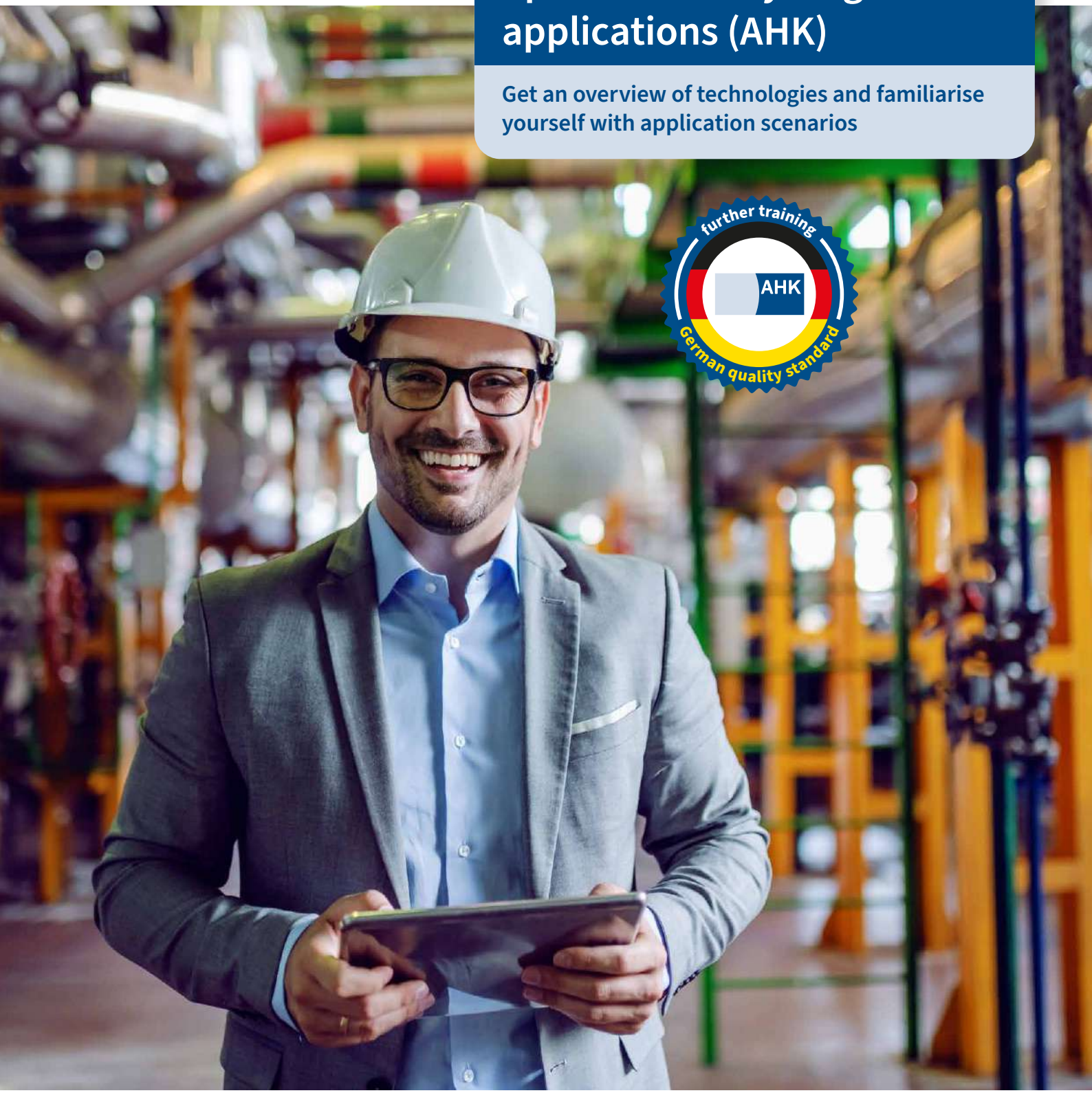
AHK DIHK

DIHK-Gesellschaft für berufliche Bildung –
Organisation zur Förderung der IHK-Weiterbildung gGmbH

Online certificate course

Specialist for hydrogen applications (AHK)

Get an overview of technologies and familiarise yourself with application scenarios



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Qualification for specialists

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What it's about

Hydrogen opens up ways for the economy to achieve its climate protection goals and free itself from the disadvantages of fossil fuels. The expansion of hydrogen technologies and their use in practice is therefore about gaining decisive competitive advantages and securing future viability.

Who is it for?

For **all specialists and managers** who want to explore the potential of hydrogen as an energy source for their company and take the first steps towards realisation, particularly in the areas of **mobility/logistics, production and energy (supply) and carbon footprint.**

Nutzen für Teilnehmende und Unternehmen

Graduates can
- **Analyse** the potential and possible applications of hydrogen technologies for their companies.
- **Competently assess** the **dangers and risks involved in handling hydrogen** and deal with them in accordance with regulations.
- Technically control the realisation of hydrogen projects.

Companies can
- Expand their **room for manoeuvre in the course of the energy transition.**
- **Generate new competitive advantages.**
- **Increase their future viability.**

Scope and content (selection)

A total of approx. 62 course hours as live online training and approx. 12 course hours as a module-accompanying self-study programme.

Introduction	Ecological and economic principles, hydrogen as an energy source and energy storage
Handling hydrogen	Hydrogen for industrial use: physical and chemical requirements, the principle of electrolysis, power-to-gas, the "colour theory" of hydrogen: grey, turquoise, blue and green hydrogen, carbon footprints of the processes
Applications of hydrogen technologies	Fuel cells, electric drives/mobility, chemical applications, steel production, ammonia as an intermediate storage medium, energy economy
Framework conditions	Storage options and facilities, transport, networks, distribution, occupational safety, risks associated with compressed gases, hazard prevention, ISO standards, legal regulations
AHK certificate test (online)	Completion of an online test to be awarded the AHK certificate, which is standardised across Germany

Registration

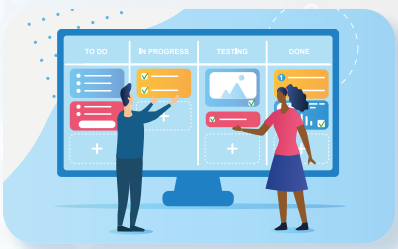
Please register via your AHK or your AHK training center.

Technical requirements: Up-to-date operating system with soundcard/sound output and connection for headset // headphones with microphone (headset), webcam // Internet access with min. 0.6 Mbps downstream and at least 1 Mbps upstream (can be verified in the router or under Settings/Network Speed) // Up-to-date version of an HTML5 browser (e.g. Chrome, Firefox) // Included in the course: Exercises that are carried out with an analytics platform and a BI tool. A download (free of charge) is required to use both applications. A Microsoft environment is required for the BI tool. Mac users need to install a virtual environment. // **Participants can access the virtual classroom via a link.**

Privacy information: In accordance with the requirements of the applicable data protection provisions, the AHK or the AHK training center stores and processes personal data required for registration in accordance with the requirements of applicable data protection regulations. This data is disclosed to service providers of the organisation solely for the purpose of conducting online training.

Online certificate course

- Centralised implementation with experienced online trainers
- Varied blended learning concept for optimal learning success
- Nationally recognised AHK certificate (in German and English) incl. digital AHK badge for social media profiles, email signature, etc.



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Dates

Live online training/e-learning	2025
	17th November until 16th December 2025 9 am to 5:30 pm CET/CEST
Module 1 – Ecological and economic basics (approx. 10 course hours) Content examples: - Hydrogen as an energy source for transport and heating - Comparisons with other energy sources with regard to, for example, costs, yield, emissions etc.	Mon: 17th November 2025, 9 am to 5:30 pm CET/CEST
Module 2 – Properties of hydrogen (approx. 10 course hours) Content examples: - Basic geological knowledge - Physical and chemical principles - Electrolysis basics - Lower and upper explosion limit	Wed: 19th November 2025
Module 3 – Generating hydrogen (approx. 10 course hours) Content examples: - Power-to-gas - Manufacturing processes and carbon footprint of the various processes - Forms of electrolysis in practice - Occupational safety during production	Mon: 24th November 2025
Module 4 – Areas of application of hydrogen technology (approx. 10 course hours) Content examples: - General application possibilities, for example chemical applications, ammonia, steel production etc. - Fuel cell/electromobility - Hydrogen/energy industry	Wed: 26th November 2025
Module 5 – Hydrogen storage and transport (approx. 10 course hours) Content examples: - Storage options - Transport options - Networks and distribution - Ammonia as an alternative storage medium - Occupational safety during transport and storage	Mon: 1st December 2025
Module 6 – Safety and regulations (approx. 10 course hours) Content examples: - Risks with compressed gases - Hazard prevention - General rules of behaviour - Relevant ISO standards and norms - Regulations for handling overpressure	Wed: 10th December 2025
AHK certificate test (online) (approx. 2 hours)	Tue: 16th December 2025, 10 am to 11:30 am CET/CEST
Overall scope of live online training (approx. 62 course hours)	
plus module-accompanying self-study programme (approx. 12 course hours)	

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Dates

Live online training/e-learning	2026
	2nd March until 30th March 2026 9 am to 5:30 pm CET/CEST
Module 1 – Ecological and economic basics (approx. 10 course hours) Content examples: - Hydrogen as an energy source for transport and heating - Comparisons with other energy sources with regard to, for example, costs, yield, emissions etc.	Mon: 2nd March 2026, 9 am to 5:30 pm CET/CEST
Module 2 – Properties of hydrogen (approx. 10 course hours) Content examples: - Basic geological knowledge - Physical and chemical principles - Electrolysis basics - Lower and upper explosion limit	Wed: 4th March 2026
Module 3 – Generating hydrogen (approx. 10 course hours) Content examples: - Power-to-gas - Manufacturing processes and carbon footprint of the various processes - Forms of electrolysis in practice - Occupational safety during production	Mon: 9th March 2026
Module 4 – Areas of application of hydrogen technology (approx. 10 course hours) Content examples: - General application possibilities, for example chemical applications, ammonia, steel production etc. - Fuel cell/electromobility - Hydrogen/energy industry	Wed: 11th March 2026
Module 5 – Hydrogen storage and transport (approx. 10 course hours) Content examples: - Storage options - Transport options - Networks and distribution - Ammonia as an alternative storage medium - Occupational safety during transport and storage	Mon: 16th March 2026
Module 6 – Safety and regulations (approx. 10 course hours) Content examples: - Risks with compressed gases - Hazard prevention - General rules of behaviour - Relevant ISO standards and norms - Regulations for handling overpressure	Mon: 23rd March 2026
AHK certificate test (online) (approx. 2 hours)	Mon: 30th March 2026, 10 am to 11:30 am CET/CEST
Overall scope of live online training (approx. 62 course hours)	
plus module-accompanying self-study programme (approx. 12 course hours)	

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Live online training/e-learning	2026
	23rd November until 16th December 2026 9 am to 5:30 pm CET/CEST
Module 1 – Ecological and economic basics (approx. 10 course hours) Content examples: - Hydrogen as an energy source for transport and heating - Comparisons with other energy sources with regard to, for example, costs, yield, emissions etc.	Mon: 23rd November 2026, 9 am to 5:30 pm CET/CEST
Module 2 – Properties of hydrogen (approx. 10 course hours) Content examples: - Basic geological knowledge - Physical and chemical principles - Electrolysis basics - Lower and upper explosion limit	Wed: 25th November 2026
Module 3 – Generating hydrogen (approx. 10 course hours) Content examples: - Power-to-gas - Manufacturing processes and carbon footprint of the various processes - Forms of electrolysis in practice - Occupational safety during production	Mon: 30th November 2026
Module 4 – Areas of application of hydrogen technology (approx. 10 course hours) Content examples: - General application possibilities, for example chemical applications, ammonia, steel production etc. - Fuel cell/electromobility - Hydrogen/energy industry	Wed: 2nd December 2026
Module 5 – Hydrogen storage and transport (approx. 10 course hours) Content examples: - Storage options - Transport options - Networks and distribution - Ammonia as an alternative storage medium - Occupational safety during transport and storage	Mon: 7th December 2026
Module 6 – Safety and regulations (approx. 10 course hours) Content examples: - Risks with compressed gases - Hazard prevention - General rules of behaviour - Relevant ISO standards and norms - Regulations for handling overpressure	Wed: 9th December 2026
AHK certificate test (online) (approx. 2 hours)	Wed: 16th December 2026, 10 am to 11:30 am CET/CEST
Overall scope of live online training (approx. 62 course hours)	
plus module-accompanying self-study programme (approx. 12 course hours)	

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