## **Courses in English**

## **Course Description**



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

Course title Plant Engineering

Hours per week (SWS) 4

Number of ECTS credits 5

Course objective Aibility to design elements and components necessary for the construction of industrial plants;

pressurerized devices, pipeline systems, selection of pumps and compressors

Prerequisites Statics, Dynamics, Fundamentals of Fluid Dynamics and Thermodynamics

Recommended reading Grundlagen der Rohrleitungs- und Apparatetechnik, 4th edition, Vulkan-Verlag Essen, 2014 by Rolf

Herz

**Teaching methods** Blended Learning: videos, lecture, questionnaire, calculation examples

Assessment methods Written final exam

Language of instruction English

Name of lecturer Prof. Dr.-Ing. Rolf Herz

Email <a href="mailto:herz@hm.edu">herz@hm.edu</a>

Link

Course content - Plant elements

- Drawing

- Loads on walls of pressurized devices

- Wall thickness calculations

- Support and expansion compensation of pipelines

- Fluid Dynamics in pipelines

- Selection of pums and compressors

Remarks