

List of courses in a technical domain - Master Human-Technology Interaction

Academic year 2024-2025 - Version September 2024

A minimum of 10 ECTS of the electives/ free electives must be in a technical domain. These courses can be taken during the elective space in the first or second year or during the international semester. It can be either in the HTI domain (course not yet selected in track) or an engineering course from another department.

Course code	Course name	Category	Subcategory
OHM240	The quantified self in health	1.1 ICT	1.1.1 Data Science and AI
OHM270	Supercrunchers: the human in an era of data science	1.1 ICT	1.1.1 Data Science and AI
OHM340	Human-AI interaction	1.1 ICT	1.1.1 Data Science and AI
OHM280	Human-robot interaction	1.4 Robotics	
1BM110	Data-driven artificial intelligence	1.1 ICT	1.1.1 Data Science and AI
1BM120	Decision making with artificial intelligence	1.1 ICT	1.1.1 Data Science and AI
1BM20	Business analysis for information technology systems	1.1 ICT	1.1.4 Other
1BM05	Business process management	1.5 Operations Management & logistics	
1BM110	Data-driven artificial intelligence	1.5 Operations Management & logistics	
1BM120	Decision making with artificial intelligence	1.5 Operations Management & logistics	
1BM130	Design of AI-driven business operation	1.5 Operations Management & logistics	
1BM140	Engineering knowledge-intensive business processes	1.5 Operations Management & logistics	
1CM110	Decision-making in transport and mobility	1.5 Operations Management & logistics	
1CM120	Advanced maintenance and service logistics	1.5 Operations Management & logistics	
1CM130	Design for transport and logistics	1.5 Operations Management & logistics	
1CM140	Design of operations planning and control systems	1.5 Operations Management & logistics	
1CM15	Project and process management	1.5 Operations Management & logistics	
1CM150	Advanced planning and scheduling systems	1.5 Operations Management & logistics	
1CM170	Sustainable supply chains	1.5 Operations Management & logistics	
1CM190	Health care operations planning	1.5 Operations Management & logistics	
1CM200	Warehouse operations management	1.5 Operations Management & logistics	
1CM240	Artificial intelligence for logistics and its interfaces	1.5 Operations Management & logistics	

Course code	Course name	Category	Subcategory
2AMD15	Big Data Management	1.1 ICT	1.1.1 Data Science and AI
2AMI10	Foundations of Process Mining	1.1 ICT	1.1.1 Data Science and AI
2AMM10	Deep learning	1.1 ICT	1.1.1 Data Science and AI
2AMM15	Machine Learning Engineering	1.1 ICT	1.1.1 Data Science and AI
2IMP40	Empirical Methods in Software Engineering	1.1 ICT	1.1.1 Data Science and AI
2IMP15	Software project management	1.1 ICT	1.1.2 Software Engineering
2IMP30	System Design Engineering	1.1 ICT	1.1.2 Software Engineering
5ARA0	Software engineering for artificial intelligence	1.1 ICT	1.1.2 Software Engineering
2DMI20	Software Security	1.1 ICT	1.1.3 Security
2IMS20	Cyberattacks Crime and Defenses	1.1 ICT	1.1.3 Security
2IMS25	Principles of Data Protection	1.1 ICT	1.1.3 Security
2IMS30	Advanced Network Security	1.1 ICT	1.1.3 Security
2IHT10	Logic and set theory	1.1 ICT	1.1.4 Other
2IMN15	Internet of Things	1.1 ICT	1.1.4 Other
5LIV0	Video health monitoring	1.1 ICT	1.1.4 Other
DBM140	Embodying intelligent behavior in social context	1.1 ICT	1.1.4 Other
DBM160	Data-enabled design	1.1 ICT	1.1.4 Other
DBM170	Designing user interfaces with emerging technologies	1.1 ICT	1.1.4 Other
DBM180	Designing with advanced artificial intelligence	1.1 ICT	1.1.4 Other
DCM180	The sound of smart things	1.1 ICT	1.1.4 Other
7KP8M0	Smart building methodology & technology	1.2 Building Technology & Mobility	
7KP9M0	Building technology with extreme complexity	1.2 Building Technology & Mobility	
7LL1M0	Sports and building aerodynamics	1.2 Building Technology & Mobility	
7LL7M0	Capita selecta lighting technology	1.2 Building Technology & Mobility	
7LS3M0	Sustainable buildings/physical aspects of building materials	1.2 Building Technology & Mobility	
7LS6M0	Heat, air and moisture transfer / CFD2	1.2 Building Technology & Mobility	
7LS8M0	Architectural acoustics	1.2 Building Technology & Mobility	
7LS9M0	Heat, air and moisture transfer / CFD1	1.2 Building Technology & Mobility	
7LY3M0	Building performance and energy systems simulation	1.2 Building Technology & Mobility	

Course code	Course name	Category	Subcategory
7LY4M0	Building services and fire safety	1.2 Building Technology & Mobility	
7LY5M0	Data science for intelligent buildings	1.2 Building Technology & Mobility	
7LY6M0	Materials panorama: design, functionality, environmental aspects	1.2 Building Technology & Mobility	
7LY7M0	Techniques in architectural acoustics	1.2 Building Technology & Mobility	
7M900	Fundamentals of building information modeling	1.2 Building Technology & Mobility	
7PP5M0	Resource efficient structural engineering and design	1.2 Building Technology & Mobility	
7QX3M0	Architectural engineering	1.2 Building Technology & Mobility	
7S880	Lighting technology	1.2 Building Technology & Mobility	
7XC1M0	Circularity in the built environment	1.2 Building Technology & Mobility	
7ZM5M0	Process modeling and information management	1.2 Building Technology & Mobility	
7ZM7M0	Parametric design	1.2 Building Technology & Mobility	
7ZW4M0	Built environment and smart mobility	1.2 Building Technology & Mobility	
7ZW5M0	Smart healthy urban environments	1.2 Building Technology & Mobility	
7ZZ9M0	Design science methodology and systems engineering	1.2 Building Technology & Mobility	
3MF100	Fusion on the back of an envelope	1.3 Energy Technology	
3MP110	Solar cells	1.3 Energy Technology	
3MT130	Transport in porous media	1.3 Energy Technology	
4AT020	Clean engines and future fuels	1.3 Energy Technology	
4AT060	Sustainable vehicles	1.3 Energy Technology	
4BM50	Energy Geoscience	1.3 Energy Technology	
4EM50	Thermal energy storage	1.3 Energy Technology	
4EM70	Sustainable Energy Sources	1.3 Energy Technology	
5LEE0	Electrical power engineering and system integration	1.3 Energy Technology	
5LEJ0	Secondary batteries and hydrogen storage	1.3 Energy Technology	
5LEM0	Dynamic control of power conversion in renewable energy systems	1.3 Energy Technology	
5SEF0	Smart grids, ICT and electricity markets	1.3 Energy Technology	
4CM00	Control engineering	1.4 Robotics	
4CM60	Advanced motion control	1.4 Robotics	
4SC020	Mobile robot control	1.4 Robotics	