

NATIONAL SUN YAT-SEN UNIVERSITY
Institute of Environmental Engineering
Graduation Requirements for Master Level

	First Semester	Second Semester
1. Prerequisite Courses (Bachelor Level) (Must Choose 4 from 6 Courses)	Engineering Mathematics (I) or Statistics (0); Fluid Mechanics (0); Thermodynamics (I) (0); Environmental Chemistry (0); Biology (0); Hydrology (0)	
2. Requirement	Seminar (1)	Seminar (1)
3. Elective Courses (Must Choose 2 from 4 courses)	Environmental Chemistry Environmental Fluid Mechanics*	Physical Chemical Treatments; Reaction Kinetics
4. Experimental Analysis Courses (Must Choose 1 from 3)	Water and Wastewater Analysis; Solid Waste and Soil Analysis	Sampling and Analysis of Air Pollutants
5. Elective courses (Must Choose 3 from 4 Professional Categories Listed Below)		
Water Pollution Prevention	Biological Treatment for Wastewater*; Water Pollution and Control; Groundwater Characterization and Analysis at Contaminated Sites;	
Air Pollution Prevention	Principles of Air Pollution Engineering; Air Pollution Control & Design; Technologies for the Control of Odors and Volatile Organic Compounds	
Waste Management	Natural Systems for Waste Treatment*; Resource Recovery and Recycling of Solid Waste	
Sustainability	Sustainable Environment Planning; Environmental Decision-Making and Management; Environmental Toxicology; Environmental Biotechnology; Principle and Technology of Environmental Electrochemistry	
6. Other Courses/Subjects	Principle of Instrument Analysis; Introduction to Industrial Safety; Noise Engineering; Technologies of Emergency Response to Hazardous Chemical Releases*; Independent Studies*	

- p.s. : 1. The number in the bracket behind the name of a course denotes the credit provided by the course. All the courses without being marked are provided with three credits. The courses with a star (*) are provided during the weekend or at night.
2. The courses actually given in each semester are subject to the “Courses and Class Times Table” announced by the National Sun Yat-sen University.
3. The seminar is provided with one credit in each semester. Every student is required to register for the seminar in four semesters at least, except those who meet and are approved to graduate within a minimum two-year of study.