

# CONCENTRATION: SCIENCE & TECHNOLOGY

*The Science and Technology Concentration is designed for students who seek to develop a more in-depth understanding of the science of environmental problems, and of the complex interactions between science, technology, the environment and society, which requires integrating knowledge across multiple disciplines. A double major or minor in Earth and Environmental Sciences (EES) is strongly suggested for this concentration.*

<b>Required Skills Courses (choose 2)</b>		<b>6-8</b>
ES/JOUR 125	Environment, the Public and the Mass Media	4
ES/POLS 319	Mapping Data for Policymaking	4
ES/TLT 367	Environmental Education	3
CEE 272	Environmental Risk Assessment	2
CSE 002	Fundamentals of Programming	2
CSE 012	Survey of Computer Science	3
ECO 001	Principles of Economics	4
EES 318	Geographic Analysis in EES <sup>1</sup>	4
EES 325	Remote Sensing of Terrestrial and Aquatic Environments	4
JOUR 314	Technical Communication	4
<b>Required Content Courses (choose 3) <sup>2</sup></b>		<b>11-12</b>
ES/EES 004	The Science of Environmental Issues	1
ES/POLS 106	Environmental Values and Ethics	4
ES/HMS/POLS 110	Environmental Planning for Healthy Cities	4
ES/CEE/CHE/EMC 171	Fundamentals of Environmental Technology	4
ES/POLS 328	U.S. Politics and the Environment	4
ES 331	Environmental Law I: Pollution & Risk Abatement	4
EES 024	Climate Change	3
EES 025	The Environment and Living Systems	3
EES 028	Conservation and Biodiversity	3
EES 029	Human Health and the Environment	3
EES 152	Ecology <sup>3</sup>	4
EES 250	Terrestrial Ecosystems <sup>4</sup>	4
<b>Elective Courses (choose 2 within one of the subconcentrations) <sup>5</sup></b>		<b>6-8</b>
<b>SCIENCE SUBCONCENTRATION</b>		
ES/ANTH 121	Environment and Culture	4
ES/HIST 315	American Environmental History	4
ES/HMS/JOUR/STS 323	Health and Environmental Controversies	4
EES 014	Lands of the Midnight Sun	3
EES 023	Weather and Climate: Past, Present, and Future	3
EES 026	Energy – Origins, Impacts, and Options	3
EES 027	Natural Hazards: Impacts and Consequences	3
EES 032	Oceanography	3
EES 042	The Natural History of Costa Rica	3

**TECHNOLOGY SUBCONCENTRATION**

ES/ANTH 121	Environment and Culture	4
ES/ANTH 321	Information Ecology	4
ES/HMS/JOUR/STS 323	Health and Environmental Controversies	4
HIST/GS 107	Technology and World History	4
HIST/STS 145	Introduction to the History of Science	4
HIST 308	Industrial America since 1945	4
HIST 336	Bethlehem and the Lehigh Valley	4
POLS 115	Technology As Politics	4
STS 011	Technology and Human Values	4
STS/JOUR 124	Politics of Science	4

<sup>1</sup> Requires ES 319 as prerequisite

<sup>2</sup> One course must be a 3-4 credit ES course.

<sup>3</sup> Requires EES 025 or EES 028 as prerequisite.

<sup>4</sup> Requires EES 152 as prerequisite.

<sup>5</sup> Can include any required skills or content courses not taken in another part of the concentration or the core courses.