

**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 2022/23 onward  
**Version:** Mai 2022

Module	SRS	Courses (type of class)	SHW	CP <sup>1</sup> /WLH
TSM1	1.	<b>Basics I - Mathematics &amp; Physics</b> Mathematics and Physics (SE) Tutorials on Mathematics and Physics (TUT)	4 2 2	6/180
TSM2	1.	<b>Basics II - Biomechanics</b> Biomechanics (SE) Mechanobiology (SE) Ergonomics (SE) Biomechanics and Mechanobiology (TUT)	8 2 2 2 2	8/240
TSM3	1.	<b>Basics III - Data management &amp; Data analysis</b> 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.	<b>Basics IV - Material &amp; construction</b> Material and Construction (SE) Material and Construction (TUT)	4 2 2	8/240
TSM5	2.	<b>Technology I - Orthopaedic technologies</b> Orthopaedic Biomechanics - Functionality of Orthoses and Exoskeletons (SE) Joint replacements, Implants and Prostheses (SE)	4 2 2	5/150
TSM6	2.	<b>Technology II - Sports Biomechanics and Project Management</b> Sports Biomechanics (SE) Project Management (SE)	5 3 2	5/150
TSM7	2.	<b>Technology III - Sports equipment and Instrumentation</b> Instrumentation Technology (SE) Sports and Rehabilitation Equipment (SE) Footwear and Playing Surfaces (SE)	6 2 2 2	9/270
TSM8	2.	<b>Technology IV - Modeling and Simulation</b> Multi Body Modeling (SE) Finite Element Modeling (SE)	4 2 2	6/180
TSM9	2.	<b>Technology V - Diagnostics in Sports, Medicine and Rehabilitation</b> Biomechanical and Physiological diagnostics (SE) Biomedical diagnostics (TUT)	4 2 2	5/150
TSM10	3.	<b>Philosophy of Science</b> Ethics, Technology and Research in Humans (SE) Research Methods (SE)	4 2 2	6/180
TSM11	3.	<b>Project I - Sports Technology Project</b> Applied Research Methods (SE) Sports Technology (TUT)  <b>OR</b>  <b>Project II - Medical Technology Project</b> Applied research methods (SE) Medical Technology (TUT)	8 2 6   2 6	12/360
TSM12	3.	<b>Internship (360 h)</b>		12/360
TSM13	4.	<b>Master Thesis</b> Reading, Writing and Publishing in empirical Sciences (SE) Thesis	2 2	30/900
<b>Total</b>			<b>60</b>	<b>120/3600</b>

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.

<sup>1</sup> 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.).