

Faculty	Nature and Technology
Course Title	CFD II (Computational Fluid Dynamics)
Number of ECTS credits	6
Hours per week (SWS)	4+1
Semester	Fall, Bachelor 4th year
Course objective	computational fluid dynamics of turbulent flows
Prerequisites	Fundamental knowledge in fluid mechanics and CFD (for beginners a short introduction into CFD will be given)
Recommended reading	Ferziger JH, Peric M (2002) Computational Methods for Fluid Dynamics. 3rd Edition, Springer, Berlin, Heidelberg
Teaching methods	Blackboard, practical training with computers (Software: openFOAM)
Assessment methods	Presentation of own CFD results (10 min + 5 min discussion) and report (3500 words maximum without appendix)
Language of instruction	English
Name of lecturer	Prof. Dr. Albert Baars
Email	albert.baars@hs-bremen.de
Link	
Course content	Solution of linear equation systems, introduction into turbulence, turbulence modelling(RANS, LES), DNS, set up of CFD cases for turbulent flows