## I-SHOU UNIVERSITY Department of <u>Electrical Engineering</u> 4-Year Curriculum for Students Admitted in Academic Year 2025

Category	Freshman Year (2025)		Sophomore Year (2026)		
GE core courses: required (18 credits)	A93A34 Academic English [2]1st A93A28 Codes in Health and Medicine [2] 1st A93A35 Professional English [2] 2nd A93A20 Programming [2] 2nd A93A29 Secret Codes in Intelligent Technologies [2] 2nd A93A21 Civic Literacy in the Era of Globalization [2] 2nd A93A22 Chinese Literature 1.0- Reading, Narration and communication [2] 2nd		A93A23 Chinese Literature 2.0- Critical thinking and creativity in writing [2] 1st A93A15 Physical Education (I) [1] 1st A93A16 Physical Education (II) [1] 2nd		
College-required courses (10 credits)	A8DE01 Introduction to Computer Science [4] 1st A8DF01 Introduction to Computers Exercises [0] 1st A8D001 Calculus (I) [3] 1st A8D002 Calculus (II) [3] 2nd				
Category	Freshman Year (2025)	Sophomore Year (2026)		Junior Year (2027)	Senior Year(2028)
Department-required courses (62 credits)	A01129 Computer Programming [3] 1st A01687 General Physics [3] 1st A01255 Digital Logic [3] 1st A01688 General Physics Laboratory [1] 2nd A01634 Linear Algebra [3] 2nd A01347 Microprocessor Theory [3] 2nd A01010 Electrical Engineering Industry Exploration [1] 2nd	A01213 Engineering Mathematics (I) [3] 1st A01219 Electronics(I) [3] 1st A01221 Electric Circuit Theory(I) [3] 1st A01381 Signal and System [3] 1st A01683 Experiment for Digital Electronics [1] 1st A01686 Analog Electronics Laboratory [1] 1st A01214 Engineering Mathematics (II) [3] 2nd A01220 Electric Circuit (II) [3] 2nd A01222 Electronics (II) [3] 2nd A01224 Electromagnetics (I) [3] 2nd A01845 Electric machinery(I) [3] 2nd A01681 Microprocessor Laboratory [1] 2nd	A01325 A01383 A01324 A01385 A01847 A01923	Electromagnetics (II) [3] 1st Communication System [3] 1st Control Engineering [3] 1st Basic Power Systems [3] 1st Introduction to Electrical Engineering Laboratory [1] 1st Special Topic Studies (I) [1] 2nd	A01924 Special Topic Studies(II) [1] 1st A01710 English ability [0]
Departmental electives (≧8 credits)	A01674 Introduction to Intelligent Robotics [3] A01992 Introduction to Optoelectronics Technology [3] A01921 Mathematics and Logic [3] A01988 Artificial Intelligence Essentials [3]	A01839 Introduction to Digital Systems [3] A01698 Programmable Logic Controller [3] A01851 Probability [3]	A01386 A01460 A01994 A01840 A01476 A01424 A01675 A01846 A01707 A01704 A01462 A01708 A01341 A01702	Advanced Power Systems [3] Power Electronics [3] Power Converter Design and Simulation [3] Smart Grid Technology and Applications [3] Power Equipment [3] Industrial Electronics [3] Technology and Application of Solar Photovoltaic [3] Electric machinery(II) [3] Synthesis, Simulation and Verification of Field Programmable Chip [3] Practice in Control Application [3] Digital Communications [3] Principle of Measurement for Microwave and Optoelectronic devices [3] Numerical analysis [3] MATLAB Program Language [3]	A01355 Industrial Power Distribution [3] A01434 Topic on Power Engineering [3] A01602 Power system stability [3] A01416 Linear Systems [3] A01622 Computer vision [3] A01444 Artificial Intelligience [3] A01478 Optimum Control [3] A01715 Cellular Neural Networks [3] A01993 Embedded System [3] A01144 Microwave Engineering [3] A01431 Antenna Design [3] A01458 Optoelectronic components [3] A01495 Optoelectronics [3] A01677 Integrated Optics [3] A01848 Practical Training(I) [3] 1st A01849 Practical Training (II) [3] 2nd
GE liberal arts education	GE liberal arts education: elective, 10 credits from "Humanities and Arts", "Nature and Technology", "Social Science"				
Cross-domain electives	Up to 20 credits earned from courses, whether required or elective, offered by other departments/programs at I-Shou University or its partner universities will be recognized by the Department as credits from electives.				
Credits required for graduation from the Department	128 Credits  *** 電機工 *** 程學系 ***  ** ** ** ** ** ** ** ** ** ** **				
Note	1.Students are required to meet the "English Proficiency" requirements set by the Department, in addition to earning the required number of credits to be eligible for graduation.  2.Before graduation, students are required to take at least one required cornerstone course offered by another college. The credits earned from such courses may be recognized as part of the credits under the category of Liberal Arts Education, but only a maximum of four credits will be recognized accordingly. (For more details about required cornerstone course offered by different colleges, please refer to the announcement on the website of the Curriculum Section.)				