

# Summer Schools



Marinos Manolesos  
Grand Opening Event, Athens, 24-26 January 2023



Co-funded by the  
European Union

## What already exists



The objective of the course is to give the participants experience with applying the established engineering knowledge to specific wind turbine problems. In relation to this, the participants will learn about analysing advantages, problems and principles in power obtained from wind energy. They will be able to understand wind as an energy source and a dynamic load source for the wind turbine, understand how power and load are transferred through the construction and understand how the individual components interact.

The summer school is carried out in close cooperation with industrial partners who, along with university staff members, contribute with theoretical lectures and input to the case exercise.

## What already exists



UNIVERSITÀ  
DEGLI STUDI  
FIRENZE

**DIEF**  
DEPARTMENT  
OF INDUSTRIAL  
ENGINEERING



Summer School on  
Advanced Research in Turbomachinery (ART)

27 June-1 July 2022  
online



## What already exists

**ETH** zürich

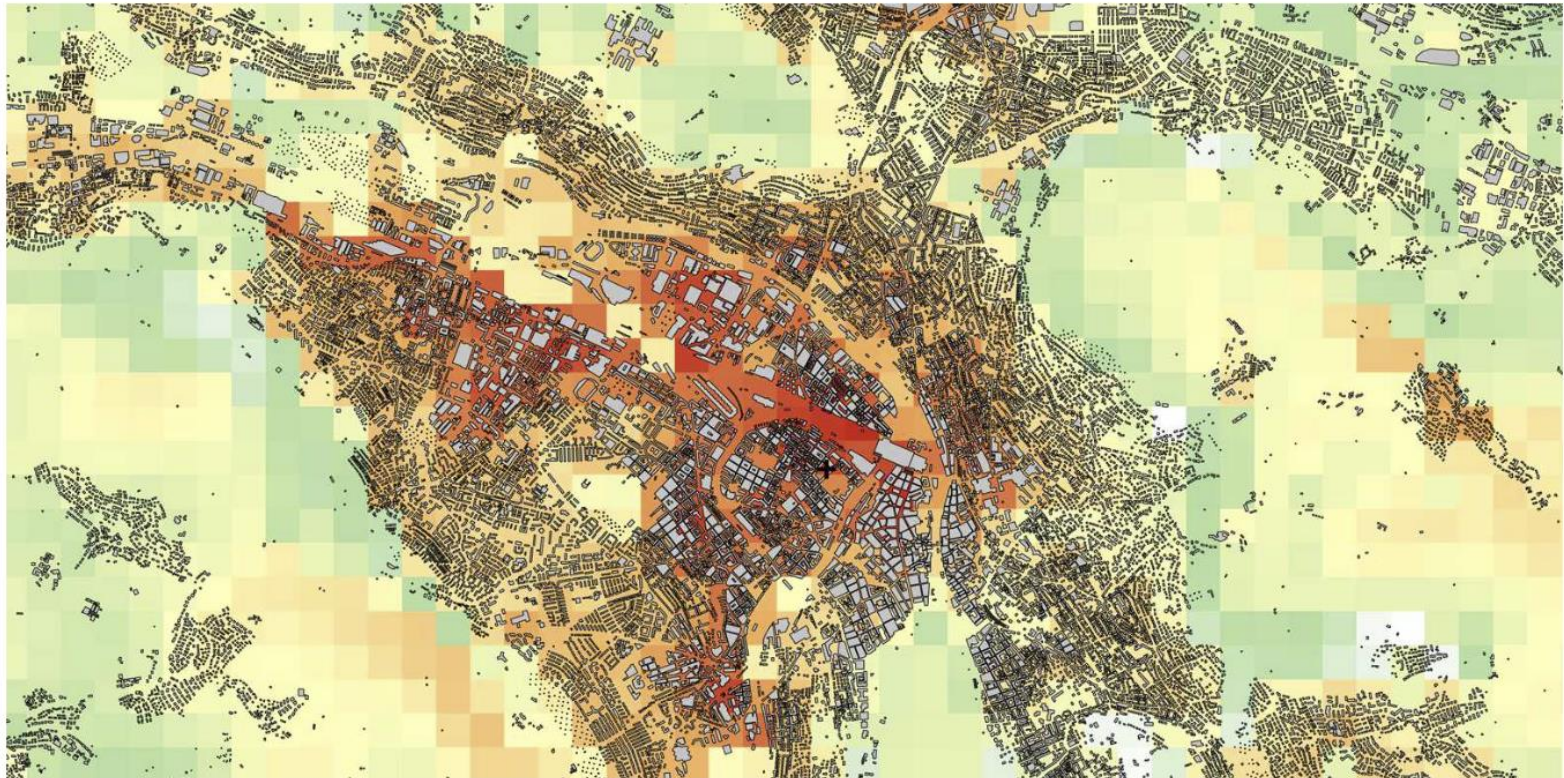
Urban Physics Winter School 2019

**TU/e** EINDHOVEN  
UNIVERSITY OF  
TECHNOLOGY



University  
of Cyprus

[UP Winter School](#) [Program](#) [Registration](#) [Accommodation](#) [Location and Directions](#) [School material and Downloads](#)



2011, 2012, 2013, 2015, 2016, 2017, 2019, then?



**von KARMAN INSTITUTE**



### **Aerodynamics of the Art and Future**

Online / on-site

von Karman Institute Lecture Series  
September 5-9, 2022



### **CFD for Atmospheric Flows and Wind Engineering**

von Karman Institute Lecture Series (on-site)  
May 8-12, 2023

10-14 October 2022



### **Elementary Structure Simulation**



### **Multidisciplinary simulation of wind farms in complex environments**

von Karman Institute Lecture Series (online /  
on-site)

September 18-22, 2023

NOVEMBER 14-19, 2022

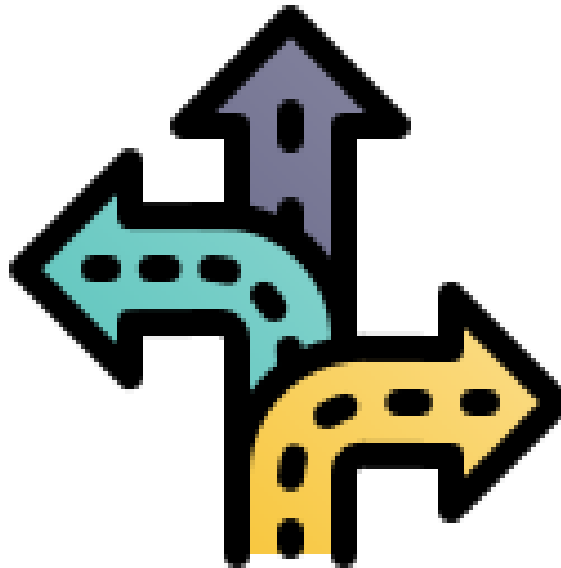
## 2x Summer Schools – 2024 and 2025

### **Option 1:**

Two independent Schools, one on Wind Energy, one on Civil Applications

### **Option 2:**

One School dedicated on Wind Engineering, repeated for two years



## Two independent Schools, one on Wind Energy, one on Civil Applications

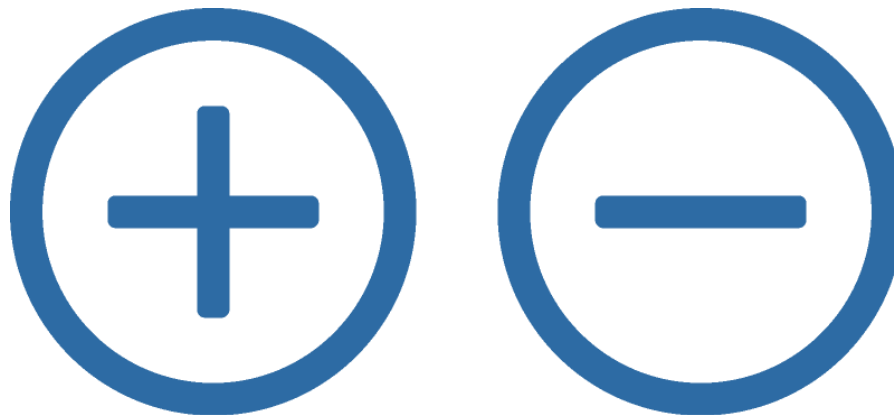
### Plus

Greater focus, possibly more attractive to PhD students/researchers

### Minus

Imbalance between Wind and Civil within the group.

Cost for inviting external speakers





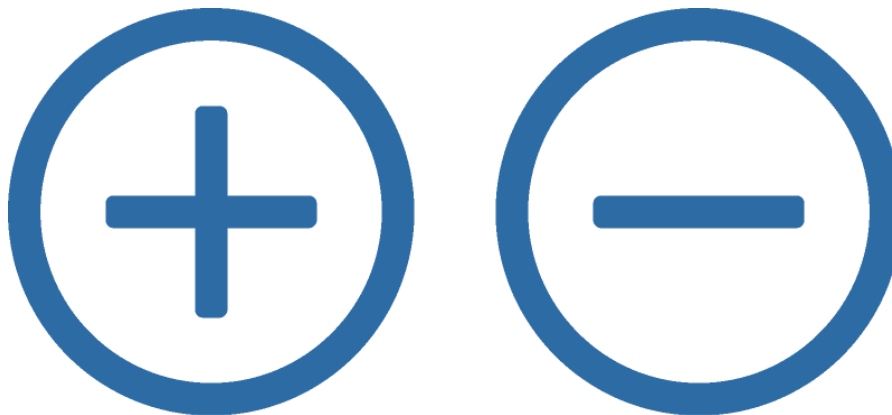
## One School dedicated on Wind Engineering, repeated for two years

### **Plus**

Combined strengths

### **Minus**

Less focused





## Ideas?

### 1 school on Wind Engineering

Focus on both Wind energy and Urban flows

Focus on Wind Tunnel testing(?)

Who is participating?

#### Plus

- following TWEET-IE topic
- significant expertise among partners

#### Minus

- Are we performing training on measurement techniques? Only Stereo PIV available in Athens. Could we involve someone else (e.g. LaVision)?
- We ignore significant CFD expertise

**Thank you!**

**Questions?**