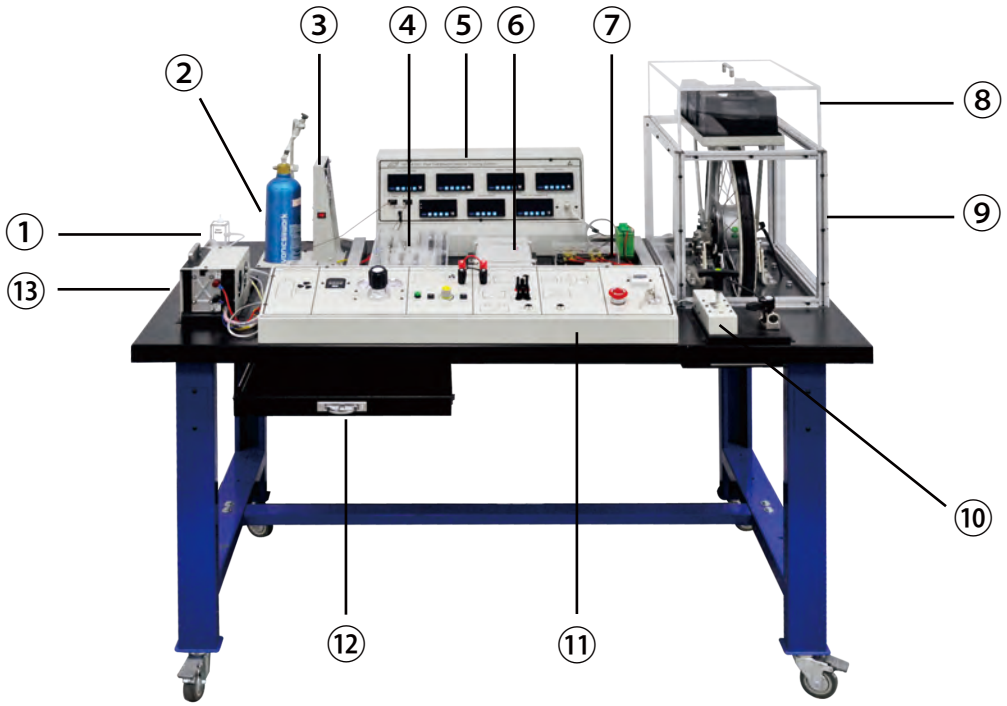
GFC-6100
Fuel Cell Electric Vehicle Training System

A Fuel Cell Electric Vehicle (FCEV) is a hydrogen vehicle which is powered by electricity resulted from the electrochemical reaction between hydrogen and oxygen. It provides an effective solution saving natural resource and alleviating environmental pollution. GFC-6100 Fuel Cell Electric Vehicle Training System is designed to demonstrate the application of fuel cells onto electric vehicles, including the FCEV mechanism, fuel cell system, hydrogen supply system, and motor controller.

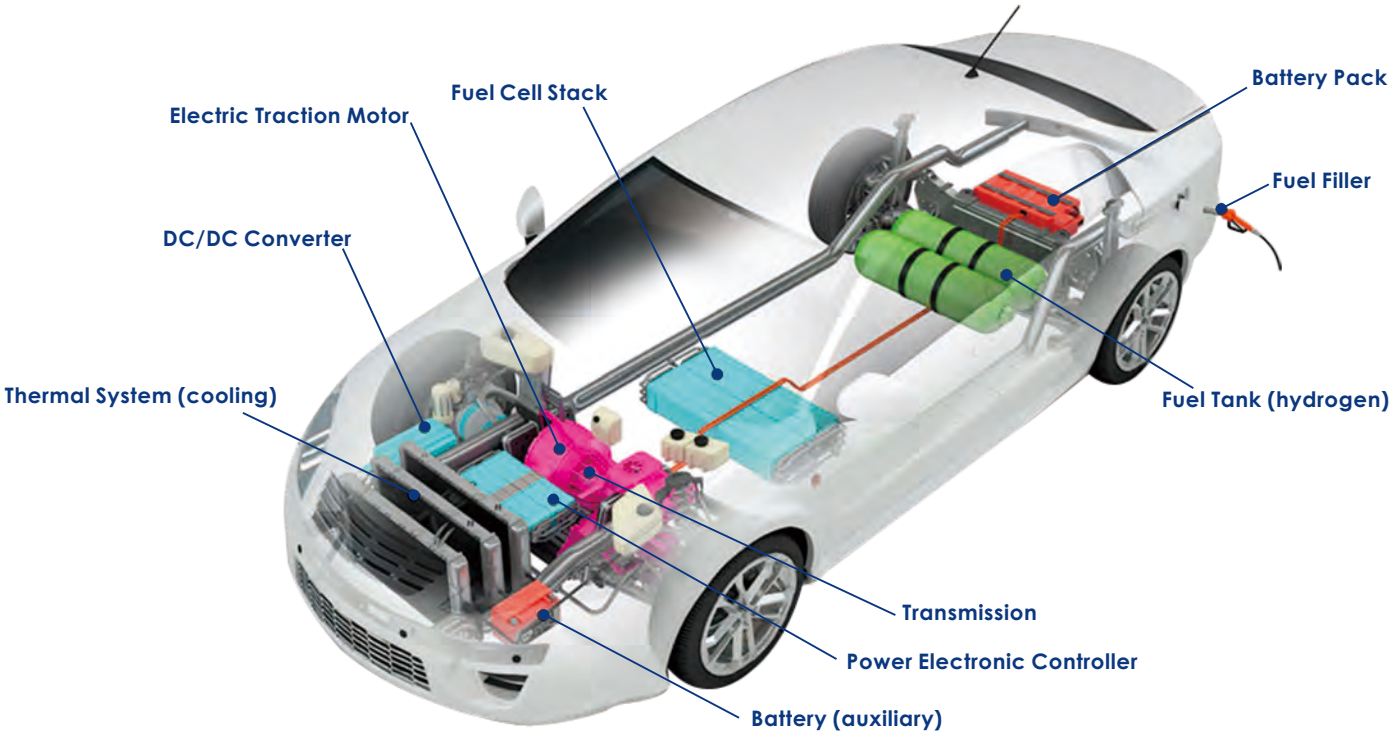
System Features

1. The Training System can be emulated as :
   (1) Hydrogen Fuel Cell Vehicle
   (2) Battery Electric Vehicle
   (3) Hybrid FCEV
2. Connectable to PC via USB. Optional software and Data Acquisition from Meters embedded in the system
3. Real-time vehicle information display : voltage, current, speed and temperature can be displayed on the instrument panel.
4. Offering fundamental knowledge of hydrogen fuel cells, hydrogen supply, hydrogen storage and system safety.



① Water storage
② Metal hydride canister (optional)
③ Temperature feedback fans (optional)
④ DC to DC Converter
⑤ Meter display
⑥ Battery (24V/10Ah)
⑦ Motor controller
⑧ Load unit
⑨ Wheel motor
⑩ Acceleration and resistance device
⑪ System control panel
⑫ Drawer
⑬ Fuel Cell stack (consumable) and controller

Hydrogen Fuel Cell Vehicle



How a Fuel Cell Electric Vehicle Works

1. Air (oxygen) taken in
2. Oxygen and hydrogen supplied to fuel stack
3. Electricity and water generated through chemical reaction
4. Electricity supplied to motor
5. Motor is activiated and vehicle moves
6. Water emitted