Formation - Hydrogen for mobility

H2SPOC-EN-D

Distanciel

12 heures
12 hours over 3 weeks

This course gives an overview to the participants about H2 context, and about the technical (functional & organic) H2 solutions for mobility

Niveau
Fondamentaux

Public
Engineers, managers and technicians who are familiar with the operating fundamentals of Powertrains

Objectifs
Attendees will be able to implement the following skills:

- Understand the general context of hydrogen economy and hydrogen as a fuel for mobility
- Compare and analyse the advantages and drawbacks of a fuel cell vehicle, a hydrogen combustion vehicle, and an electric vehicle
- Identify and understand the evolution of H2 combustion engines and Fuel cells

Pédagogie & ressources techniques
Teaching aids:

- Videos, surveys, evaluations..
- Interactive approach
- Pedagogical activities to validate knowledge acquisition

Technical means:

- Provision of resources and tools for remote support: training platform (LMS)
- Computer resources required: a minimum bandwidth of 1.5 Mbps for a video quality in 720P. For Zoom you can consult the technical requirements by clicking on the link: https://support.zoom.us/hc/en-us/articles/201362023-System-Requirements-for-PC-Mac-and-Linux. For Teams you can consult the requirements by clicking on the link: https://docs.microsoft.com/fr-fr/microsoftteams/hardware-requirements-for-the-teams-app
- Technical support is provided by our training platform management team
- Our trainers provide pedagogical assistance in synchronous mode during the virtual classes. Participants' questions can also be formulated on the training platform and will be answered during the virtual classes

Évaluation des acquis

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prérequis
No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Programme

HYDROGEN FOR MOBILITY CONTEXT AND PRODUCTION

Hydrogen tomorrow – Interview;
Hydrogen production.
Hydrogen mobility context.
E-fuels.
Webinar Q&A.

HYDROGEN INTERNAL COMBUSTION ENGINE

Chemical characteristics of hydrogen that influence the mixing process, ignition and combustion.
Impact of hydrogen chemistry on engine performance (efficiency, pollutants, power, torque and noise).
Engine technologies and technological developments necessary for hydrogen combustion (injection, intake, combustion, after treatment).
Advantages and disadvantages of hydrogen combustion.
Webinar Q&A.

FUEL CELL VEHICLES

Fuel cells architecture.
Fuel cells introduction.
Fuel cell electrochemistry.
Fuel cells system.
Fuel cells powertain management.
Fuel cells safety.
Fuel cells conclusion.
Webinar Q&A.

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Pour vérifier l'accessibilité de cette formation à une personne en situation de handicap, contactez notre référent à l'adresse suivante : referent.handicap@ifptraining.com