

MOTORVEHICLE UNIVERSITY OF EMILIA-ROMAGNA

S&W SCHOOLS

AGENDA

MONDAY 27/5/24

TUESDAY 28/5/24

OFF-HIGHWAY VEHICLE DESIGN

WEDNESDAY 29/5/24

DAY AT UNIBO

UNIBO - DISTAL: viale G. Fanin 50, forth floor, Bologna UNIBO - FARM: via Ganfolfi 19, Cadriano Bologna

8.45 - 13 Welcoming speech at DISTAL

Lecture: Off-highway vehicles: description, field uses, and challenges in their development

> 13 - 14.30 **Free lunch**

14.30 - 18 **Technical visit at UNIBO** Farm: **Description of tractors** working conditions

From 18 Ice-breaker buffet with **UNIBO** farm's meals

DAY AT UNIBO

UNIBO - DISTAL: viale G. Fanin 50, forth floor, Bologna UNIBO - FARM: via Ganfolfi 19, Cadriano Bologna

8.45 - 13

Lectures: Modeling, Control and Testing of Advanced Powertrains: Introduction and Overview of Off-highway **Applications** - Nicolò Cavina

Fluid Power Systems overview for modern Off-Highway applications -Andrea De Pascale

Opportunities and challenges for the Electrification of Off-Highway Vehicles - Claudio Rossi

> 13 - 14.30 **Free Lunch**

14.30 - 18 **Technical visit at UNIBO Farm:** Demonstration of homologation and traction tests for agricultural tractors

from 18 Tour of Bologna city center and typical Bolognese dinner

DAY AT UNIMORE

UNIMORE - DIEF: via Pietro Vivarelli, 10, Modena

8.45 - 13 Welcoming speech ad DIEF

8.45 - 13 Introduction of CNH company and S. Matteo plant - Tempestilli / De Amicis

Lectures:

- Advanced sensing of off-highway vehicles
- Advanced autonomous control of off-highway vehicles
- NVH modelling, simulation and experimentation in automotive driveline
- Off-highway components design and manufacturing

13 - 14.30 **Free Lunch**

14.30 - 17.30 **UNIMORE** Dief's Lab showcasing: Idea Lab, Melting Lab, Millechili, Additive Manufacturing, Fluid Power, Laboratorio Rosso, Electronics, Aerodynamics and thermal control, FSAE, NVH, Powerunit testbench

> 17.30 - 18 **Final remarkss**

Design Analysis and Simulation - De Marco / Mariniello / Ardolino

THURSDAY 30/5/24

DAY AT CNH

CNH: via delle Nazioni 55, Modena

Vehicle Product Engineering -Ansaloni

> 13 - 14.30 Lunch

14.30 - 17.30 Driveline (Testing and Design) -Frulli

Product Validation and testing visit - Francesco Davide

from 18 Social dinner and tour of Modena city with a typical dinner

DAY AT UNIBO

FRIDAY 31/5/24

UNIBO - DISTAL: viale G. Fanin 50, forth floor, Bologna UNIBO - FARM: via Ganfolfi 19, Cadriano Bologna

8.45 - 13

MUNER teaching activities and Q & A session and experiences of graduated students working in CNH and with HR manager of CNH and showcasing projects partnered with CNH (i.e., Master thesis and PhD projects).

