Department	05 Technical Systems, Processes and Communication
Course title	Emerging Trends and Technologies in Graphic Communication: Data Visualization and Management
Hours per week (SWS)	4
Number of ECTS credits	6
Course objective	Problem solving strategies for the Graphic Communication Industry that integrate selected tools of design thinking, current software; current trends, practices and emerging digital topics. In detail: Study of data used in marketing and publishing applications. Exploration, uses, analysis and visualizations used in digital advertising, marketing, and graphic communications. 1. Articulate professional practices for structuring, collecting, storing, cleaning, querying, and using data. 2. Analyze and use appropriate data visualization strategies for publishing and marketing data. 3. Model entity relationships (ERD) for relational databases. 4. Use MS Excel for complex data organization and analysis. 5. Use Tableau for creating interactive data visualizations.
Prerequisites	Basic knowledge on print and media technologies
Recommended reading	No textbook is required. Printed course handouts will be provided. Video tutorials will supplement the
Teaching methods	Lecture, assignments and development of portfolio.
Assessment methods	Term project, individual assignments will be assessed throughout the semester.
Language of instruction	English
Name of lecturer	Prof. Malcolm Keif
Email	N.N. (Please contact: Ulrich.Moosheimer@hm.edu)
Link	www.pm.hm.edu
Course content	Selected topics from *Advanced Digital Typography* *Advanced Consumer Packaging* *Advanced Interactive Product Development for Packaging and Publication* *Advanced Color Management* *Advanced Digital Photography* *Advanced Digital Printing* *Advanced Flexography* *Advanced Database concepts*
Exam	Quizzes, written exams, research paper, project reports