114th Academic Year, Department of Materials Science, Faculty of Engineering, I-Shou University, Doctoral Program

一、 Core competencies

level	number	Core competencies
School level	C1	Professional Expertise
	C2	Global Perspective
	C3	Innovation and Integration
	C4	Information Technology
	C5	Ethics and Morality
	C6	Social Awareness
	C7	Life Attitudes

Hospital level	CC1-1	Understanding of fundamental engineering theories
	CC1-2	Exposure to practical fields
	CC2-1	Sustainable mindset and global perspective
	CC3-1	Reasoning with logic analytics
	CC4-1	Application and acquisition of new technical information
	CC5-1	Ethics and Morality
	CC6-1	Social Awareness
	CC7-1	Life Attitudes

departmental level	CB 1-1-1	To have the professional knowledge in materials science and engineering
	CB 1-2-1	To have abilities of planning, management and coordination
	CB 2-1-1	To have a sustainable concept and global prospects and the ability of grasping scientific technology evolving trends

departmental level	CB 3-1-1	To have abilities of innovative thinking and independent problem solving
	CB 3-1-2	To have abilities of research project proposing and execution, and academic paper writing
	CB 4-1-1	Possessing the ability to collect and read new knowledge in materials science and from industry, and being capable of self-learning and personal growth
	CB 5-1-1	Ethics and Morality
	CB 6-1-1	Social Awareness
	CB 7-1-1	Life Attitudes

二、 Achievement Metrics

level	number	Achievement Metrics
School level	CSI1-1	Ability to apply professional knowledge and skills
	CSI2-1	Ability to keep abreast of global development and trends
	CSI3-1	Ability to think creatively, integrate resources and solve problems
	CSI4-1	Ability to apply information technology
	CSI5-1	Ability to develop morality and commitment to work as well as environmental and social concerns
	CSI6-1	Ability to plan one's career, collaborate and communicate with others, and promote oneself
	CSI7-1	Ability to accommodate cultural diversity, respect the law and pursue lifelong learning

Hospital level	CSI 1-1-1	Understanding mathematical, physical, and chemical theories
	CSI 1-2-1	Applying engineering knowledge to perform experiments and designs to solve practical problems.
	CSI 2-1-1	Understanding international issues and sustainable trends in industries.

Hospital level	CSI 3-1-1	Integrating and analyzing relevant knowledge to solve interdisciplinary engineering problems.
	CSI 4-1-1	Familiar with engineering technology and tools, and capable of conducting inquiry of new knowledge.
	CSI 5-1-1	Ability to develop morality and commitment to work as well as environmental and social
	CSI 6-1-1	Ability to plan one's career, collaborate and communicate with others, and promote oneself
	CSI 7-1-1	Ability to accommodate cultural diversity, respect the law and pursue lifelong learning

departmental level	I1	Using the professional knowledge in materials to research projects
	I2	Coordinating and managing human resources, equipment, materials, and other resources to complete various projects and reports
	I3	To read and fully understand international academic journal paper as well as attending national or international conferences
	I4	Using the related theories to establish problem solving flow chart
	I5	To accomplish research projects and present project results in forms of academic paper or technical reports
	I6	Using various methods to search and learn newly developed technologies of materials
	CPI5	Ability to develop morality and commitment to work as well as environmental and social
	CPI6	Ability to plan one's career, collaborate and communicate with others, and promote oneself
	CPI7	Ability to accommodate cultural diversity, respect the law and pursue lifelong learning