Virtual Reality in Housekeeping (1 EXPE)

Virtual reality (VR) is transforming the way housekeeping professionals are trained, offering an immersive and interactive experience that enhances learning efficiency and skill development. Through VR simulations, trainees can practice essential housekeeping tasks in a realistic yet risk-free environment.

The Benefits of Virtual Reality in Housekeeping:

- Realistic Training Scenarios
- Improved Skill Development
- Safety and Efficiency
- Cost-Effective Learning

HVAC Training Simulation



A complete ductwork-to-refrigerant simulation pathway for HVAC technicians — from sheet metal fabrication and thermal insulation through full VRF system installation and final commissioning.

Training Experiences (16)

Air Duct Fabrication

1. Preparation & Safety
2. Project Overview
3. Tools & Equipment
4. Sheet Metal Assembly - Open Form
5. Sheet Metal Assembly - Closed Form
6. Thermal Insulation
7. Flexible Connection
8. Diffuser Openings
9. Duct Connection & Integration
10. Final Installation - Ceiling Mounting

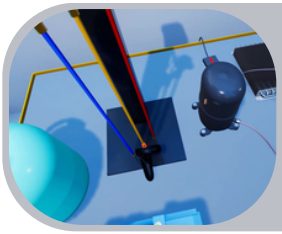
VRF Installation

1. Safety Procedures & Tools Preparation
2. Site Assessment & Drainage Planning
3. Indoor Unit Installation & Piping Integration
4. Refrigerant Piping & Electrical Wiring Installation
5. Wall Coring & Service Route Preparation
6. Outdoor Condensing Unit Installation & Final Connections

AC Indoor / Outdoor Unit Training

Simulation-based HVAC training modernizes skill development in heating, ventilation, and air conditioning systems by enabling trainees to practice installation, repair, and troubleshooting within realistic 3D training environments. The simulation provides safe, cost-effective hands-on learning without the risks associated with real-world equipment.

Training Experiences (5)



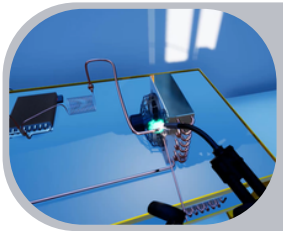
Disassembly & Installation of Mechanical Capacitors



Welding Oxy Acetylene Station



Split Air Conditioner Installation



Discharging & Charging the Refrigeration Circuit



Exercise Health and Safety Test

Virtual Reality In Car Tires Maintenance (1 EXPE)

As vehicles become more complex with advanced technologies, understanding car maintenance has become increasingly challenging for both professionals and enthusiasts. Traditional training methods often involve hands-on practice in workshops, which can be limited and sometimes hazardous. Enter Virtual Reality (VR), a transformative tool that promises to revolutionize car maintenance training. This blog explores how VR is enhancing the learning experience for aspiring mechanics, providing them with the skills and knowledge needed to succeed in a modern automotive landscape.

The Benefits of Virtual Reality in Car Tires Maintenance:

- Immersive Learning Experience
- Safe Environment for Experimentation
- Realistic Simulations
- Instant Feedback



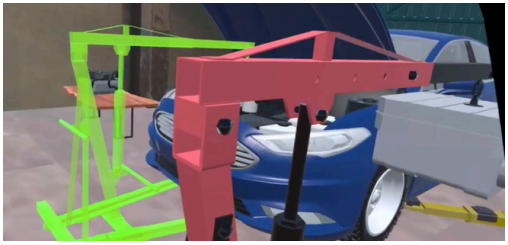
Electric Vehicle Maintenance Training

ASFAN introduces a cutting-edge Virtual Reality (VR) training simulator designed to revolutionize the way electric vehicle (EV) technicians are trained. It provides an immersive, interactive, and safe learning environment—eliminating the need for real vehicles or physical tools.

What the VR Simulator Offers

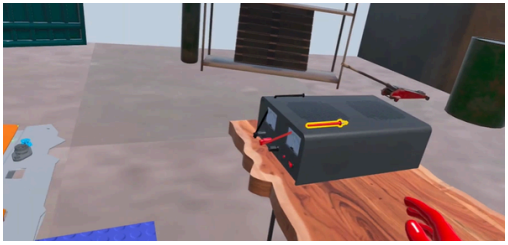
<u>27</u> Interactive Scenarios in 5 Key Modules:

Basic Maintenance:
Battery tests, dashboard indicators, diagnostics, lockout, ADAS systems



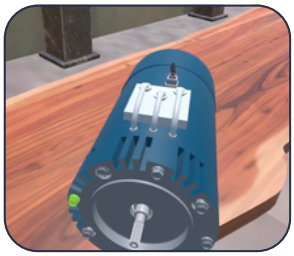
Charging Systems:
AC charging and DC fast-charging simulations

High-Voltage Battery Handling:
Safe removal, failure diagnostics, voltage testing

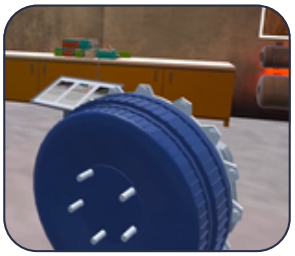


Assembly & Disassembly:
PM/SM motor assembly, hub motors, EV conversion

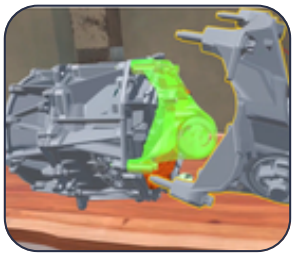
Vehicle Safety:
High-voltage protocols, tool usage, EV accident simulations



Async Motor



HUB MOTOR



PMSM MOTOR

A. Basic Information Scenarios for Electric Vehicles

1. Electric Vehicle Technology
2. Hybrid Vehicle Technology
3. Electric Vehicle Battery Components

B. Practical Interactive Scenarios in Electric Vehicles

- **Vehicle Safety (6 EXPER)**

4. Electric Vehicle Accidents
5. Tools and Safety for Electric Vehicle
6. High-Voltage Battery Maintenance
7. Automotive Electronics
8. Vehicle Comfort Systems
9. Vehicle Communication

- **Basic maintenance (7 EXPER)**

10. Vehicle Diagnostics and Troubleshooting
11. Electric Vehicle Dashboard Indicators
12. 12-Volt Battery Test
13. Autonomous Driving Assistance Systems
14. Car Lockout Scenario Simulation
15. Vehicle Troubleshooting
16. Maintenance & Troubleshooting in Automotive Electronics

- **Disassembling Electrical & Mechanical Assemblies (5 EXPER)**

17. Asyronousnch Engine Assembly
18. PM and SM engine assembly
19. Hub motor assembly
20. Removing the PM and SM
21. Electric Vehicle Conversion

- **Charging Station Assembly (2 EXPER)**

22. AC Station Charging Experience
23. DC Charging Station Experiment

- **High Voltage Battery (4 EXPER)**

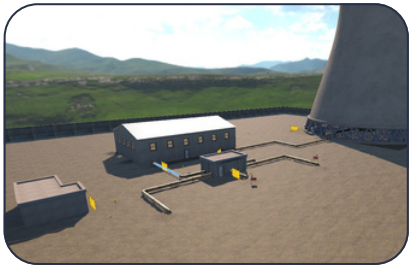
24. Removing the High-Voltage Battery
25. High-voltage battery testing
26. High-voltage battery failures
27. Hybrid Cars



Renewable Energy Training

This training module introduces learners to core renewable energy technologies through immersive virtual simulations. Trainees perform real tasks and explore energy systems in 3D, gaining practical understanding of sustainable power generation and operations.

Renewable Energy Training Modules

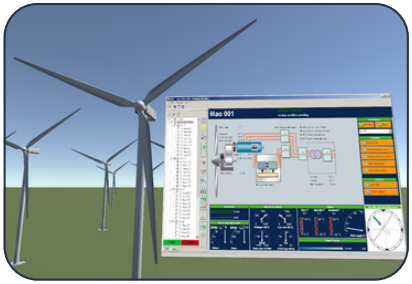


Geo Thermal

3 Experiences

Experience the Complete Journey of Geothermal Power Generation.

- System Exploration
- Control Room Operations
- Turbine Operation & Emergency Response

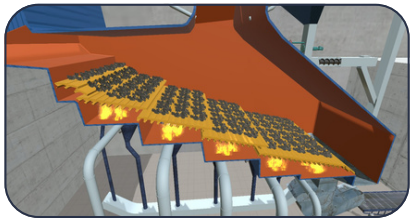


Wind Turbine Installation

3 Experiences

Gain hands-on experience in the complete wind turbine development and operation process.

- Site Selection
- Wind Turbine Components
- SCADA Monitoring & Troubleshooting



Waste To Energy

2 Experiences

Experience the complete Waste-to-Energy process

- Components Exploration
- Interactive Plant Operation



Green Hydrogen

3 Experiences

understanding green hydrogen production, electrolysis systems, and hydrogen compression processes.

- Green Hydrogen Components
- Electrolysis Process
- Compression Process



Hydropower

3 Experience

gives learners focused, repeatable practice through immersive scenarios that support skill development, assessment, and safer preparation.

- Plant Readiness
- Generation Operation
- Emergency Response



Biomass Energy

2 Experiences

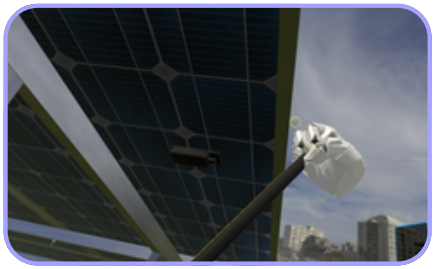
Experience the complete Waste-to-Energy process

- Biomass Components
- Biomass Process

Solar Panel Advanced Installation

This module guides trainees through advanced solar panel installations with step-by-step practice in realistic virtual environments. The focus is on system layout, wiring, commissioning, and safety procedures used in real solar projects — all done via VR headsets or Desktop PC.

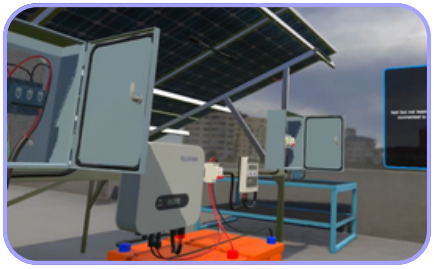
Training Experiences (6)



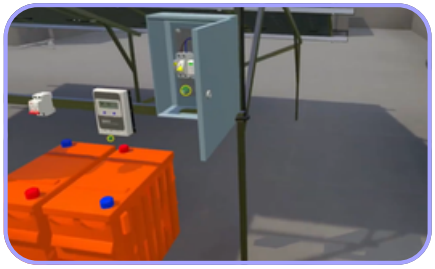
Solar Base System Installation



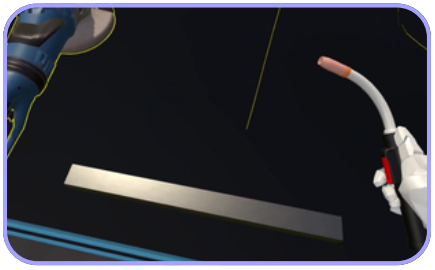
On-Grid Systems



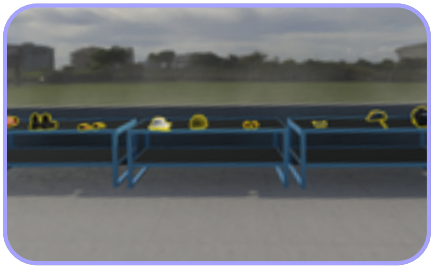
Off-Grid Systems



Hybrid Systems



Tools & Diagnostics



Safety & Compliance

Welding Training

A welding simulation that allows trainees to perform full welding tasks while following correct procedures in a realistic training environment.

- Trainee enters a fully immersive virtual welding workshop
- Training setup is selected (joint type, welding method, material, orientation, hand preference, skill level)
- Welding table and workpiece are positioned inside the virtual environment
- On-screen reference guides display correct work angle, travel angle, speed, and distance
- Trainee performs the welding task using natural hand movements
- System tracks motion accuracy, angles, speed, and stability in real time
- Live indicators visualize performance during welding
- Session ends with an automatic performance score and detailed evaluation
- Movements can be reviewed and the task repeated for further practice



:Joint Type •


Butt


Corner


Edge


Lab


Tee


Cylinder

:Gun Type •


TIG


Stick


MIG

:Preferred Hand •


Left


Right

:Material •


Aluminum


Copper


Steel

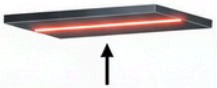

Stainless Steel

:Orientation •

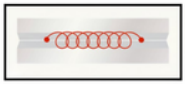

Vertical

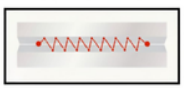

Horizontal


Flat


Overhead

:Welding Wave Type •


Circular


ZigZag


Stringer

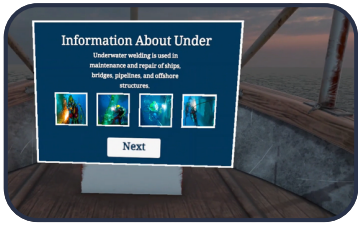
:Skill Level •


Advanced


Biginner

Underwater Welding Training

This training module introduces trainees to the procedures and challenges of underwater welding through structured, step-by-step scenarios. Trainees go through preparation, safety checks, and welding execution in a submerged environment that reflects real underwater working conditions.



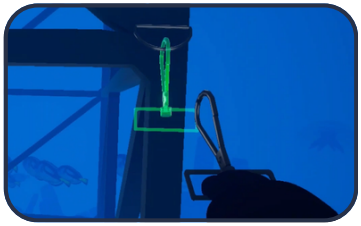
1. General Information About Welding



2. Blood Pressure Check Before Diving



3. Safety Gear & Precautions Before Diving



4. Jumping into the Sea & Welding Process

Aircraft Structures & Engines

This module allows trainees to explore aircraft structures and engine systems through detailed, interactive scenarios. Trainees move through aircraft components, identify structural elements, and follow inspection and familiarization procedures used in aviation maintenance training.
The training supports multi-trainee workshops, allowing up to five trainees to enter the same virtual workshop simultaneously.

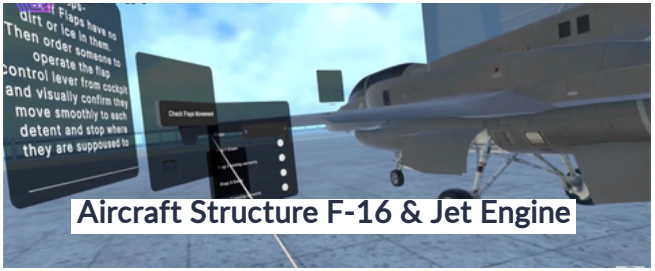
Training Experiences (6)



Aircraft Structure Let L-410



Aircraft Structure P-180 Avanti


Aircraft Structure F-16 & Jet Engine


Aircraft Structure Boeing 737-800 & Engine


Aircraft Structure Piper Aztec & Jet Engine


Aircraft Walkaround Check

Spray Painting Training

This training module provides a structured spray painting experience that simulates professional painting workflows used in industrial environments. Trainees practice surface selection, paint preparation, spray control, and quality evaluation through a complete painting process.
The training focuses on technique accuracy, consistency, and professional standards used in real spray painting jobs.


Automotive


Aircraft


Construction


Furniture

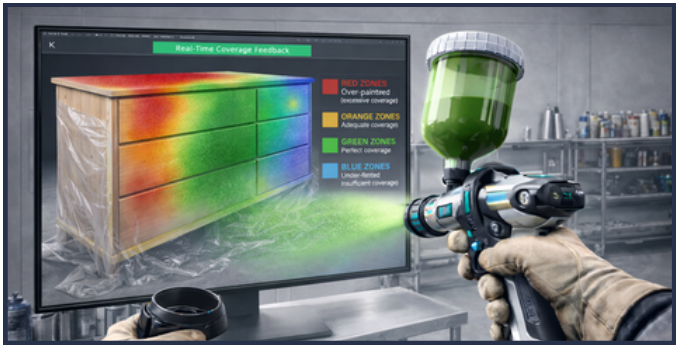
Three-Stage Painting Process

1. Primer Application

2. Base Coat Application

3. Clear Coat Application

Performance Feedback & Evaluation



Over-painted

Adequate coverage

Under-painted

Perfect coverage

Civil Engineering Training

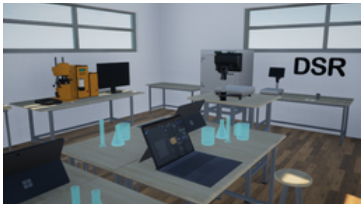
This module provides hands-on training in civil engineering materials testing through realistic laboratory simulations. Trainees perform standard testing procedures used in civil engineering labs, following correct sequences, handling equipment, and recording results as done in real testing environments.

Training Experiences (6)

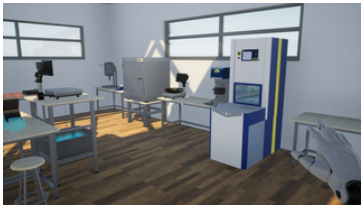
Asphalt Testing



Marshall Mix



Dynamic Shear Rheometer



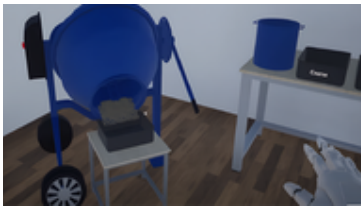
Gyratory Mix



Polymer Modified Bitumen

BBR, PAV, RV, RTFO, DSR

Concrete Testing



Concrete Testing

Soil Testing



CBR Test

Safety Training Simulation

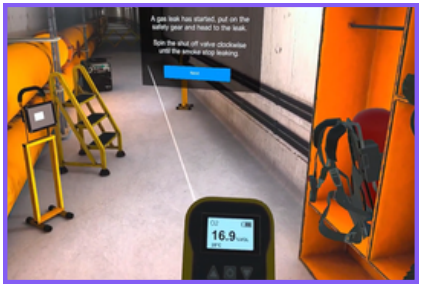


FireFighting&Evacuation

5 Experiences

Crisis-response simulation covering fire suppression, gas leaks and evacuation.

- Fire Fighting 5 Scenarios
- Accident Car Safety
- Gas Precaution & Evacuation Safety
- Electricity Fire Fighting
- Factory Evacuation Due to Gas Leak



Industrial Safety Training

6 Experiences

Hazard simulations spanning lockout/tagout, laboratory, food and pharmaceutical safety.

- Electricity LOTO Safety
- Scientific Labs Safety
- Food Industry Safety
- Workshop Labs Safety
- H2S Gas Safety
- Pharmaceutical Industry Safety



High-Rise Construction Site Safety

1 Experience

Focused simulation for high-rise jobsite hazard awareness and safety compliance.

Construction Training	
Gypsum Board	5
Formwork Training	5
Electrical & Solar Energy	5
HVAC Training	16
Plumbing Training	4
Renewable Energy Engineering	
Renewable Energy	6
Solar Panel Installation	6

Welding Training	3
welding underwater	4
Civil Engineering	6
Car Maintenance	27
Car Tires Maintenance	1
Aircraft Structure	6
Spray Painting Training	1
Housekeeping	1
Safety Training	12

Why Choose ASFAN?

- One of the region's pioneers in VR training for electric vehicles
- Based in Jordan with full local support and Arabic/English content
- Proven track record of deploying high-quality technical training solutions across industries
- Flexible packages for institutions, companies, and individuals

Get Started Today

For more information, demo scheduling, or consultation:



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