Course Offer Summer Semester 2024

Master Digital Health (DH)

(Status: 04/05/2024)

	Course Titel	Type	Lecturers Supervisors	weekly hours per semester	CP	Participants (max.)	Language	Digital Health					Scalable Computing Algorithms for Digital Health			Digitalization of Clinical Research Processes			Acquisition, Processing and Analyis of Health Data			Health Data Security			Professional Skills				Bridge moduls			
								DH					SCAD			DICR			APAD			HDAS			PSK				BM			
								Health Systems and Sciences for Digita Health	Software Architectures for Digital Health	Ethics, Law and Copilance for Digital Health	Data Science for Digital Health	Digital Health Project Lab	Concepts and Methods	Technologies and Tools	Specialization	Concepts and Methods	Technologies and Tools	Specialization	Concepts and Methods	Technologies and Tools	Specialization	Concepts and Methods	Technologies and Tools	Specialization	Communication Skills	Management and Leadership	Design Thinking Basic	Design Thinking Advanced	Principles of IT Systems	Fundamentals of Programming	Introduction to Principles in Medicine	Fundamentals of Healthcare Systems
								#PJ-DH-HS	#PJ-DH-SW	#PJ-DH-EC	#PJ-DH-DS	#PJ-DH-PL	#PJ-SCAD-C	#PJ-SCAD-T	#PJ-SCAD-S	#PJ-DICR-C	#PJ-DICR-T	#PJ-DICR-S	#PJ-APAD-C	#PJ-APAD-T	#PJ-APAD-S	#PJ-HDAS-C	#PJ-HDAS-T	#PJ-HDAS-S	#PJ-PSK-CO	#PJ-PSK-MLE	#PJ-PSK-DTB	#PJ-PSK-DTA	#PJ-DHBM-IT	#PJ-DHBM-PR	#PJ-DHBM-MM	#PJ-DHBM-HS
								MA Digital Health Prüfungsordnung 2018					MA Digital Health Prüfungsordnung 2018			MA Digital Health Prüfungsordnung 2018																	
1	21st Century Health Care Businesses: Regulatory, Legal, and Public Policy Aspects	S	Prof. Dr. Ariel Stern	2	3		EN			3																						
2	Advanced Recent Topics in Cybersecurity	L/E	Dr.-Ing. Jiska Classen	4	6	60	DE/EN															6	6	6								
3	Advanced Competitive Programming	L	Prof. Dr. Tobias Friedrich, Dr. Kirill Simonov	4	6		EN						6	6	6							6	6	6								
4	Advanced Cryptography	L/E	Prof. Dr. Anja Lehmann	4	6		DE															6	6	6								
5	Advanced Medical Machine Learning Seminar	S	Prof. Christoph Lippert	4	6		EN						6	6	6				6	6	6											
6	Application Security	V	Henryk Plötz	4	6		EN															6	6	6								
7	Applying Digital Storytelling to Global Health Issues	S	Dr. Catrinel Craciun	2	3		EN									3	3	3														
8	Business Process Intelligence	L	Prof. Dr. Mathias Weske, Anjo Seidel	4	6		EN						6	6	6	6	6	6														
9	Computational Statistics	L/E	Prof. Dr. Bernhard Renard, Susanne Ibing	4	6		EN						6	6	6				6	6	6											
10	Cryptographic Protocols	S	Prof. Dr. Anja Lehmann	4	6	12	EN															6	6	6								
11	Current Developments in Electronic Health Records	S	Prof. Dr. Bernhard Renard, Jan-Philipp Sachs, Susanne Ibing, Linea Schmidt	2	3	12	EN									3	3	3	3	3	3											
12	Data Science for Wearables	L/E	Prof. Dr. Bert Arnrich, Orhan Konak	4	6		EN						6	6	6	6	6	6	6	6	6											
13	Digital Health Systems	S	Dr. Lorenzo Valle Garcilazo	4	6		EN									6	6	6														
14	Digital N-of-1 Trials and their Application	S	Dr. Stefan Konigorski	2	3		EN				3		3	3	3	3	3	3	3	3	3											
15	Ethics in Digital Health and Technology	L/S	Dr. Joschka Haltaufderheide, Prof. Robert Ranisch	2	3		EN			3																						
16	Fault-Tolerant Algorithms	PS	Prof. Dr. Tobias Friedrich, Dr. Sarel Cohen	4	6		EN						6	6	6																	
17	Future Interactive Technology	L	Prof. Dr. Patrick Baudisch, Conrad Lempert	4	6		EN									6	6	6														
18	Future Internet	L	Prof. Dr. Holger Karl	4	6		nach Abst.						6	6	6																	
19	Global Team-Based Innovation II	P/S	Prof. Dr. Falk Uebernickel	4	6	15	EN									6	6	6	6	6	6					6		6				
20	Hands-on Artificial Intelligence for Digital Health	S	Dr. Matthieu Schapranow	4	6		EN				6			6	6		6	6		6	6											
21	Hardware Conscious Data Processing	L	Prof. Dr. Tilmann Rabl, Marcel Weisgut, Florian Schmeller, Martin Boissier	4	6		EN						6	6	6																	
22	HCI Project Seminar on Digital Fabrication and Haptics	S	Prof. Dr. Patrick Baudisch	4	6		EN						6	6	6																	
23	iOS & Android Internals	S	Dr.-Ing. Jiska Classen	2	3	8	DE/EN															3	3	3								
24	Lecture Series on Research at HPI	L	Prof. Dr. Tilmann Rabl und weitere	2	3		EN						3			3			3			3										
25	Machine Learning for Image Analysis	L/E	Prof. Dr. Dagmar Kainmüller	4	6		EN						6	6	6				6	6	6											
26	Managing and Researching Healthcare Systems	L	Prof. Dr. Reinhard Busse, TBN	4	6		EN	6																								
27	Mathematics for Machine Learning	L	Prof. Dr. Christoph Lippert	4	6		EN						6	6	6				6	6	6											
28	Netzwerksicherheit	L	Prof. Dr. Christian Dörr	4	6		DE															6	6	6								
29	PACE Challenge on Crossing Minimization	PS	Prof. Dr. Tobias Friedrich, Dr. Kirill Simonov, Dr. Shaily Verma, Dr. Sarel Cohen, Aikaterini Niklanovits	4	6		EN						6	6	6																	
30	Parameterized Algorithms	L/E	Prof. Dr. Tobias Friedrich, Dr. Kirill Simonov, Dr. Shaily Verma	4	6		EN						6	6	6																	
31	Probability and Computing	L/E	Prof. Dr. Tobias Friedrich, Dr. Samuel Baguley, Dr. Andreas Göbel	4	6		EN						6	6	6																	
32	Product Builder - Digital Health	S	Dr. Frank Pawlitschek, Prof. Dr. Ariel Stern, David Hahn	4	6		EN									6	6	6														
33	Quantum-Safe Cryptography	L/E	Dr. Gregor Seiler	2	3		EN															3	3	3								
34	The Fundamentals of Human-Centred Digital Health Applications	S	Dr. Danielly de Paula	4	6		EN						6	6	6	6	6	6	6	6	6											
35	Topics in Algorithms, Graphs and Probabilities	S	Dr. Timo Kötzing, Dr. George Skretas, Dr. Sam Baguley	2	3		EN						3	3	3																	
36	Trends and Concepts in Digital Health	S	Dr. Matthieu Schapranow	2	3		EN				3		3	3		3	3		3	3												
37	Trends in AI and Deep Learning Research Seminar	PS	Prof. Dr. Gerard de Melo, Dr. Jingyi Zhang	4	6		EN				6					6	6	6	6	6	6											
38	Understanding your Genome- An Introduction to Human Genome Analysis and Interpretation	S	Dr. Henrike Heyne	4	6		EN						6	6	6	6	6	6	6	6	6											
	Professional Skills - LV																															
39	Academic Writing for Science	S	Dr. Sharon Nemeth	2	3	15	EN																		3							
40	Communicating Technology Successfully - Developing Communication Strategies	S (Block)	Nadine Lux	2	3	20	EN																		3							
41	Communicating Technology Successfully – Developing Content and Formats	S (Block)	Nadine Lux	2	3	20	EN																		3							
42	Dealing with Uncertainty	S (Block)	Christoph Burger	2	3	30	EN																		3	3						
43	Design Thinking Studio "Design Thinking and Open Innovation in Education" (before: Advanced Track in Design Thinking)	P/S	Sherif Osman, Dr. Claudia Nicolai	6	6	20	EN																					6				
44	Design Thinking Studio "Design Thinking and Sustainability" (before: Advanced Track in Design Thinking)	P/S	Thomas Grundnigg, Dr. Claudia Nicolai	2	3	20	EN																					3				
45	Foundations for Design Thinking (before: Basic Track in Design Thinking)	P/S	Lukasz Lata, Dr. Claudia Nicolai	6	6	40	EN																						6			
46	Führungskompetenz	S (Block)	Michael Heidemann, Eugen Unger	4	6	30	DE																			6						
47	Global Design Thinking Workshop (D-School)	P/S	Sherif Osman, Dr. Claudia Nicolai	2	3	40	EN																						3			
48	How to be a (Startup)-CTO	S	Dr. Frank Pawlitschek	2	3	30	EN																			3						
49	Leading People, Teams, and Change	S (Block)	Dr. Ulf Schäfer	2	3	20	EN																			3						
50	Management Essentials	L	Prof. Dr. Eric Kearney	2	3	30	EN																			3						
51	Managing Stakeholders – The Psychology and Neuroscience of Successfully Influencing Others	S (Block)	Dr. Franziska Frank	2	3	25	EN																			3						
52	Master & PhD Thesis Class	S	Dr. Julia von Thienen	2	3		EN																		3			3				
53	Product Builder	S	Dr. Frank Pawlitschek, David Hahn	4	6	20	EN																			6						
54	Responsible Data Science - Ethical Issues and Risk Management in the Development of Data-intensive Projects	S	Dr. Simon Hirsbrunner	2	3	20	EN																		3							
55	Sonic Thinking - Methods of Working with Sound	S	Dr. Julia von Thienen	2	3		EN																		3			3				
56	Strategic Leadership and Management Principles - Bridging Technology and Human Insight in the Fourth Industrial Revolution	S (Block)	Ulrich Selzer	2	3	24	EN																			3						
57	The Social Implications of Digital Technology	L/E	Prof. Dr. Gilian Bolsover	2	3	8	EN																		3	3						
58	Was brauche ich, was brauchst du? Konflikte verstehen und konstruktiv bearbeiten	S (Block)	Anna-Lisa Obermann	2	3	16	DE																		3	3						
59	Wayfinder: Self- and Leadership Development (D-School) - IN PLANNING	P/S	Dr. Martin Schwemmle, Klaudia Thal, Dr. Claudia Nicolai	2	3	18	EN																			3		3				