

Environmental Science B.S. Degree Requirements, 2019-2020
Department of Geology and Physics -- University of Southern Indiana

For more information on this program, please contact Dr. William Elliott at welliott@usi.edu

Course Number	Course Name	Credits
Core 39 Requirements at University of Southern Indiana		
Foundation courses (15 hours)		
UNIV 101 (FYE)	First Year Experience	1
ENG 101 (RC1)	Rhetoric & Composition I	3
ENG 201 (RC2)	Rhetoric & Composition II	3
CMST 101 or 107 (C)	Intro to Public Speaking	3
MATH 230 (M)	Calculus I (+ES requirement)	4
KIN 192 (PAW)	Wellness/Fitness Appraisal	1
Ways of Knowing (13 hours)		
PHIL 200 (WK-HI & EED)	Introduction to Philosophy	3
CHEM 262 (WK-SMI)	General Chemistry II (+ES requirement)	4
ANTH 235 (WK-SIQ & EEW)	American Life	3
BGS 301 (WK-MER & EEW)	Ethics of Global Engagement	3
BS Requirements (14 hours)		
GEOL 151 or GEOL 161 (BS-NSL)	Geology of National Parks/Introduction to Geology (+ES requirement)	4
BIOL 141 (BS-NS)	Principles of Biology (+ES requirement)	4
GEOG 330 (BS-WLC & EEG)	World Geography	3
SOC 121 (BS-SS)	Principles of Sociology	3
TOTAL CORE		42

Environmental Science Core Courses (C or better)		
GEOG 112 or GEOL 131	Earth System Science or Geology, Environment or Society	3
BIOL 215	Ecology	3
GEOL 311	Concepts in Environmental Science	3
GEOL 481	Advanced Environmental Geology	4
TOTAL ES Core Courses		13
Environmental Science Required Coursework		
GEOL 151 or GEOL 161	Geology of National Parks or Introduction to Geology (+satisfies core)	4
GEOL 234	Oceans Present, Past & Future (Oceanography)	3
GEOG 215	Climatology	3
CHEM 321	Quantitative Analysis	4
GEOL 407	Geomorphology	4
GEOL 441	Hydrogeology	4
BIOL 452	Biology & Environmental Science of Global Change	3
Choose at least 9 credit hours from the following:		
ECON 338	Environmental & Resource Economics	3
POLS 464	Environmental Politics and Policy	3
PHIL 366	Environmental Ethics	3
SOC 415	Sociology of the Environment	3

Choose at least 9 credit hours from the following:		
BIOL 221	Introduction to Entomology	4
BIOL 305	Aquatic Biology	4
BIOL 306	Ichthyology	4
BIOL 321	Invertebrate Zoology	4
BIOL 336	Plant Physiology	4
BIOL 361	Plant Systematics	4
BIOL 459	Advanced Ecology	4
CHEM 241	Organic/Biochemistry Principles or	4
CHEM 354	Organic Chemistry II	4
CHEM 341	Environmental Chemistry	3
GEOL 411	Geology of Soils	4
GEOL 455	Global Quaternary Env. & Geologic Change	3
GEOL 465	Introduction to GIS	3
GEOL 475	Remote Sensing and Image Analysis	3
GEOL/CHEM 499; BIOL 492	Independent Research (Max of 4 credits counting toward ES degree)	4
ENGR 265	Energy Systems & Sustainable Design	3
ENGR 428	Environmental Engineering*	4
ENGR 429	Water Resources*	4
TOTAL ES Required Courses (remove credits for GEOL 151 or 161)		39
Supporting Science Courses & Prerequisites		
BIOL 141	Principles of Biology (+satisfies core)	4
BIOL 151	Botany	3
BIOL 152	Zoology	3
CHEM 261	General Chemistry I	4
CHEM 262	General Chemistry II (+satisfies core)	4
PHYS175	General Physics I	4
MATH 230	Calculus I (+satisfies core)	4
TOTAL Supporting Sciences (remove credits for BIOL 141, CHEM 262, & MATH 230)		14
Supporting Social Science Courses		
Choose one course from the following:		
SOC 370	Seminar: w/ Variable Topics	3
SOC 370	Seminar: Global Climate Change	3
PHIL 435	Philosophy of Science	3
TOTAL Supporting Social Science Courses		3
TOTAL CREDIT HOURS - B.S. in ENVIRONMENTAL SCIENCE		111
ADDITIONAL ELECTIVE CREDIT HOURS		9
TOTAL CREDIT HOURS FOR GRADUATION		120
AT LEAST 39 CREDIT HOURS 300/400 LEVEL REQUIRED FOR GRADUATION		40