Courses in English
Course Description

Department
05 Building Services Engineering, Paper and Packaging Technology and Print and Media Technology

Course title
Advanced Fluid Mechanics

Hours per week (SWS)
3

Number of ECTS credits
5

Course objective
Fluid Measurements
Introduction to the instrumentation and procedures for flow, velocity and pressure measurement
instrument. Flow visualization techniques.

Prerequisites
no

Recommended reading
English Textbook and handouts

Teaching methods
lectures and exercises

Assessment methods
examination

Language of instruction
English

Name of lecturer
Prof. Dr.-Ing. habil. D. Liepsch

Email
Liepsch@hm.edu

Link

Course content
Introduction to flow, velocity and pressure measurements techniques
Theoretical and practical studies
* Flow meters for internal and external flows
* Orifice plate
* Flow nozzle
* Venturi tube
Optical methods:
* LDA
* Two phase Doppler anemometer
* Two focus laser anemometer
* Particle image velocimetry
* Ultrasound and magnetic-induction flow meters
* Flow visualization techniques in fluids gas and liquids

Remarks