

## Ph.D. Program for Medical Engineering and Rehabilitation Science Fall Semester 110 Elective Courses

Course	Type	Credit	1st year		2nd year		3rd year	
			Fall	Spring	Fall	Spring	Fall	Spring
Biostatistics	Elective	2	2	0	0	0	0	0
Research design and scientific writing	Elective	2	2	0	0	0	0	0
Biomedical imaging principals & applications	Elective	2	2	0	0	0	0	0
Special topics on advanced numerical analysis	Elective	2	2	0	0	0	0	0
Special topics on scientific computing	Elective	2	2	0	0	0	0	0
Special topics in rehabilitation science	Elective	2	2	0	0	0	0	0
Research fundamentals in human movement science	Elective	2	2	0	0	0	0	0
Special topics on biomedical materials	Elective	2	2	0	0	0	0	0
Special topics on medical electronics	Elective	2	2	0	0	0	0	0
Medical devices regulatory & intelligent property in health industry	Elective	2	0	2	0	0	0	0
Clinical application of biomedical engineering	Elective	2	0	2	0	0	0	0
Researches & innovations in rehabilitation industry	Elective	2	0	2	0	0	0	0
Applied ergonomics	Elective	2	0	2	0	0	0	0
Special topics on healthcare marketing	Elective	2	0	2	0	0	0	0
Neural network theory and applications	Elective	2	0	2	0	0	0	0
Principles of medical equipment design and patent portfolio	Elective	2	0	0	2	0	0	0
Computer aided design and engineering	Elective	2	0	0	2	0	0	0
Lasers for medical applications	Elective	2	0	0	2	0	0	0
Management and regulation of medical devices	Elective	2	0	0	0	2	0	0
Advanced biomedical materials	Elective	2	0	0	0	2	0	0
3D printing in medical application	Elective	2	0	0	0	2	0	0
Special topics on machine learning programming	Elective	2	0	0	0	2	0	0
Advanced fluorescence microscopy techniques	Elective	2	0	0	0	0	2	0
Advanced ergonomics	Elective	2	0	0	0	0	0	2
Nanomedicine: cancer diagnostics and therapy	Elective	2	0	0	0	0	0	2