

**Doctoral Curriculum in Department of Civil Engineering For 2021**

Architecture Group	Civil Engineering Group				
	Graduate Courses in Sustainable Development	Graduate Courses in Structural Engineering	Graduate Courses in Geotechnical Engineering	Graduate Courses in Management	General Courses
Architectural Disaster Prevention(3)	Water Environment Science (3)	Application of Non-destructive Inspection for Civil Technology (3)	Slope Stability Analysis and Mitigation(3)	Project Management (3)	Application of Innovation Thinking (3)
Topical Studies in Architectural Spatial Theory(3)	Green Energy and Technology(3)	Applications of Health Monitoring and Inspection Technology for Engineering(3)	Analysis of Ground Water Modeling (3)	Cost and Financial Management (3)	English Reading and Writing in Profession (3)
Building Technology Developmen(3)	Conservation of Soil and Water Resources (3)	Application of Elasticity in Engineering Structures(3)	Rock Mechanics and Engineering (3)	Quality Management (3)	Guideline for Writing a Technigue Pape (3)
Green Building and Eco-City(3)	Flood Control Engineering (3)	Analysis of Structural Dynamics(3)	Advanced Soil Mechanics (3)	Schedule Management (3)	The History of Engineering and Technology (3)
Special Topic of Oceanic Architecture and Environment(3)	Green Geomaterials (3)	Special Topics of Structural Mechanics (3)	Advanced Foundation Engineering (3)	Construction Innovation and Creative Design(3)	Civil Construction Practice (3)
Knowledge Economy and Industrial Cluster(3)	Green Industrials and Green Building(3)	Earthquake Resistant Design of Structures(3)	Foundation Engineering Design(3)	Innovative Design of Green Technology(3)	Data Analysis (3)
Regional Innovation and Development Strategy(3)	App Development for BIM Application(3)	Special Topics of Building Structure Design (3)	Tunnel and Underground Space Technology (3)	The Appl:Cation of Information Technology(3)	Quality Control of Construction (3)
Industrial Environment Planning(3)	Assessment of Engineering Structures Integrity (3)	Finite Element Method(3)	Construction Practice in Geotechnical Engineering(3)	Safety and Health for Construction Engineering Management(3)	Special Topics of Civil Engineering (3)
Special Topics on Intelligent City(3)	Geotechnical Disasters and Prevention (3)		Forensic Engineering in Geotechnical Failure Inrestigation(3)		Practice of Surveying Engineering(3)
Special Issues in Urban Renewal(3)	Special Topics in Soil and Water Conservation (3)		Soil Dynamics (3)		
	Special Topics in Sustainable Engineering(3)		The Design and Construction of Major Transportation Projects by the Underground Methods(3)		
	Earthquake Engineering (3)		The Design and Construction of Major Transportation Projects by The Elevated Methods(3)		
	Environmental Remote Sensing (3)				
	Hydraulic Engineering(3)				
	River Restoration and Assessment(3)				
	Environmental Impact Assessment(3)				
	Water Resources Engineering and Planning (3)				

\* Graduation Qualifications:

- 1.24 credits. (Include 4 semesters of Seminar, and at least 2 semesters of Thesis Seminar).
- 2.The dissertation oral examination must be passed.
- 3.Academic Ethics Online Course must be Passed.
- 4.Please refer to the Study Regulations for the Doctoral Program of the Department.

\*The number of courses offered each academic year will be adjusted according to the actual approved standards.