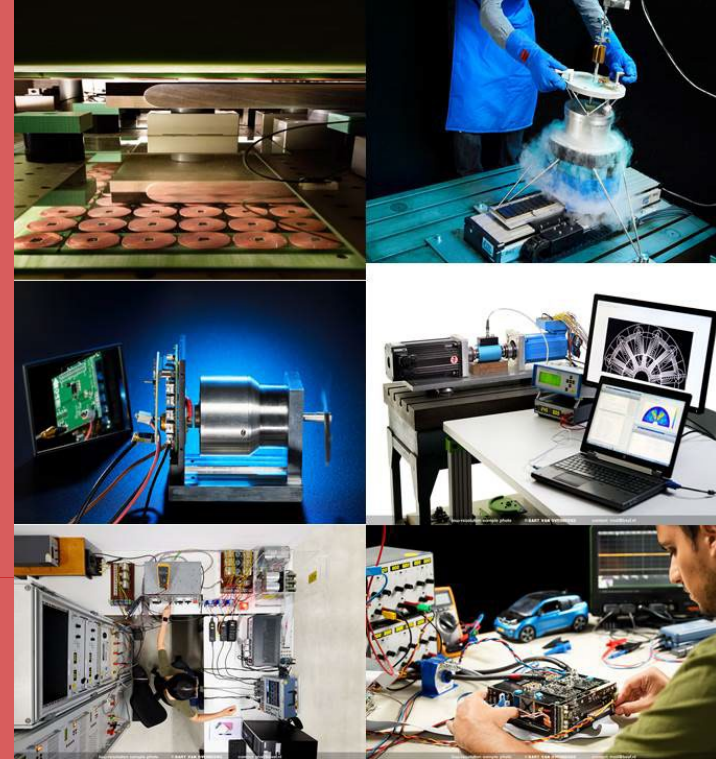


Electromechanics & Power Electronics (EPE group)

Specialization in EPE group for MSc. AT

dr. ir. Esin Ilhan Caarls, September, 2022



In 2030, around **35%** of all newly registered passenger cars and light commercial vehicles will feature fully electric drive systems.

Fuel cell

Long-distance electric transport for deliveries into urban areas

EE Engineer - Sensors and Actuators
Punch Powertrain
Eindhoven
Wees een van de eerste sollicitanten
3 weken geleden



Electro Magnetics Engineer

Lightyear

Helmond

E-mobility Project Manager



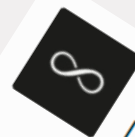
Heliox

Amsterdam



EMV-Entwicklungingenieur
BMW Group

München, Bayern



Power Electronics Engineer
Lightyear
Helmond

Do you want to be the next Tesla engineer?



Typing Engineer (Electrical)
Lightyear
Helmond
Wees een van de eerste sollicitanten
1 week geleden

High Voltage Engineer
VDL Enabling Transport Solutions

Valkenswaard

Wees een van de eerste sollicitanten
1 week geleden

Power electronics design
Prodrive Technologies
Eindhoven



Senior Experte/in strategische Kooperationen Batterie
(m/w/d)
Volkswagen AG

Salzgitter, Nieder-Sachsen, Deutschland



Electrical Mechanical Engineer

VDL Groep

Almelo

Wees een van de eerste sollicitanten
2 weken geleden



EU officially bans sale of ICE vehicles from 2035

TU/e

Welcome to the EPE group!

Enthusiastic team of ~55 people with a relaxed and informal atmosphere

Many (inter)national industrial partners

17 part-time fellows from industry

State-of-the-art laboratory

Very good job opportunities in NL & abroad



Our focus areas are...

Electromechanics: Interaction between electrical and mechanical energy

Power electronics: Dynamic control of flow and shape of electric energy

Electrical drives: Interaction between *Electromechanics* and *Power Electronics*

EPE = “systems and technology for processing electric energy”

High-tech systems



Robotics



Renewables & smart grids



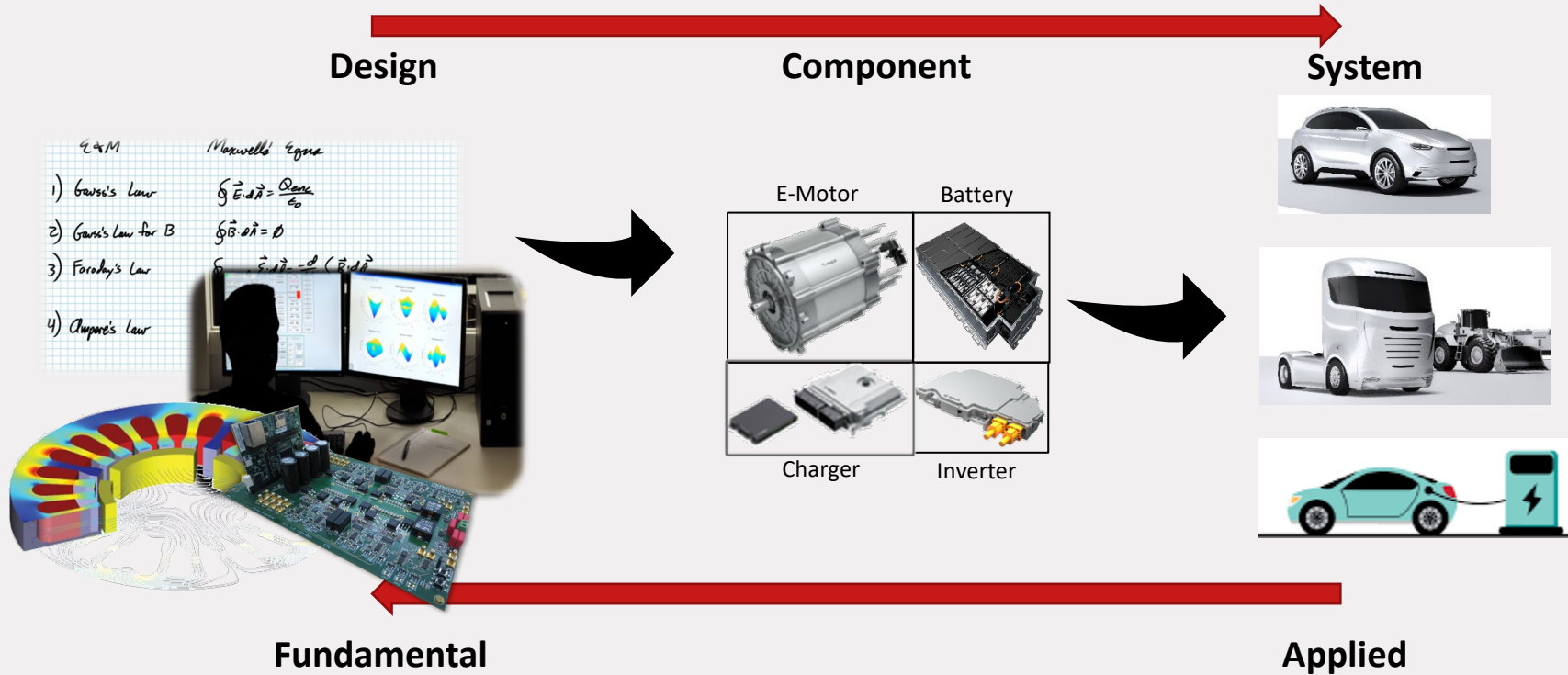
Automotive & smart mobility



Healthcare



Balancing theory and practice in...



... diverse (industrial) internships & graduation projects

High-speed e-drives

(H)EV **hardware**

Efficiency vs **Zero-waste** design

Thermal system engineering

HV & LV

Batteries & Charging

Wireless Energy Transfer

Active Suspension and Vibration systems

Fuel Cell Systems

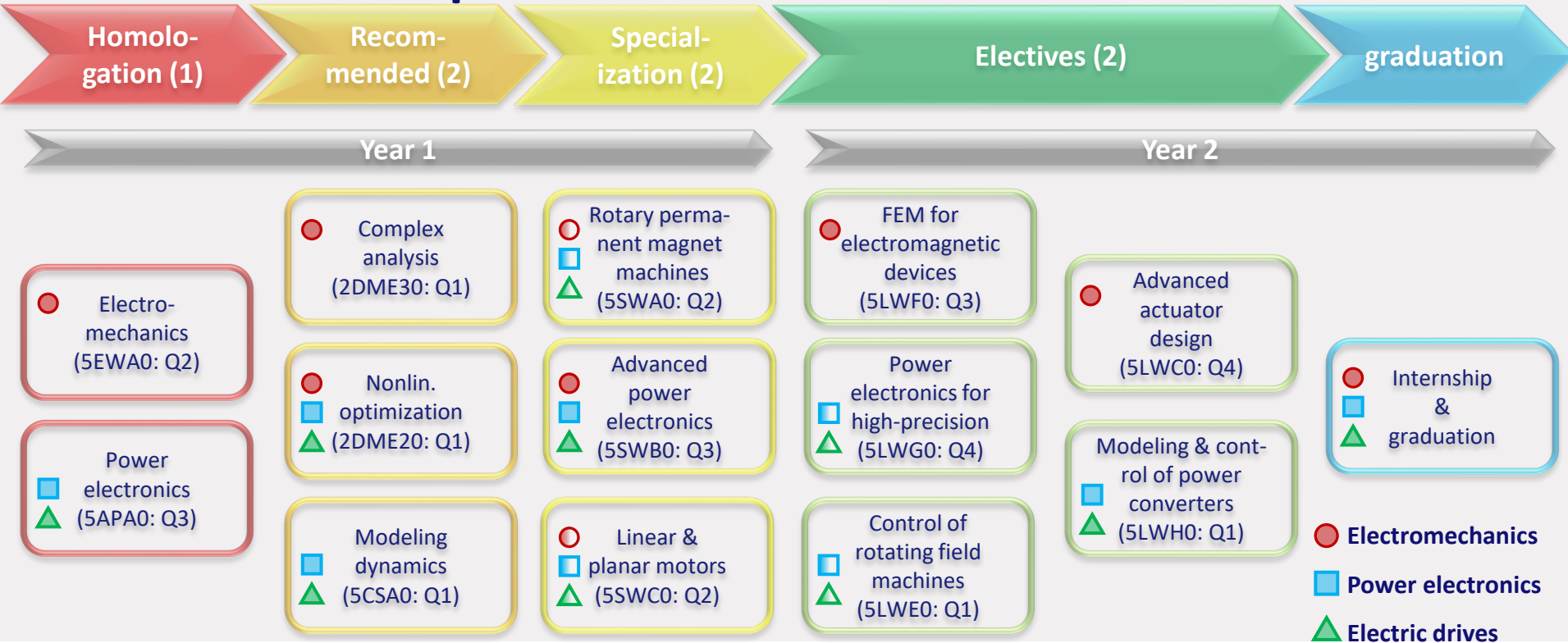
Integrated System Actuation

Automated design with **AI**

Intelligent power converters

Digital Twin for Scalability

Towards EPE specialization



Interested in EPE?

- Subscribe for the follow-up meeting by mailing e.ilhan@tue.nl
- 10:00h-11:00h, Sept. 22 2022 (Thursday) Flux 2.09 , OR
- 15:30h-16.30h, Sept. 22 2022 (Thursday) Flux 2.09

- We will check your Master plan and if approved assign you a supervisor
- As the last step, you will discuss with supervisor (make an appointment)