

Study program	M.Sc. Human Technology in Sports and Medicine (M.Sc. TSM)
Examination regulations by:	2007/04/01 in its respectively valid version
Valid for first-year students:	Winter term 2023/24 onward
Version:	June 2023

Module	SRS	Courses (type of class)	SHW	CP ¹ /WLH
TSM1	1.	Basics I - Mathematics & Physics Mathematics and Physics (SE) Tutorials on Mathematics and Physics (TUT)	4 2 2	6/180
TSM2	1.	Basics II - Biomechanics Biomechanics (SE) Mechanobiology (SE) Ergonomics (SE) Biomechanics and Mechanobiology (TUT)	8 2 2 2 2	8/240
TSM3	1.	Basics III - Data management & Data analysis Data management/programming (SE) Statistics lecture series (LEC) Advanced & Applied statistics (SE) Applied Data management/programming (SE)	7 2 1 2 2	8/240
TSM4	1.	Basics IV - Material & construction Material and Construction (SE) Material and Construction (TUT)	4 2 2	8/240
TSM5	2.	Technology I - Orthopaedic technologies Orthopaedic Biomechanics - Functionality of Orthoses and Exoskeletons (SE) Joint replacements, Implants and Prostheses (SE)	4 2 2	5/150
TSM6	2.	Technology II - Sports Biomechanics and Project Management Sports Biomechanics (SE) Project Management (SE)	5 3 2	5/150
TSM7	2.	Technology III - Sports equipment and Instrumentation Instrumentation Technology (SE) Sports and Rehabilitation Equipment (SE) Footwear and Playing Surfaces (SE)	6 2 2 2	9/270
TSM8	2.	Technology IV - Modeling and Simulation Multi Body Modeling (SE) Finite Element Modeling (SE)	4 2 2	6/180
TSM9	2.	Technology V - Diagnostics in Sports, Medicine and Rehabilitation Biomechanical and Physiological diagnostics (SE) Biomedical diagnostics (TUT)	4 2 2	5/150
TSM10	3.	Philosophy of Science Ethics, Technology and Research in Humans (SE) Research Methods (SE)	4 2 2	6/180
TSM11	3.	Project I - Sports Technology Project Applied Research Methods (SE) Sports Technology (TUT) OR Project II - Medical Technology Project Applied research methods (SE) Medical Technology (TUT)	7 2 5 2 5	12/360
TSM12	3.	Internship (360 h)		12/360
TSM13	4.	Master Thesis Reading, Writing and Publishing in empirical Sciences (SE) Thesis	2 2	30/900
Total			59	120/3600

Abbreviations: TSM = Human Technology in Sports and Medicine, SRS = subject-related semester, SHW = semester hours per week, CP = credit points, WLH = workload hours, LEC = lecture, SE = seminar, TUT = exercise/tutorial, FT = field trip

Comments: The specifications regarding the academic performances and examination results as well as the attendance requirements are listed in the module handbook.

¹ A credit point corresponds to a workload of 30 hours, which can be achieved by attendance of lectures, seminars and courses as well as by means of self-study (e.g. preparatory- and follow-up work, tutorials etc.).