Courses in English
Course Description

Department	05 Technical Systems, Processes and Communication
Course title	**Coating and Barriers**
Course number	
Hours per week (SWS)	4
Number of ECTS credits	5
Course objective	derive process engineering phenomena of the interface processes and their characteristic magnitudes; describe the principles and applications of the machines and the course of the processes used for surface application and coating in the paper and packaging material industry, on the basis of laboratory work similar to the industrial process or production on an experimental paper machine; work out solutions for problems arising during the coating of paper or packaging materials, in a team, and to present these in the form of a re port.
Prerequisites	Fundamentals of Coating
Recommended reading	E. Lehtinen – “Pigment Coating and Surface Sizing of Paper” / Papermaking Sci ence and Technology Series Fapet Oy – Finland 2000 T. Metzger – “Das Rheologie-Handbuch für Anwender von Rotations- und Oszilla tions-Rheometern” Curt R. Vincentz Verlag – Hannover 2000 J.C. Walter – “The Coating Processes” Tappi Press – Atlanta / GA 1993 C.L. Garey – “Physical Chemistry of Pigments in Paper Coating” Tappi Press – Atlanta 1977
Teaching methods	Lecture, exercises, Laboratory experiments
Assessment methods	Laboratory reports, Oral examination
Language of instruction	English
Name of lecturer	Dr. Thoralf Gliese
Email	thoralf.gliese@hm.edu
Link	
Course content	derive process engineering phenomena of the interface processes and their characteristic magnitudes; describe the principles and applications of the machines and the course of the processes used for surface application and coating in the paper and packaging material industry, on the basis of laboratory work similar to the industrial process or production on an experimental paper machine; work out solutions for problems arising during the coating of paper or packaging materials, in a team, and to present these in the form of a re port.
Remarks	