

<h2 style="text-align: center;">Summary of Course Requirements</h2>		<p style="text-align: center;">* (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.)</p>
<h3 style="text-align: center;">Descriptions for Core Courses (Required)</h3>		<h3 style="text-align: center;">Elective Courses (must take 3)</h3>
<p>Clarkson University</p>	<p>CE 681 Environmental Physico-Chemical Processes This class provides fundamental understanding of the chemical and physical processes that govern the migration and fate of pollutants in environmental systems. Emphasis will be placed on the application of these concepts to water treatment processes. Topics include: Mass transfer and kinetics, coagulation, precipitation, adsorption, ion exchange, chemical oxidation, sedimentation, filtration, and related processes.</p>	<p>CE 682 Environmental Biological Processes Principles and applications of biological phenomena and processes in relation to environmental engineering practice. Emphasis is given to biokinetic analysis and design of biological treatment processes applicable to the treatment of water, municipal and industrial wastewater, and hazardous wastes. Topics include: microbial growth kinetics and bioenergetics; aerobic, anaerobic fixed-film, nitrification, denitrification and phosphorus removal biological processes; sludge treatment and disposal; advanced wastewater treatment processes.</p>
<p> CE 580 Environmental Chemistry CE 584 Chemodynamics CE 582 Environmental Systems Analysis CE 586 Intro to Industrial Ecology ES 534 Air Pollution Control CE 579 Water and Wastewater Treatment CE 581 Hazardous Waste Management Engineering CE 587 Contaminant Transport/ Groundwater CE 583 Modeling Natural Aquatic Systems ES 532 Risk Analysis ES 533 Human Exposure Analysis </p>		