



LECTURE GUEST SERIES MEE3064 – TRANSPORT POWER & SYSTEMS 3

Electric Powertrain: Energy Systems, Power Electronics and Drives for Hybrid, Electric and Fuel Cell Vehicles

Location: Room LT01, Larmour Lecture Theatre, Physics, Lanyon Building, Queen's University Belfast

Time: 2m-5pm, Monday 3 December 2018

Abstract: The new book *Electric Powertrain: Energy Systems, Power Electronics and Drives for Hybrid, Electric and Fuel Cell Vehicles* is a structured holistic textbook for the teaching of the fundamental theories and applications of energy sources, power electronics, and electric machines and drives to engineering students. This four-part practical guide also acts as an industry reference.

In this introductory tutorial, the lead author presents a seminar on electromobility. Battery electric vehicles, fuel cell electric vehicles, and conventional and hybrid electrical vehicles are described, contrasted and compared for vehicle propulsion.



John G. Hayes, PhD, MSEE, MBA, lectures at University College Cork, Ireland, and specialises in automotive, industrial and renewable energy systems and related power electronics, machines and electromagnetism. He previously worked in Southern California for ten years at General Motors' Hughes Aircraft subsidiary, Hughes Power Control Systems, developing EV propulsion and inductive charging systems for the General Motors EV1, the first modern production EV. John's recent focus has been on the development of integrated and holistic EV teaching materials for the engineering student and the

automotive professional.

For more information:

Wiley: wiley.com/WileyCDA/WileyTitle/productCd-1119063647.html

Companion website: www.wiley.com/go/hayes/electricpowertrain

Chapter 1 on *Electromobility and the Environment* is free to access at the following link:

https://media.wiley.com/product_data/excerpt/47/11190636/1119063647-81.pdf

You can read Chapter 14 on *Battery Charging* for free on the following link:

https://media.wiley.com/product_data/excerpt/47/11190636/1119063647-2.pdf

The table of contents is available at:

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