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 Wisconsin Madison	**CEE 821 Biological Treatment Processes** Advanced theory and application of biological systems for the treatment of wastes. Includes a wet lab to introduce techniques to assess treatability and to provide design parameters. Topics covered include the fundamental concepts of stoichiometry, energetics, and kinetics of microbial growth and biological oxidations, suspended and biofilm processes, and bioremediation	**CEE 822 Physical/Chemical Treatment Processes** Advanced theory and applications of chemical and physical-chemical treatment of water and wastewater. Includes a wet lab to introduce techniques to assess treatability and design requirements. Topics covered include the fundamental concepts of sorption, caoagulation/flocculation, filtration, disinfection, reactor hydraulics, and sedimentation.	**CEE 500 Water Chemistry** **CEE 824 Environmental Field Evaluations** **CEE 423 Air Pollution - Effects, Meas. & Control** **CEE 629 Environmental Microbial Biotechnology** **CEE 609 Sol-Gel Chemistry** **CEE 929 Environmental Engineering Seminar** **CEE 700 Chemistry of Natural Waters** **CEE 502 Env. Organic Chemistry** **CEE 609 Chemistry of Air Pollution** **CEE 629 Aerosol and Air Pollution lab**