

Course List for Master of Science Degree Program in Innovation for Smart Medicine, Chang Gung University (for students admitted in **Fall, 2025)**

module	(R/E)	Course Name	Year	Credit	1st	2nd	Instructor	Remarks
Required	(R)	Smart Medical Material Software Innovation	1	3	3		陳嶽鵬	
	(R)	Smart Healthcare Topic: Field Applications	1	2	2		裴育晟	
	(R)	Special Topics on the Progress of Innovative Healthcare Advancements	1	2		2	郭昶甫	
Innovative design & Management	(E)	Medical Design	1	3	3		黃建嘉	
	(E)	Regulations and Risk Management for Smart Medical Devices	1	3	3		許建隆	
	(E)	Research Methods (1)	1	3	3		蕭文龍	
	(E)	Research Seminar I	1	2	2		鄧景宜	
	(E)	Topics in Design Management	1	3	3		邱文科	
	(E)	Innovative Product Design and Development	1	3		3	曾俊儒	
	(E)	Policies and Management of Information Security	1	3		3	許建隆	
	(E)	Research Methods(2)	1	3		3	許光宏	
	(E)	Research Seminar II	1	2		2	鄧景宜	
	(E)	Mixed method: Research design and application	1	3		3	蕭文龍	
(E)	Decision Science and Applications	1	3		3	陳亭羽		

	(E)	Creative Thinking and Method	1	3	3		蔡采璇	
	(E)	Scientific Research and Paper Publication	2	2	2		鄧景宜	
	(E)	Advanced Topics in Management I	2	3	3		蕭文龍	
	(E)	Topics in Statistics	2	3	3		裘厥庸	
	(E)	Production and Operations Management	2	3	3		古思明	
	(E)	Bioinformatics analysis	1	2	2		鄧致剛	
	(E)	Practical Bioinformatics	1	1	1		鄧致剛	
	(E)	Business strategy for the biotech and health industries	2	2	2		廖珮茹	Offered by Master Program of Health Care Industry
	(E)	Medical Device Productization Strategy	1	3		3	黃建嘉	
	(E)	Biomedical Startup Industry Lecture	2	2		2	郭昶甫	
	(E)	Advanced Topics in Management II	2	3		3	蕭文龍	
	(E)	International Scholarly Communication	2	2		2	鄧景宜	
	(E)	Innovation Design Management and Practice	1	3		3	邱文科	
	(E)	Financial Management of Biotech and Health Industry	2	2		2	陳佰弦	Offered by Master Program of Health Care Industry
Healthcare management	(E)	Occupational Medicine and Current Researches	1	3	3		曹又中	
	(E)	Healthcare and Society	1	3	3		盧瑞芬	

	(E)	The Application of Interdisciplinary CollaborateInnovation Design for Medical Industries	1	3	3		梁又照	
	(E)	Health Policy and Politics	1	2	2		林欣柔	Offered by Health Care Management
	(E)	Health Economics	1	3		3	盧瑞芬	Offered by Health Care Management
	(E)	The Application of Innovation Design Thinking to Medical Industry	1	3		3	梁又照	
	(E)	Design Thinking in Health Care	1	2		2	葉婷婷	
	(E)	Comprehensive Geriatric Care	1	2		2	林佩欣	Offered by Master Program of Health Care Industry
	(E)	Activity Analysis and Applications of Assistive Technology	1	2		2	黃湘涵	Offered by Master Program of Health Care Industry
	(E)	Topics in Health Economics	2	3	3		盧瑞芬	
	(E)	Workshop of Occupational and Environmental Medicine	1	3		3	曹又中	
	(E)	Health and Information Systems Theories	2	3		3	許建隆	
	(E)	Topics in Healthcare Management	2	3		3	邱月暇	
	(E)	Design Strategy and Innovation for Assistive Technology Products	2	3		3	蔡采璇	
	(E)	Special Topics in Long-term Care Management	1	2		2	王惠玄	Offered by Health Care Management
Intelligent Computing	(E)	Image Processing	1	3	3		萬書言	Offered by Master of Information Management
	(E)	Introduction to Deep Learning	1	2		2	高煥堂	
	(E)	Machine Learning and Its Medical Applications	1	3		3	陳嶽鵬	

	(E)	Internet of Things	1	3		3	吳世琳	Offered by Master of Computer Science
	(E)	Artificial Intelligence in Natural Language Processing and Applications	2	3		3	陳嶽鵬	
	(E)	The Classification Topics in Artificial Intelligence	2	3		3	萬書言	
	(E)	Application Project for Deep Learning	2	2		2	林詩偉	
	(E)	Seminar on Intelligent Imaging Systems in Healthcare: Applications and Clinical Perspectives	1	3	3		范佐搖	
	(E)	AI Application Planning and Practice for Smart Healthcare	2	3		3	范佐搖	

Remarks	<p>1. Minimum requirement for graduation: 30credits</p> <p>(1) Credits from required courses: 7credits</p> <p>(2) Credits from elective courses: 17credits from at least three elective modules, at least 2 credits from each of the chosen elective modules</p> <p>(3) Six thesis/technical report credits are awarded upon completion of oral defence</p> <p>2. Students are required to pass the English certification standard to obtain graduation qualifications.</p> <p>3. At most 10 graduate level credits taken from other CGU departments/programs not listed here can be considered towards graduation credits, unless with written approval from the program director.</p>							
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