Hochschule München University of Applied Sciences

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
Prerequisites	no
Recommended reading	English Textbook and handouts
Teaching methods	lectures and exersices
Assessment methods	examination
Language of instruction	English
Name of lecturer	Prof. Dr.-Ing. habil. Dieter Liepsch
Email	Liepsch@hm.edu
Link	
Course content	siehe Anlage
Remarks	

Prof. Dr.-Ing. habil. Dieter Liepsch

Advanced Fluid Mechanics

Goal: Introduction to the instrumentation and procedures for flow, velocity and pressure measurement instrument. Flow visualization techniques.

Contents:

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