

Doctoral Curriculum – Graduate Institute of Rehabilitation Science, Chang Gung University

(For students admitted in Fall, 2025)

Required /Elective	Course	Credit	Year	1 <sup>st</sup> semester	2 <sup>nd</sup> semester	Core area	Required /Elective	Course	Credit	Year	1 <sup>st</sup> semester	2 <sup>nd</sup> semester		
R	Seminar (1)	1	1	v		The Musculoskeletal System and Rehabilitation Engineering	R	Advances in Rehabilitation Engineering of Musculoskeletal System	3	1		v		
E	Independent Study (I)	1		v			E	Advanced Topics in Motor Control (for MS and PhD)	3		v			
E	Independent Study (II)	1			v		E	Biomedical Instrumentation (for MS and PhD)	3		v			
R	Research Design	2		v			E	Translational Science and Evidence-based Research (for MS and PhD)	3			v		
R	Seminar (2)	1			v		E	Biomedical Signal Analysis (for MS and PhD)	3		v			
R	Evidence Based Medicine in Rehabilitation	2			v		E	Scientific Assessment of Rehabilitation	2			v		
R	Seminar (3) (English presentation)	1	2	v		Health and Exercise Science	E	Decision-makings for clinical professions in rehabilitation science (for MS and PhD)	3	2		v		
R	Statistics	3		v			E	Sensory Motor Analysis in Health and Disease (for MS and PhD)	3		v			
E	Independent Study (III)	1		v			R	Research on Health-Related Exercise Prescription (Practice)	2(1)			v		
R	Seminar (4) (English presentation)	1			v		E	Applied Physiology (for MS and PhD)	3		v			
R	Scientific Literature Writing	1			v		E	Biomedical Instrumentation (for MS and PhD)	3		v			
E	Independent Study (IV)	1			v		E	Research Topics in Geriatrics and Long-term care (for MS and PhD)	3			v		
R	Teaching Practicum	0	3	v		Neuroscience and Movement Science	E	Evidence-based research in healthy and successful aging (practicum)	2(1)	1		v		
R	Scientific Writing	0					E	Decision-makings for clinical professions in rehabilitation science (for MS and PhD)	3			v		
							E	Research on Sport Sciences (for MS and PhD)	3			v		
							E	Scientific Assessment of Rehabilitation	2			v		
							E	Advanced sport injury rehabilitation (practicum)	2(1)			v		
							E	Motion analysis and its application in human	3			v		
								E	Biomedical methodology	3	2	v		
								E	Respiration and Circulation (for MS and PhD)	3			v	
								R	Neuroscience Seminar	3		1	v	
								E	Advanced Topics in Motor Control (for MS and PhD)	3			v	
								E	Biomedical Instrumentation (for MS and PhD)	3			v	
								E	Cognitive neuroscience	3			v	
							E	Developmental delay and human development	3	v				
							E	Biomedical Signal Analysis (for MS and PhD)	3	v				
							E	Advanced neurological rehabilitation	3		v			
							E	Neuroplasticity and Rehabilitation (for MS and PhD)	3	v				
							E	Sensory Motor Analysis in Health and Disease (for MS and PhD)	3	2	v			
							E	Monograph in child behavior and development	3			v		
							E	Neurobiology	3			v		
							E	Biomedical methodology	3		v			
							E	Molecular Neurobiology	3			v		

1. Graduation Credits: 30 credits.

(1) Required Courses: 12 credits. This includes 3 credits of statistics. The available statistics courses are as follows: Biostatistics (3 credits) and Multivariate Analysis (3 credits) offered by the Graduate Institute of Clinical Medical Sciences.

(2) Elective Courses: 12 credits. Credits from courses taken outside the department (including relevant courses from other institutions) can be recognized after approval by the Ph.D. program curriculum committee. This must include at least 3 credits of core area required electives, 3 credits of core area electives, and 3 credits of interdisciplinary electives.

(3) Thesis: 6 credits (awarded upon passing the degree examination and submitting the thesis after approval).

2. English Proficiency Requirement: Students must meet the English graduation threshold to graduate, which includes the following two parts:

(1) English Presentation Evaluation in Seminar Courses: Second-year students must present an English oral report in a seminar course, and the content will be graded by the instructor.

(2) English Proficiency Assessment: One of the following options can be chosen:

(A) English Oral Expression Evaluation: Students will deliver an English oral report during their first or second year in a seminar course. The instructor will evaluate the student's English proficiency based on topic development, delivery, and language use. If a student fails to meet the passing criteria (each component is graded on a 5-point scale, with 3 points being the passing score), they must deliver the report again. Students must apply in advance to the teaching assistant to deliver this report, and the oral presentation must be recorded on the day of the report.

(B) Passing an English Proficiency Test:

a. Pass the high-intermediate level of the General English Proficiency Test (GEPT).

b. TOEFL score of 510 or above.

c. Computer-based TOEFL score of 181 or above, or Internet-based TOEFL score of 65 or above.

d. Foreign Language Proficiency Test (FLPT-English) with an oral score of S-2 or above. e. IELTS score of 5.5 or above.

e. TOEIC score of 630 or above.

f. EnglishScore (British Council) Core Skill test with a passing standard of B2 or above.

3. 「Evidence Based Medicine in Rehabilitation」 is offered every other year, in odd-numbered academic years. 「Research Design」 is offered every other year, in even-numbered academic years.
4. 「Advances in Rehabilitation Engineering of Musculoskeletal System」 is offered every other year, in odd-numbered academic years. 「Neuroscience Seminar」 is offered every other year, in even-numbered academic years.
5. 「Biomedical Instrumentation」 is offered every other year, in odd-numbered academic years. 「Sensory Motor Analysis in Health and Disease」 is offered every other year, in even-numbered academic years.
6. 「Applied Physiology」 is offered every other year, in odd-numbered academic years. 「Biomedical methodology」 is offered in even-numbered academic years.
7. 「Research on Sport Sciences」 is offered every other year, in odd-numbered academic years. 「Respiration and Circulation」 is offered every other year, in even-numbered academic years.
8. 「Teaching Practicum」 is offered every other year, in even-numbered academic years.