

Master's degree minimum requirements

【Civil Engineering Program】

Completion of master thesis & 30 credits to fulfill Instruction A & B)

- A. To pass intermediate presentation exam & final presentation (including 2 credits for Advanced Engineering & 2 credits for Engineering Seminar)
- B. To earn 26 or more credits listed below;
 - B-1. 6 or more credits from Module A
 - B-2. 6 or more credits from Module B
 - B-3. 4 or more credits from Module C & D

Master's candidate must fulfill the requirements of "Registration Guideline".

【Graduate school of Engineering】

Master thesis & 30 credits listed below;

- 1. 6 or more credits from "Advanced Subjects"
- 2. 6 or more credits from "Advanced Specialized Subjects"
- 3. 2 or more credits from "Professional Skill Developments"

	Fall 2019		Spring 2020		Fall 2020		Spring 2021	
	Autumn	Winter	Spring	Summer	Autumn	Winter	Spring	Summer
Master theis	(Review) (Plan)					(Intermediate presentation exam)		Final presentation Advanced Engi- neering (2◇) * Engineering Seminar (2◇) *
Module A (Civil core subject) (Min. 6 credits)			[IM1677] Advanced Data Analysis (2☆)◆J(E) [IM250] Field Survey Method (2☆)◆J(E) [IM141] Research Planning (2☆)◆J(E) [IM119] Numerical Analysis (2☆) E [IM131] Geo-Spatial Information Science (2☆)◆J(E) [IM112] Advanced Earthquake Engineering (2☆) E					
Module B (Civil specialized subject) (Min. 6 credits)								
Structural & material			[IM111] Advanced Concrete Engineering (2◎) E [IM118] Advanced Structural Analysis (2◎) E		[IM212] Advanced Steel Structures (2◎) E			
Geotechnical	[IM114] Advanced Geomechanics and Design (2◎) E		[IM115] Risk Management in Natural Disaster Prevention (2◎) E		[IM113] Advanced Geotechnical Modeling and its Application (2◎) E		[IM121] Geo-environmental System Engineering (2◎) E [IM140] Mechanics of Geomaterials (2◎) E	
Hydraulic & water resources	[IM222] Environmental Fluid Mechanics (2◎) E				[IM223] Advanced Ocean and Coastal Engineering(2◎) E		[IM214] River Engineering (2◎) E	
Planning			[IM220] Practical Application of Aesthetic Design in Civil Engineering (2◎) E		[IM224] Urban Development Project (2◎) E		[IM211] Urban Transport Planning (2◎) E	
Environmental	[IM221] Material Cycles and Waste Management(2◎) E [IM217] Advanced Ecological Engineering (2◎) E		[IM218] Environmental Planning (2◎) E [IM219] Groundwater Environmental Systems(2◎) E				[IM216] Biological Water Quality Control Engineering (2◎) E	
Module C (Communicating & presentation skills)	[IM251] Presentation Exercise (2☆) E		[IM252] Urban Engineering & Economics (2☆) E					
Credits in other departments and programs are recommended. KIKAN Education for Graduate School, Graduate Training Program in Decision Science, QREC (Entrepreneurship Education), . . .								
Module D (Project-based learning)		[IM1679] Problem-Solution Seminar (2◇) J(E)	[IM227] Practice in Environmental Studies (2◇) J(E)					
	[IM1692] internship Program (2◇)							

Legend

Thick line : compulsory
Thin line : elective

Language
J : Japanese-based
E : English-based
J(E) : Japanese & English
E(J) : English & Japanese

☆ : Advanced
◎ : Advanced specialized
◇ : Professional skill developments

Subject No. [IM1677] Advanced Data Analysis (2☆) E