

Study programme 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 2017/18 onward
Version: July 2017

Module	SRS	Courses (type of class)	SHW	CP ¹ /WLH
TSM1	1.	Basics I – Mathematics & Physics Mathematics and physics (SE) Mathematics and physics (TUT)	4 2 2	6/180
TSM2	1.	Basics II – Biomechanics Biomechanics (SE) Mechanobiology (SE) Ergonomy (SE) Biomechanics and Mechanobiology (TUT)	8 2 2 2 2	10/300
TSM3	1.	Basics III – Data management &-analysis Data management/programming (SE) Statistics lecture series (LEC) Advanced statistics (TUT) Data management/programming (TUT)	7 2 1 2 2	8/240
TSM4	1.	Basics IV – Material & construction Materials and construction (SE) Materials and construction (TUT)	4 2 2	6/180
TSM5	2.	Technology I - Orthopaedic technologies (orthopaedic aids, prostheses, orthoses, exo skeletons, robots, joint replacements) Orthopaedic aids (SE) Joint replacements and implants (SE)	4 2 2	6/180
TSM6	2.	Technology II - Footwear, apparel and playing surfaces Footwear and playing surfaces (sports and rehabilitation) (SE) Apparel (sports and rehabilitation) (SE) Management (SE)	6 2 2 2	6/180
TSM7	2.	Technology III - Sports equipment and instrumentation Instrumentation technology (SE) Sports and rehabilitation equipment (SE)	4 2 2	6/180
TSM8	2.	Technology IV - Modeling and simulation Multi body modeling (SE) Finite element modeling (SE)	4 2 2	6/180
TSM9	2.	Technology V - Performance diagnostics in sports, medicine and rehabilitation Biomechanical and physiological diagnostics (SE) Biomedical diagnostics (TUT)	4 2 2	6/180
TSM10	3.	Research methods and application 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 Applied research methods (SE) Sports technology OR Project II -Technology in medicine project – applied research methods Applied research methods (SE) Medical technology	8 2 6 2 6	12/360
TSM12	3.	Internship (> 12 weeks)		12/360
TSM13	4.	Master Thesis Scientific paper writing (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.).