

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) Ergonomy (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.).