

Summary of Course Requirements		* (Note: Core Courses and Electives listed are for the Engineering The Future Funding Program - Students must also satisfy their University's degree requirements regarding core courses and electives, which may differ from those listed here.)
Descriptions for Core Courses (Required)		Elective Courses (must take 3)
Univ. of Washington	<p>CEE 541 Biological Treatment Systems Basic reactions, design principles, current design models, and operational considerations for biological treatment systems used in environmental engineering. Applications include activated sludge design and optimization, fixed film reactors, nitrification, nitrogen removal, phosphorus removal, anaerobic treatment, and toxic organics removal.</p>	<p>CEE 544 Physical-Chemical Treatment Processes Principles and design of major physical-chemical unit processes used in water, wastewater, and hazardous waste treatment. Processes include chemical and reactor kinetics, filtration, chemical coagulation, ion exchange, adsorption, and gas transfer. Development of mathematical models, laboratory demonstrations, and evaluation of current design practice.</p> <p> CEE 540 Microbiological Process Fundamentals CEE 543 Aquatic Chemistry CEE 462 Applied Limnology & Poll. Effects of Freshwater CEE 486 Environmental Analysis Lab CEE 481 Hydraulic Design for Env. Engineering CEE 484 On Site Wastewater Disposal CEE 542 Bioremediation of Env. Pollutants CEE 547 Lake and Watershed Mgmt. CEE 555 Topics in Env. Health CEE 577 Water-Quality Management CEE 576 Water Resources Planning </p>