

I-SHOU UNIVERSITY Department of Mechanical and Automation Engineering 4-Year Curriculum for Students Admitted in Academic Year 2026

Category	Freshman Year		Sophomore Year	
GE core courses: required (16credits)	A93A34 Academic English [2]1st A93A35 Professional English [2]2nd A93A29 Secret Codes in Intelligent Technologies [2]2nd A93A36 Chinese Literature - Speculative and Expression [2] 2nd		A93A28 Codes in Health and Medicine [2]1st A93A20 Programming [2]2nd A93A21 Civic Literacy in the Era of Globalization [2]2nd A93A15 Physical Education (I) [1]1st A93A16 Physical Education (II) [1]2nd	
College-required courses (18 credits)	A83819 Calculus (I) [2]1st A83817 Calculus e-learning (II)- [1]1st A83815 Physics(I) [3]1st A83E03 Deciphering sustainable development [2]2nd A83812 General Physics Laboratory [1]2nd		A83820 Calculus (II) [2]2nd A83818 Calculus e-learning (II) [1]2nd A83816 Physics(II) [3] 2nd	
Category	Freshman Year	Sophomore Year	Junior Year	Senior Year
Department-required courses (46 credits)	A04243 Mechanical Engineering Materials [3]1st A04246 Introduction to smart machinery [2]1st A04195 Computer-Aided Design and Mechanical Drawing [3]1st A04130 Applied Mechanics -Statics [3]2nd	A04217 Thermodynamics (I) [3]1st A04339 Computer aided design and practice [1]1st A04230 Electric Circuits [3]1st A04285 Applied Mechanics -Statics [2] 1st A04214 Practice in mechanical workshop [1]2nd A04239 Mechanisms [3]2nd A04323 Manufacturing Processes (I) [3]2nd A04226 Strength of Materials [3]2nd	A04319 Mechanical Engineering Laboratory (I) [1]1st A04347 Electrical Engineering & Electronics Labor [1]1st A04216 Implementation in mechanical workshop [1]1st A04317 Fluid Mechanics [3]1st A04349 Fundamental of Machine Design [3]1st A04320 Mechanical Engineering Laboratory (II) [1]2nd A04325 Automatic Control [3]2nd A04409 Mechatronics Laboratory [1]2nd A04369 Practical Project (I) [2]2nd	A04009 English Proficiency Enhancement [0] 1st A04B98 Interdisciplinary Competencies [0] 1st
Departmental electives (≥16credits)	A04196 Smart Materials Science [3] A04145 Global Communication Skills [2] A04215 Introduction to green energy [3]	A04236 Thermodynamics (II) [3] A04062 Engineering Mathematics(II) [3] A04070 Electronics [3] A04061 Applied Mechanics -Dynamics [3] A04078 Practices of the smart machinery [2] A04359 Smart Energy [3] A04552 Design and Analysis of Computer Aided Engineering [3] A04284 Energy storage and energy saving technologies [3]	A04336 Manufacturing process for Engineering Materials(II) [3] A04368 Sensor technology [3] A04420 Mechatronics [3] A04311 Applications of Photovoltaic Technology [3] A04071 Heat Transfer [3] A04479 Logic Circuits [3] A04372 Design of Machine Elements [3] A04463 Principles and Applications of PLC [3] A04391 Pneumatic Engineering [3] A04386 Non Traditional Manufacture Technology [3] A04472 Computer Aided Design & Manufacturing [3] A04512 Machine Learning [3] A04410 Electric Vehicle [3] A04505 Electric vehicle design [3]	A04447 Rapid Prototyping Principles and Technology [3] A04677 Modern Control Systems [3] A04685 Engineering Computational Methods [3] A04441 metal Heat Treatment [3] A04632 Application of Computational Fluid Dynamics [3] A04663 Mechanism Design Fluid Dynamics [3] A04414 Project practice for 3D printing [3] A04383 Industrial Internship (I) [3] A04513 Industrial Internship (II) [3] A04648 Introduction to MEMS [3] A04072 Flight Principle And Maneuvering Techniquw For Uavs [3] A04490 Numerical Control Machine [3] A04638 Micro-Sensory Sytem [3] A04550 Multi-axis machining and manufacturing technology [3] A04557 Working Capability and Occupational Ethics [2] A04553 Single-chip Controller [3] A04555 Semiconductor Fabrication Technology [3]
GE liberal arts education	GE liberal arts education: elective, 10 credits from “Humanities and Arts”, “Nature and Technology” , “Social Science” , 2 credits from “ College Humanistic Literacy Courses””.			
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			
Note	Undergraduate students admitted to the University in or after Academic Year 2026 are required to fulfill all of the following requirements during the prescribed duration of study to be eligible for graduation: I.Earning the number of course credits required by their major department; II.Completing one required cornerstone course offered by another college and earning a passing score; the credits earned from this course may be counted toward the Liberal Arts Education category, up to a maximum of four credits; III.Fulfilling one of the University’s English proficiency requirements for graduation by submitting a valid test report recognized by the University; IV.Interdisciplinary Learning: Completing a minor or a secondary major recognized by the University, or completing an interdisciplinary credit program or micro-credit program offered by the University and obtaining a certificate of completion issued by the program.			