National Taiwan Ocean University

0702-Department of Mechanical and Mechatronic Engineering (For the academic year 2024; Admission Status: International Students)

Subject category	Subject name	Credit points	Cross-disciplinary subjects	First academic year		Second academic year		Third academic year		Fourth academic year		Fifth academic year		Remarks
				F	S	F	S	F	S	F	S	F	S	
General education courses	Swimming Graduation Requirements B92A12P5	0	Unlimited					0						Those who meet one of the following conditions will be considered eligible: 1. Completed a swimming course during the academic period. 2. Participated in the school's swimming proficiency test and received certification for completing a fifty-meter swim from the Physical Education Office. 3. Previously engaged in swimming competitions, with recognized participation or performance certificates from the organizing authority. 4. Certified by a medical professional as unfit or unable to participate in swimming activities, with a specified period during which swimming is prohibited, and this period exceeds the remaining duration of the student's enrollment at the school.
	English Graduation Requirements B9D03TVS	0	Unlimited					0						According to the English graduation requirement implementation guidelines of this university, students who do not meet the English proficiency standards during their studies must provide proof of their failure. After review and registration by each department, they must also enroll in the "English

														Improvement" course (zero credits) to substitute for the English proficiency test. Only those who pass this course will be eligible for graduation.
	Chinese	6	Unlimited	3	3									Foreign students are required to complete at least six credits.
	English B9B01968、B9B01969	4	Unlimited	2	2									Freshman English is divided into two semesters, each worth 2 credits. For international students outside the English-speaking field, a total of four credits must be completed in the foreign language area. English-speaking nationality students are required to take foreign language courses in a language other than their native language.
	11- Liberal arts courses	6	2			2	2	2						This field encompasses four sub-areas: humanities exploration, societal dynamics, technological innovation, and interdisciplinary sustainability. A minimum of two credits is required for interdisciplinary sustainability, with each sub-area allowing a maximum of four credits. The College of Engineering has course regulations that permit the selection of courses from the four major areas. The semesterly elective distribution for the General Education courses is provided for graduation qualification assessment and credit exemption purposes. For elective distribution and course regulations for each department, please refer to the General

														Education Center's webpage on "Liberal Arts Courses," specifically the "Credit Distribution and Course Regulations for Required Subjects in Each Department from the 112th Academic Year Onward."
	Introduction to Artificial Intelligence B9M01024	2	Unlimited	2										Required Liberal arts Courses for Freshmen
	Introduction to Oceanography B9M01Z64	2	Unlimited		2									A required liberal arts courses for all freshmen at the university.
	19- Physical education courses	0	Unlimited	0	0	0	0							2 hours of class per week.
Subtotal of general education course credits		20		7	7	2	2	2	0	0	0	0	0	
Departmental required courses	Engineering Graphics B7201083	1	Unlimited	1										
	Engineering Graphics Drawing B7201081	1	Unlimited	1										3 hours of Internship per week.
	Matlab Programming Language B7201ML1	3	Unlimited	3										
	Work Shop Practice B7201099	1	Unlimited	1										4 hours of Internship per week. One class is offered each semester; Class A is for the fall semester, and Class B is for the spring semester.
	Precision Measurement and Processing Lab. B7201R1S	1	Unlimited		1									One class is offered each semester; Class A is for the fall semester, and Class B is for the spring semester.
	Calculus B7211M97、B7221M97	6	Unlimited	3	3									
	General Physics B7201L66	3	Unlimited		3									
	General Physics Lab.	1	Unlimited		1									2 hours of Internship per week.

	B7201L6K													
	Mechanical Drawing B7201T80	1	Unlimited		1									
	Mechanical Drawing Work Shop B7201T81	1	Unlimited		1									3 hours of Internship per week.
	Statics B7201U24	3	Unlimited		3									
	Engineering Mathematics (I) B720208A	3	Unlimited			3								
	Engineering Mathematics (II) B7202088	3	Unlimited				3							
	Applied Electronics B7202U62	3	Unlimited				3							Prerequisite: "Electric Circuits"
	Electric Circuits B7202P48	3	Unlimited			3								
	Thermodynamics (I) B7202S42	3	Unlimited			3								
	Thermodynamics (Ⅱ) B7202S43	3	Unlimited				3							
	Dynamics B7202H30	3	Unlimited			3								
	Engineering Materials B7202070	3	Unlimited			3								
	Mechanics of Materials B7202690	3	Unlimited				3							
	Machine Design B7203T79	3	Unlimited						3					
	Mechanism B7203T74	3	Unlimited					3						
	Manufacture Process B7203T83	3	Unlimited					3						
	Fluid Mechanics B7203925	3	Unlimited					3						

	Heat Transfer B7203S51	3	Unlimited						3					
	Automatic Control Systems (I) B7203635	3	Unlimited					3						
	CapStone-Research B7203I36	2	Unlimited						2					
	Mechanical and Mechatronic Engineering Laboratory (I) B7203N6W	1	Unlimited						1					3 hours of Internship per week.
	Mechanical and Mechatronic Engineering Laboratory (Ⅱ) B7204N6V	1	Unlimited							1				3 hours of Internship per week.
	General Chemistry(I) B7201L60	2	Unlimited	2										
	General Chemistry Lab. B7201L6G	1	Unlimited	1										2 hours of Internship per week.
Subtotal of departmental required credits		74		12	13	15	12	12	9	1	0	0	0	
Departmental Required Courses of Specialty	23-Departmental Required Courses of Specialty	12	Unlimited					3	3	3	3			Referring to the regulations for course requirements in the study domain, courses in the main domain are not restricted by academic year, and a minimum of 12 credits of required and elective courses in the study domain must be completed.
Subtotal of departmental required courses of specialty credits		12		0	0	0	0	3	3	3	3	0	0	
Total credits		106		19	20	17	14	17	12	4	3	0	0	
Total required credits		106												
Minimum elective credits		18												
Minimum graduation credits		124												

Note on minimum elective credits	At least 12 credits of elective courses from this department are required.
Note on minimum graduation credits	1 To graduate, students must complete a minimum of 98 credits of courses offered by the department. This includes compulsory common professional courses (74 credits), compulsory and elective courses in the chosen major area (at least 12 credits), and 12 credits of other elective courses offered by the department. 2 Students must choose one major area based on their interests and take the required courses within that area, which are mandatory credit requirements. Please refer to the course regulations for each major area for details on compulsory courses. 3 Liberal arts courses are limited to 2 credits and are included in the "minimum graduation credits." 4 National defense education is not included in the calculation of "minimum graduation credits."
Remarks	1 Regarding the courses listed in the curriculum of the College of Engineering from other departments, students may apply for exemption in writing. Upon approval by the department chair, these courses may be considered as elective credits for our department. 2 Double major students in our department should complete all required courses and elective courses totaling 12 credits. 3 Once students have chosen their major and minor fields, the final deadline for adjusting field groups is before the start of the fourth academic year. No adjustments will be accepted after this deadline.