Institute of Construction Engineering
Curriculum Requirements for Enrollees in the Academic Year 111 (Fall 2022)

Program	Master's Program for the Day Division	
Group	None	
Class Type	Regular Class	
Special Program	None	
Curriculum Committee	Department Curriculum	
	College Curriculum	
	University Curriculum	111.06.06
	Academic Affairs	111.06.06
Graduation Credits /Study Duration	At least 30 credits required (plus 6 thesis credits), with a study period of 1－4 years; actual graduation credits based on the table below.	
Credit Load per Semester	The courses and credits required for each semester are determined by the respective departments (or institutes). However, during the first academic year, the total number of credits per semester must not be fewer than 6 credits and not exceed 18 credits.	
Required and Elective	Credits	Subject Category
Required	6 Credits	Major Requirements (including Thesis)
Elective	24 Credits	Major Elective
Other Regulations		
Remarks	"Computer Course" means computer access is required (computer and internet usage fee).	

First Semester, First Year					Second Semester, First Year				
Course	Course	Course Name	Credits / Hours	Notes	Course	Course	Course Name	Credits / Hours	Notes
Major Required	M0J007	Seminar(1)	0/2		Major Required	M0J008	Seminar(2)	0/2	
Major Elective	M0JB23	Environmental Applied Geology	3/3		Major Elective	M0JA09	Nonlinear Behavior of Structures	3/3	
Major Elective	M0JA04	Advanced Reinforced Concrete	3/3		Major Elective	M0JA11	Advanced Structural Analysis	3/3	
Major Elective	M0JA06	Advanced Engineering Materials	3/3		Major Elective	M0JA14	Advanced Reinforced Concrete	3/3	
Major Elective	M0JA07	Applied Statistics	3/3		Major Elective	M0JA17	Advanced Asphalt Material	3/3	
Major Elective	M0JA24	Overseas Studies	2/2		Major Elective	M0JA20	Project Construction Management	3/3	
Major Elective	M0JA30	Advanced Material Mechanics	3/3		Major Elective	M0JA22	Structural Testing	3/3	
Major Elective	M0JA31	Advanecd Topics in Environmental Engineering	3/3		Major Elective	M0JA31	Advanecd Topics in Environmental Engineering	3/3	
Major Elective	M0JB01	Advanced Soil Mechanics	3/3		Major Elective	M0JB01	Advanced Soil Mechanics	3/3	
Major Elective	M0JB02	Advanced Foundation Engineering	3/3		Major Elective	M0JB06	Soil and Water Disaster Prevention Technique	3/3	
Major Elective	M0JB03	Advanced Rock Mechanics	3/3		Major Elective	M0JB10	In-situ Observation and Evaluation of Foundation Engineering	3/3	
					Major Elective	M0JB11	Reinforcement and Improvement of Soil	3/3	
					Major Elective	M0JB21	Shield Tunnel	3/3	
					Major Elective	M0JB22	Nondestructive Testing and Evaluation	3/3	

First Semester, Second Year					Second Semester, Second Year				
Course	Course	Course Name	Credits / Hours	Notes	Course	Course	Course Name	Credits / Hours	Notes
Major Required	M0J003	Seminar(3)	0/2		Major Required	M0J011	Thesis	6/6	
Major Elective	M0JA08	Finite Element method	3/3		Major Required	M0J004	Seminar(4)	0/2	
Major Elective	M0JA16	Earthquake Engineering	3/3		Major Elective	M0JA19	Measurment and analysis of micro-vibration	3/3	
Major Elective	M0JA18	Behavior of Hardened Properties of Concrete	3/3		Major Elective	M0JA21	Eoc-Material	3/3	
Major Elective	M0JB12	Soil Improvement	3/3		Major Elective	M0JA27	Application of Geomatics Technology	3/3	
Major Elective	M0JB14	Deep Excavation	3/3		Major Elective	M0JA29	Application of Geomatics and Remote Sensing	3/3	
Major Elective	M0JB15	Slope Stability Analysis and Disaster Prevention	3/3		Major Elective	M0JB17	Analysis of artificial intelligence in engineering applications	3/3	
Major Elective	M0JS27	Resource recycling technology	3/3		Major Elective	M0JB19	Urban Disaster Prevention	3/3	