

I-SHOU UNIVERSITY
Department of Materials Science and Engineering
Curriculum for Doctoral Students Admitted in Academic Year 2025

Category	First Year (2025)		Second Year (2026)		
Required Professional Courses (12Credits)	D07922 Dissertation/Thesis Guide(I) [1]1st D07923 Dissertation/Thesis Guide(II) [1]2nd D07044 Seminar(I) [2]1st D07045 Seminar(II)[2]2nd		D07924 Dissertation/Thesis Guide(III) [1] 1st D07925 Dissertation/Thesis Guide(IV) [1] 2nd D07046 Seminar(III) [2] 1st D07047 Seminar(IV))[2] 2nd D07D00 Doctoral dissertation [0] 2nd D07D01 Research Ethics [0] 2nd		
Elective Professional Courses (≥24Credits) (Elective courses “Independent Study” will not be included.)	D07752 Advanced Metallurgical Thermodynamics [3] D07805 X-ray Crystallography [3] D07751 Advanced Physical Metallurgy [3] D07551 Advanced surface theory [3] D07780 Transmission Electron Microscopy [3] D07557 Advanced electronic ceramics [3] D07559 Advanced composite materials [3] D07813 Diffusion Theory [3] D07609 Advanced solid state physics [3] D07816 Materials Characterization and Analysis [3] D07610 Advanced solid thermo-dynamics [3] D07812 Advanced Phase Transformation [3] D07586 Electron microscopy laboratory [1] D07087 Statistical Thermodynamics and Mechanics [3] D07753 Welding Metallurgy [3] D07766 Mechanical Property Analysis of Materials [3]		D07057 Advanced Chemical Reaction Engineering[3] D07516 Fracture and fatigue of materials [3] D07562 High temperature oxidation and corrosion[3] D07539 Wear of metals [3] D07588 Introduction to carbonaceous materials[3] D07560 Advanced sintering theory[3] D07585 Special topics in electron microscopy [3] D07571 Defect chemistry in ceramics[3] D07902 Special alloys and processes[3] D07582 Steelmaking processing and analysis[3] D07509 Polymer electronic and photonic[3] D07593 Theory of solidification [3]		
Category	Third Year (2027)	Fourth Year (2028)	Fifth Year (2029)	Sixth Year (2030)	Seventh Year 2031)
Elective Professional Courses	D07926 Dissertation/Thesis Guide(V) [1]1st D07927 Dissertation/Thesis Guide(VI) [1]2nd D07564 High resolution electron microscopy [3] D07607 Special topics on thin film materials [3]	D07928 Dissertation/Thesis Guide(VII) [1]1st D07929 Dissertation/Thesis Guide(VIII) [1]2nd D07507 Introduction to biomedical materials [3] D07514 Special topics on optical properties of materials [3]	D07930 Dissertation/Thesis Guide(IX) [1]1st D07931 Dissertation/Thesis Guide(X) [1]2nd	D07932 Independent Study (XI) [1]1st D07933 Independent Study (XII) [1]2nd	D07934 Independent Study(XIII) [1]1st D07935 Independent Study (XIV) [1]2nd
Dissertation	Dissertation required courses without credits (capstone courses)				
Credits required for graduation from the Program	36 Credits				
Note	1. Within the designated period of study, students must complete the total number of credits required for graduation and fulfill the requirements set forth in the “I-Shou University Regulations for the Doctoral Degree Examination” in order to be eligible for graduation.				