

BSA-Environmental & Sustainability Studies

Fall 2023

Bachelor of Science and Arts (BSA)

Mellon College of Science (MCS) Concentration in Environmental & Sustainability Studies 123 units (minimum)

Advisor: Ryan Sullivan, DH 2111, 412-268-8462, rsullivan@cmu.edu

Additional Required Courses 18 units minimum

09-217	Organic Chemistry I	9
33-122	Physics II for Biological Sciences & Chemistry Students	9
or 33-142	Physics II for Engineering and Physics Students (12)	

Core Courses 30 units

24/09-291	Environmental Systems on a Changing Planet	9
24/09-381	Environmental Systems on a Changing Planet: Science & Engineering Addendum (co-req: 24/09-291)	3
66-236	Introduction to Environmental Ideas	9
66-506	Senior Capstone (Interdisciplinary Research: Capstone in ESS)	9

Earth and Environmental Science 9 units

Choose one course from the list below.

03-128	Biology for Life Special Topics: Section S, Tropical Ecology	9
03-140	Ecology and Environmental Science	9
09-225	Climate Change: Chemistry, Physics, Planetary Science *	9
09-510	Chemistry and Sustainability *	9
09-524	Environmental Chemistry *	9
09-529	Introduction to Sustainable Energy Science *	9
09-538	Exposure and Risk Assessment for Environmental Pollutants: Environmental Exposure and Risk Assessment *	9
33-226	Physics of Energy *	9

* Prerequisites from the BSA general education curriculum

Global Course 3 units

99-xxx	Each semester, a new course is offered on Global themes, in partnership with University of Pittsburgh's Global Studies Center.	3
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Statistics and Data Science 9 units

36-xxx	Any Statistics Course	9
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Political Economy 9 units minimum

Choose one course from the list below.

19-101	Introduction to Engineering and Public Policy	12
79-300	History of American Public Policy	9
84-110	Foundations of Political Economy	9
84-226	International Relations	9
84-325	Contemporary American Foreign Policy	9
88-344	Systems Analysis: Environmental Policy	9

Electives 45 units minimum

Choose three MCS Electives and two DC Electives in consultation with the concentration advisor.

MCS Electives:

03-140	Ecology and Environmental Science	9
09-225	Climate Change: Chemistry, Physics, Planetary Science	9
09-510	Chemistry and Sustainability	9
09-524	Environmental Chemistry *	9
09-529	Introduction to Sustainable Energy Science	9
12-100	Exploring CEE: Infrastructure and Environment in a Changing World	12
12-201	Geology	9
19-101	Introduction to Engineering and Public Policy	12
19-425	Sustainable Energy for the Developing World	9
24-292	Renewable Energy Engineering	9
27-505	Exploration of Everyday Materials	9
33-226	Physics of Energy	9

DC Electives:

76-241	Introduction to Gender Studies	9
76-291	Getting Heard/Making a Difference	9
76-354	Watchdog Journalism	9
76-395	Science Writing *	9
76-450	Law, Culture, and the Humanities	9
79-201	Introduction to Anthropology	9
79-275	Introduction to Global Studies	9
79-278	How (Not) to Change the World	9
79-288	Bananas, Baseball, and Borders: Latin America and the United States	9
79-297	Technology and Work	9
79-331	Body Politics: Women and Health in America	9
79-372	The Rise and Fall of Pittsburgh Steel	6
79-377	Food, Culture, and Power: A History of Eating	9
79-379	Extreme Ethnography	9
79-383	The History of Capitalism	9
80-135	Introduction to Political Philosophy	9
80-244	Environmental Ethics	9
84-110	Foundations of Political Economy	9
84-275	Comparative Politics	9
84-325	Contemporary American Foreign Policy	9
85-241	Social Psychology	9

* Additional prerequisites

BSA Free Electives

Take any Carnegie Mellon course. A maximum of 9 units of physical education and/or military science may be counted toward this requirement.