

**Master Courses**  
( hours of lecture-hours of practical learning-credits)

First Year		Second Year	
1st Semester	2nd Semester	1st Semester	2nd Semester
Required courses			
<b>Seminars(I)</b> 0-2-1	<b>Seminars(II)</b> 0-2-1	<b>Seminars(III)</b> 0-2-1	<b>Seminars(IV)</b> 0-2-1
		<b>Master Thesis</b> 3-0-3	<b>Master Thesis</b> 3-0-3
Professional Elective Courses			
Elective Courses			
Core Elective Courses			
Environmental Engineering Core Courses			
<b>Physic chemical treatment processes</b> 3-0-3	<b>Biological Process</b> 3-0-3	<b>Material of Green Engineering</b> 3-0-3	
<b>Applied engineering mathematics</b> 3-0-3	<b>Theory of Air Pollution Control</b> 3-0-3		
Safety and Health Core Courses			
<b>Applied Numerical Analysis</b> 3-0-3	<b>Aerosol Science and technology</b> 3-0-3		
<b>Engineering Thermodynamics</b> 3-0-3	<b>Statistical Analysis</b> 3-0-3		
Core Experiment Courses			
<b>Air Pollutants Sampling and Analysis</b> 2-3-3	<b>water analysis</b> 2-3-3	<b>Disaster Prevention and Safety</b> 2-3-3	
Elective Courses			
<b>The wastes handles and recycling</b> 3-0-3	<b>Experimental Design for Environmental Engineering</b> 3-0-3	<b>Environmental Systems Analysis</b> 3-0-3	<b>Sewer design</b> 3-0-3
<b>Fire and Explosion Simulation</b> 3-0-3	<b>Environmental Economics</b> 3-0-3	<b>Process Safety Design</b> 3-0-3	<b>Occupational Epidemiology</b> 2-0-2
<b>Groundwater Hydrology</b> 3-0-3	<b>System safety Analysis</b> 3-0-3	<b>Electrical Safety</b> 3-0-3	<b>Soil Remediation</b> 3-0-3
<b>Principles of Safety Science</b> 3-0-3	<b>Control of Process Safety</b> 3-0-3	<b>Water Treatment Engineering and Design</b> 3-0-3	<b>Runaway Reaction Hazard</b> 3-0-3
<b>Water Resources Engineering System</b> 3-0-3	<b>Multi-media Transport Theory</b> 3-0-3	<b>Semi-conductor Process Safety</b> 3-0-3	<b>Special Topics on Cleaner Manufacturing Process</b> 3-0-3
<b>Evaluating the Hazards of chemical process</b> 3-0-3	<b>Groundwater pollution</b> 3-0-3	<b>Control of Hazardous Air Pollutants</b> 3-0-3	<b>Management of River Basin</b> 3-0-3
<b>Biostatistics</b> 3-0-3	<b>Loss prevention</b> 3-0-3	<b>Radiation Protection</b> 3-0-3	<b>Process Safety Evaluation</b> 3-0-3

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<b>Calorimetric Analyses and Applications</b> 2-3-3	<b>Controlling the Thermal Hazards</b> 3-0-3	<b>Hydrological Analysis</b> 3-0-3	<b>Atmospheric Chemistry and transport</b> 3-0-3
<b>Occupational Hygiene</b> 3-0-3	<b>Scientific Reports Writing</b> 2-0-2	<b>Air Quality modeling</b> 3-0-3	<b>Air Quality Management</b> 3-0-3
<b>Environmental Technology and Global Change</b> 3-0-3	<b>Risk Assessment</b> 3-0-3	<b>Advanced Environmental Chemistry</b> 3-0-3	<b>Storage and Transportation Safety</b> 3-0-3
<b>Bioremediation principles applications</b> 3-0-3	<b>Special Topics on Indoor Environmental Quality</b> 3-0-3	<b>Emergency Response</b> 3-0-3	<b>Human Factor Engineering</b> 3-0-3
<b>Microbial fuel cells</b> 3-0-3	<b>Exposure Assessment</b> 3-0-3	<b>Bioenergy development and application</b> 3-0-3	<b>Special Topics in Biotechnology</b> 3-0-3
<b>Industrial &amp; Environmental Toxicology</b> 3-0-3	<b>Homeland Security</b> 3-0-3	<b>Environmental Planning and Management</b> <b>3-0-3</b>	<b>Special Topics of Soil &amp; Water Disaster Prevention</b> 3-0-3
<b>Advanced of Occupational Hygiene Management</b> 3-0-3	<b>Soil and Water Conservation</b> 3-0-3		<b>System Optimization and Decision Making Analysis for Environmental Resources</b> 3-0-3
<b>The Reclamation and Treatment Technology of Water Resources</b> 3-0-3	<b>Environment Risk Assessment</b> 3-0-3		
<b>Chemical Safety and Security</b> 3-0-3	<b>Failure Analysis</b> 3-0-3		
<b>Special Topics on Disaster Mitigation and Prevention</b> 3-0-3	<b>Scientific English Reports and Papers Reading</b> 2-0-2		
<b>Hydrogeology</b> 3-0-3			
<b>Water Quality Modeling</b> 3-0-3			
<b>Mechanical Safety Design</b> 3-0-3			