REHABILITATION SCIENCE AND TECHNOLOGY, MS

MS-RST Overview

The MS in Rehabilitation Science and Technology is a flexible 30-credit graduate program in the School of Rehabilitation Sciences and Technology. It prepares students for an evolving job market within the rehabilitation, special education-related services, disability-related services, and various occupational health, safety, and performance-focused domains. The program also provides a unique background and experience for students seeking to apply to graduate professional degree programs and/or advanced research-based graduate studies.

The MS-RST program consists of four tracks, each with specific foci: Assistive Technology and Accessible Design (ATAD), Human Factors Innovations (HFI), Sport and Performance Psychology (SPP), and Rehabilitation Sciences (RS). Depending on the student's program of study and faculty advisor, the MS-RST program can be completed either in face-to-face or hybrid format and can culminate in a research-based thesis, or in a non-thesis-based capstone/design project experience.

MS-RST Tracks

Assistive Technology and Accessible Design (ATAD)

The assistive technology and accessible design (ATAD) track is designed for students who wish to work in various settings, including rehabilitation clinics, hospitals, nursing homes, consulting firms, and school systems. Depending on the student's career goal, the ATAD track can prepare the student to meet the diverse and adaptive needs of a career in the field of assistive technology and accessible design.

Human Factors Innovations (HFI)

The Human Factors (HFI) track is designed for students who wish to gain advanced knowledge and skills aimed at helping individuals achieve peak occupational health and performance through the interaction of human factors and human function. The track will also emphasize application and generation of knowledge within an entrepreneurial and innovation framework. Depending on the student's career goal, the HFI track can prepare the student for a path to enhance safety, reduce injury, and improve workability in the occupational worker.

Sport and Performance Psychology (SPP)

The Sport and Performance Psychology (SPP) track is designed for students who wish to help various performers (e.g., sport, performing arts, military) to develop and use various mental, life, and self-regulatory skills with a goal to optimize performance, enjoyment, and personal development. Depending on the student's career goal, the SPP track can prepare the student for a path towards (a) certification as a mental performance consultant by the Association for Applied Sport Psychology in the United States and Canada, (b) a graduate professional degree program, and/or (c) advanced research-based graduate studies.

Rehabilitation Sciences (RS)

The Rehabilitation Sciences (RS) track is designed for students who wish to gain advanced knowledge in biomechanical, physiological, and/or psychological factors that contribute to prevention and rehabilitation of injury. Depending on the student's career goal, the RS track can prepare the student for a path to various careers in healthcare, research, or teaching in higher education.

For additional information, please contact the Program Director, Dr. Monna Arvinen-Barrow (arvinenb@uwm.edu), PhD, CMPC FAASP (United States), CPsychol AFBPsS (United Kingdom), UPV sert. (Finland).

Admission Requirements

Application Deadlines

Application deadlines vary by program, please review the application deadline chart (http://uwm.edu/graduateschool/program-deadlines/) for specific programs. Other important dates and deadlines can be found by using the One Stop calendars (https://uwm.edu/onestop/dates-and-deadlines/).

Admission

Students must meet the general requirements of admission to a graduate program at UWM. As stated by the Graduate School, these requirements include: (1) "a baccalaureate degree, or its equivalent as determined by the UWM Center on International Education, from a regionally accredited institution, completed before the first term of enrollment in the Graduate School; (2) proficiency in the English language; and (3) a minimum cumulative undergraduate grade point average (GPA) of 2.75 on a 4.0 scale, or an equivalent measure on a grading system that does not use a 4.0 scale".

Additional admission requirements include: (1) Transcripts from all university degrees/coursework; (2) Reasons Statement that includes a rationale and career goals; (3) current resume or curriculum vitae; and (4) two letters of recommendation from persons most knowledgeable about the applicant's recent academic and relevant work experiences. Depending on the MS-RST track and faculty advisor, GRE scores may be requested by the Program.

Students applying to the degree must have completed (undergraduate) pre- requisites in statistics (3 credits), laboratory-based natural sciences (4 credits,) and psychology (required for the Sport and Performance Psychology [SPP] and Human Factors Innovation [HFI] tracks) or sociology (3 credits). A grade of B- or better must have been obtained in each prerequisite course. Prerequisites will be verified through transcript review at the time of application. Students deemed not to have satisfied one or more of the prerequisites may be admitted on probation and complete the prerequisite(s) as deficiency credits within their first two semesters. Deficiency coursework will not count towards the MS-RST degree.

Credits and Courses

Code	Title	Credits
Prerequisites or support courses (minimum 10 credits)		
Statistics		3
Natural Science(s) (Laboratory-Based)		4
Psychology (required for SPP and HFI tracks) or Sociology		3

Thesis Students

Code	Title	Credits
Core Courses (12 credits)		
Select two of the following:		6
ED PSY 624G	Statistical Methods for Professionals and Practitioners I	

KIN 703	Research Methods in Kinesiology	
NURS 882	Qualitative Methods in Health Research	
NURS 883	Quantitative Methods in Health Research	
OCCTHPY 542	Evidence for Practice II	
OCCTHPY 742	Single Case Experimental Design	
PH 729	Survey Research Methods in Public Health	
PRPP 556G	Research Methods and Statistics in Sport and Performance Psychology	
Select one of the following:		3
ATRAIN 799	Independent Study II	
COMSDIS 799	Independent Studies	
OCCTHPY 799	Independent Study II	
PRPP 799	Independent Study II	
PT 799	Independent Reading	
Select one of the following:		3
ATRAIN 890	Research and Thesis	
COMSDIS 790	Research and Thesis	
OCCTHPY 890	Research and Thesis	
PRPP 890	Research and Thesis	
Foundation Courses (6 credits)		
PRPP 553G	Psychological Considerations for Optimizing Health & Performance	3
PT 723	Physiological Regulation in Exertion & Disease	3
A prescribed foundation is defined for most students to take; however, advisors can define an alternative foundation on an individualized basis to ensure that each student's specialized goals are met.		
Specialization Courses (minimum of 12 credits selected from one area)		**12**
Assistive Technology and Accessible Design (ATAD)		
OCCTHPY 620	Introduction to Assistive and Rehabilitation Technology	
OCCTHPY 625	Design and Disability	
OCCTHPY 760	Assistive and Rehabilitation Technology	
Electives		
Human Factors Innovations (HFI)		
OCCTHPY 522	Health, Performance, & Injury Monitoring in Organizations	
OCCTHPY 592	Innovative Solutions in Human Factors and Performance	
Select one of the following:		
PRPP 551G	Psychology of Injury: Prevention, Rehabilitation & Return to Participation	
PRPP 552G	Psychological Interventions and Strategies in Sport and Performance	
NUTR 580	Sports Nutrition	
Electives		
Sport and Performance Psychology (SPP)		
PRPP 551G	Psychology of Injury: Prevention, Rehabilitation & Return to Participation	
PRPP 552G	Psychological Interventions and Strategies in Sport and Performance	
PRPP 854	Professional Studies in Sport & Performance Psychology	
Select one of the following:		
COUNS 714	Essentials of Counseling Practice	
COUNS 715	Multicultural Counseling	
COUNS 814	Professional, Ethical and Legal Issues in Counseling Psychology	
PRPP 554G	Cultural and Contextual Factors in Sport and Performance Psychology	
PRPP 555G	Professional Ethics and Standards in Sport and Performance Psychology	
PRPP 855	Mentored Fieldwork in Sport and Performance Psychology	
Rehabilitation Sciences (RS)		
12 credits of courses selected in collaboration with faculty advisor that reflect an area of specialization to match the student's career and professional interests. At least 6 credits must come from ATRAIN, COMSDIS, OCCTHPY, PRPP, or PT graduate-level courses.		
Total Credits		**30**

Non-Thesis Students

Code	Title	Credits
Core Courses (6 credits)		
Select one of the following:		3
ED PSY 624G	Statistical Methods for Professionals and Practitioners I	
KIN 703	Research Methods in Kinesiology	
NURS 882	Qualitative Methods in Health Research	
NURS 883	Quantitative Methods in Health Research	
OCCTHPY 542	Evidence for Practice II	
OCCTHPY 742	Single Case Experimental Design	
PH 729	Survey Research Methods in Public Health	
PRPP 556G	Research Methods and Statistics in Sport and Performance Psychology	
Select one of the following:		3
OCCTHPY 790	Design Project	
PRPP 895	Capstone	
Foundation Courses (6 credits)		
PRPP 553G	Psychological Considerations for Optimizing Health & Performance	3
PT 723	Physiological Regulation in Exertion & Disease	3
Specialization Courses (minimum of 18 credits selected from one area)		**18**
Assistive Technology and Accessible Design (ATAD)		
OCCTHPY 620	Introduction to Assistive and Rehabilitation Technology	
OCCTHPY 625	Design and Disability	
OCCTHPY 760	Assistive and Rehabilitation Technology	

Electives (minimum 9 credits)	
Human Factors Innovations (HFI)	
OCCTHPY 522	Health, Performance, & Injury Monitoring in Organizations
OCCTHPY 592	Innovative Solutions in Human Factors and Performance
Select one of the following:	
PRPP 551G	Psychology of Injury: Prevention, Rehabilitation & Return to Participation
PRPP 552G	Psychological Interventions and Strategies in Sport and Performance
NUTR 580	Sports Nutrition
Electives (minimum 9 credits)	
Sport and Performance Psychology (SPP)	
PRPP 551G	Psychology of Injury: Prevention, Rehabilitation & Return to Participation
PRPP 552G	Psychological Interventions and Strategies in Sport and Performance
PRPP 854	Professional Studies in Sport & Performance Psychology
Select three of the following:	
COUNS 714	Essentials of Counseling Practice
COUNS 715	Multicultural Counseling
COUNS 814	Professional, Ethical and Legal Issues in Counseling Psychology
PRPP 554G	Cultural and Contextual Factors in Sport and Performance Psychology
PRPP 555G	Professional Ethics and Standards in Sport and Performance Psychology
PRPP 855	Mentored Fieldwork in Sport and Performance Psychology
Rehabilitation Sciences (RS)	
18 credits of courses selected in collaboration with faculty advisor that reflect an area of specialization to match the student's career and professional interests. At least 6 credits must come from ATRAIN, CSD, OCCTHPY, PRPP, or PT graduate level courses.	
Total Credits	**30**

Additional Requirements

Major Professor as Advisor

The Graduate School requires that each student have a major professor to advise and approve the program of study. Students are assigned a faculty advisor upon acceptance to the program.

Time Limit

The student must complete all degree requirements within seven (7) years of initial enrollment.

Rehabilitation Science and Technology MS Learning Outcomes

Upon completion of the MS in Rehabilitation Science and Technology, the students will be able to:

1. Demonstrate a systematic and critical understanding of existing conceptual, philosophical, theoretical, empirical, and/or professional practice knowledge to promote human health, performance, and/or quality of life.
2. Demonstrate a comprehensive understanding of methods and techniques applicable to their own research and/or professional practice.
3. Demonstrate originality and critical understanding on how to apply concepts, frameworks, and research evidence to enhance human health, performance, and/or quality of life.
4. Demonstrate their ability to exercise self-initiative, personal responsibility, and decision-making skills that are consistent with their professional competencies and ethical guidelines.
5. Demonstrate their ability for independent learning and to advance their knowledge and skills beyond graduation.

In doing so, the students can:

1. Explain how various biopsychosocial and sociotechnical systems interact to influence human health, performance, and/or quality of life.
2. Compare and contrast how various philosophical, theoretical, and professional practice frameworks explain human health, performance, and/or quality of life.
3. Analyze and apply systems and frameworks, concepts, and research evidence to enhance human health, performance, and/or quality of life.
4. Collaborate with other professionals using innovative methods, interventions/approaches, evaluations, and assessments, to promote human health, performance, and/or quality of life across the lifespan.