

ERASMUS+ PROGRAMME
Project Number: 618509-EPP-1-2020-1-JO-EPPKA2-CBHE-JP

ECO-CAR:
Vocational Training Diploma on Electrical and Hybrid Vehicles

12th Online Management Meeting

Agenda

The University of Jordan

Thursday, June 15th, 2022

15:00 – 17:00

(Amman time)





Thursday, June 15th, 2022
15:00 – 17:00

14:45 - 15:00

Registration

15:00 - 15:05

Welcoming Speech, by:

Prof. Ahmed Al-Salaymeh, General Project Coordinator at the University of Jordan.

Work Packages and Clusters Discussion

Moderator of the sessions Eng. Rasha Albaik & Eng. Sara Tweissi

15:00-16:00

Discuss the preparations for our upcoming StC meeting in TH-OWL / Hoxter

16:00 - 16:10

Cluster 1: Hybrid and Electric Vehicle Basics

Presented by: Prof. Rebhi Damseh, Dr. Ma'moun Al-Smadi, and Dr. Clio Vossou

- ✓ Courses outlines
- ✓ Courses content
- ✓ Upcoming tasks and challenges
- ✓ Timeline to submit the cluster material

Cluster 1: Hybrid and Electric Vehicle Basics	
Focus Group 1 (Professional Diploma)	Introduction to Automotive Engineering (Introduction to Hybrid and Electric Vehicles)
Focus Group 2 (Community College Diploma)	Hybrid and Electric Vehicle Technology
Focus Group 3 (Vocational Diploma)	Hybrid and Electric Vehicles Systems

University		Role	Name of Responsible Members
BAU	Leader	Prof. Rebhi Damseh and Dr. Ma'moun Al-Smadi	
NTUA	Co-Leader	Dr. Clio Vossou	
Aachen	Partner	Mr. Stephan Bihn	
MU	Partner	Dr. Hussien Al-Majali	
UJ	Partner	Dr. Bashar Qawasmeh	

16:10– 16:15 Cluster 2: Battery Storage Technology, Charging systems, and Recharging Infrastructure.

Presented by: Eng. Florian Ringbeck and Prof. Salman Ajib

- ✓ Courses outlines
- ✓ Courses content
- ✓ Upcoming tasks and challenges
- ✓ Timeline to submit the cluster material

Cluster 2: Battery Storage Technology, Charging systems, and Recharging Infrastructure	
Focus Group 1 (Professional Diploma)	1- Energy Storage and Energy Management 2- Power Electronics and Charging Systems
Focus Group 2 (Community College Diploma)	N.A
Focus Group 3 (Vocational Diploma)	Braking and Charging System

University	Role	Name of Responsible Member
Aachen	Leader	Eng. Florian Ringbeck
TH-OWL	Co-Leader	Prof. Salman Ajib & Dr. Sabine Brunklaus
UJ	Partner	Dr. Bashar Qawasmeh & Dr. Hussam Khasawneh
ZUJ	Partner	Dr. Nabeel Abu Shaban
JUST	Partner	Eng. Salaheldeen Abu Yahya

16:15– 16:20 Cluster 5: Automotive Electricity, Electronics, Sensors, and Actuators

Presented by: Prof. Tarek A. Tutunji and Eng. Eman Abdelhafez

- ✓ Courses outlines
- ✓ Courses content
- ✓ Upcoming tasks and challenges
- ✓ Timeline to submit the cluster material

Cluster 5: Automotive Electricity, Electronics, Sensors, and Actuators	
Focus Group 1 (Professional Diploma)	Automotive Electronic, Electrical, and Sensing Systems
Focus Group 2 (Community College Diploma)	1- Electrical and Electronics Circuits 2- Electrical and Electronic Systems in Vehicles
Focus Group 3 (Vocational Diploma)	1- Sensors 2- Basic Electricity and Electronics

University	Role	Name of Responsible Member
HTU	Leader	Prof. Tarek A. Tutunji
ZUJ	Co-Leader	Eng. Eman Abdelhafez
TTU	Partner	Dr. Wael Adailleh + Dr. Ahmad Mostafa
BME	Partner	Dr. Máté Zöldy
UJ	Partner	Eng. Mohamad Masad

16:20 – 16:30 Cluster 6: Vehicle Dynamics

Presented by: ASU

- ✓ Courses outlines
- ✓ Courses content
- ✓ Upcoming tasks and challenges
- ✓ Timeline to submit the cluster material

Cluster 6: Vehicle Dynamics	
Focus Group 1 (Professional Diploma)	1- Automotive Powertrains 2- Vehicle Dynamics
Focus Group 2 (Community College Diploma)	Vehicle Engineering
Focus Group 3 (Vocational Diploma)	1- Powertrain Systems 2- Steering & Suspension Systems 3- Braking and Charging System

University	Role	Name of Responsible Member
ASU	Leader	Dr. Hanan Saleet
UD	Co-Leader	Jon García-Barruetaña
UNIVAQ	Partner	Dr. Carlo Villante
NTUA	Partner	Dr. Clio Vossou
JUST	Partner	Eng. Qatada Damra
TTU	Partner	Dr. Wael Adaileh + Dr. Ahmad Mostafa
UJ	Partner	Dr. Hussam Khasawneh & Dr. Hashem Alkhaldi

16:30-16:35 Cluster 7: Health and Safety

Presented by: Dr. Mohammad Almajali

- ✓ Courses outlines
- ✓ Courses content
- ✓ Upcoming tasks and challenges
- ✓ Timeline to submit the cluster material

Cluster 7: Health and Safety	
Focus Group 1 (Professional Diploma)	N.A
Focus Group 2 (Community College Diploma)	N.A
Focus Group 3 (Vocational Diploma)	Safety in Hybrid and Electric Vehicles

University	Role	Name of Responsible Member
MU	Leader	Dr. Mohammad Almajali



UNIVAQ	Co-Leader	Dr. Carlo Villante
BAU	Partner	Dr. Ma'moun Al-Smadi
ZUJ	Partner	Dr. Loai Dabbour
BME	Partner	Dr. Árpád TÖRÖK
UJ	Partner	Eng. Otba Al-Oran

16:35 – 16:40

Cluster 8: Electrical Machines and Drives

Presented by: Prof. Salman Ajib and Mr. Timo Broeker

- ✓ Courses outlines
- ✓ Courses content
- ✓ Upcoming tasks and challenges
- ✓ Timeline to submit the cluster material

Cluster 8: Electrical Machines and Drives	
Focus Group 1 (Professional Diploma)	1- Electrical Machines and Drives 2- Power Electronics and Charging Systems
Focus Group 2 (Community College Diploma)	Electrical Machines and Drives
Focus Group 3 (Vocational Diploma)	Control Systems

University	Role	Name of Responsible Member
TH-OWL	Leader	Prof. Salman Ajib
ASU	Co-Leader	Prof. Ayman Abu Baker
HTU	Partner	Dr. Muhannad Al-Tarifi
BAU	Partner	Dr. Ma'moun Al-Smadi
UJ	Partner	Prof. Dia Abu Alnadi

16:40 – 16:45

Cluster 9: Labs & Workshops

Presented by: Prof. Rebhi Damseh, Dr. Ma'moun Al-Smadi, and Dr. Wail Adaileh

- ✓ Courses outlines
- ✓ Courses content
- ✓ Upcoming tasks and challenges
- ✓ Timeline to submit the cluster material

Cluster 9: Labs & Workshops	
Focus Group 1 (Professional Diploma)	1- Introduction to Automotive Engineering (Introduction to Hybrid and Electric Vehicles) Workshop 2- Internal Combustion Engine Workshop 3- Electrical Machines and Drives Workshop



	<p>4- Powertrain Integration in HEVs Workshop</p> <p>5- Power Electronics and Charging Systems Lab</p> <p>6- Energy Storage and Energy Management Lab</p> <p>7- Automotive Electronic, Electrical, and Sensing Systems Lab</p> <p>8- Vehicle Dynamics Lab</p>	
<p>Focus Group 2 (Community College Diploma)</p>	<p>1- Hybrid and Electric Vehicle Workshop</p> <p>2- Workshop of Electrical and Electronic Systems in Vehicles</p> <p>3- Malfunction Diagnostics and Repair in Hybrid and Electric Vehicles Workshop</p> <p>4- Vehicle Engineering workshop</p> <p>5- Internal Combustion Engine Lab</p> <p>6- Electrical Machines and Drives Lab</p> <p>7- Electrical and Electronics Circuits Lab</p>	
<p>Focus Group 3 (Vocational Diploma)</p>	<p>1- Hybrid and Electric Vehicles Systems Workshop</p> <p>2- Sensors Lab</p> <p>3- Braking and Charging System Workshop</p> <p>4- Powertrain Workshop</p> <p>5- Internal Combustion Engine Workshop</p> <p>6- Steering & Suspension Systems Workshop</p> <p>7- Cooling & Lubrication Systems Workshop</p> <p>8- Basic Electricity and Electronics Lab</p> <p>9- Braking and Charging System Workshop</p> <p>10- Safety in Hybrid and Electric Vehicles Workshop</p> <p>11- Control Systems Lab</p>	



University	Role	Name of Responsible Member
BAU	Leader	Prof. Rebhi Damseh + Dr. Ma'moun Al-Smadi
TTU	Co-Leader	Dr. Wail Adaileh + Dr. Ali Alahmer
JUST	Co-Leader 2	Eng. Salheddin Abu Yahya
UD	Partner	Jon García-Barruetaña
UNIVAQ	Partner	Prof. Michele Anatone
HTU	Partner	Engr. Yousef Okour
ASU	Partner	Prof. Ayman AbuBaker

16:45-17:00 Discussion

17:00 Wrap up & end of the meeting