**MSc Wind Energy Engineering
Introduction to Wind Turbine Aerodynamics
Summer Semester 2021**

Korjahn, Schlipf and Schaffarczyk

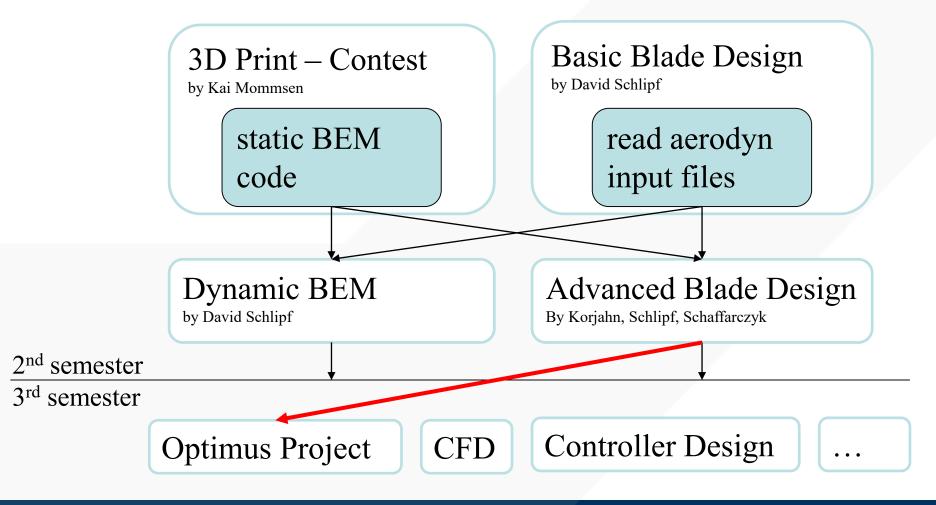**Coding our own**

Aerodynamic Design Code

KSS-Blade

Overview

3D Print – Contest
by Kai Mommsen

> static BEM code

Basic Blade Design
by David Schlipf

> read aerodyn input files

Dynamic BEM
by David Schlipf

Advanced Blade Design
By Korjahn, Schlipf, Schaffarczyk

2nd semester
3rd semester

Optimus Project   CFD   Controller Design   …

- **We can use the groups from the lecture „Certification, load assumptions and simulations"**

Language: matlab (octave)

Good Matlab Programming Practices (available in the net)

- main and all other functions, subroutine, classes etc should be not longer than 100 lines

- comment all data-declarations

- use „simple" algorithmic structures only

- No tricks from computer science

- **Separate code into three main pieces:**

- **1. Input**

- **2. Solving**

- **3. Post-processing (plots etc)**

- **Communication via ASCII**

Share project via:

https://de.mathworks.com/help/simulink/ug/share-project-on-github.html

Out node:

Github.com/Schaffarczyk/KSS-Blade