

• **Advanced Program in Environmental Science**

The Advanced Program in Environmental Science started in 2010 with the collaboration from Indiana University Bloomington (IUB) (U.S.A.). The total minimum required number of credits is 172 (in 4.5 years).

- + **General courses:** 64 credits;
- + **Fundamental courses:** 52 credits;
- + **Core requirements:** 30 credits;
- + **Concentrations courses:** 18 credits;
- + **Thesis:** 8 credits.

**Available curriculum**

No.	<i>HUS advanced program</i>		<i>Code</i>	<i>IUB program</i>	
	<i>Course</i>	<i>Cr</i>		<i>Course</i>	<i>Cr</i>
<b>General courses (64 TC)</b>					
1	<i>General English I</i>	14	ENG 101	Fundamental English	6
2	<i>General English II</i>	8	ENG 102		
3	<i>General English III</i>	3	ENG 103		
4	<i>Advanced English I</i>	6	ENG W231a	Intensive Writing	6
5	<i>Advanced English II</i>	5	ENG W231b	Communication English (I and II)	5
6	<i>Marxist - Leninist Philosophy 1</i>	3	PHI 1004		
7	<i>Marxist - Leninist Philosophy 2</i>	2	PHI 1005		
8	<i>Policies of the Vietnam Communist Party</i>	3	HIS 1002		
9	<i>Ho Chi Minh Ideology</i>	2	POL 1001		
10	<i>Physical Education I</i>	2	PES 1001		
11	<i>Physical Education II</i>	2	PES 1002		
12	<i>National Defense Education</i>	2	CME 1001		

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	<i>I</i>				
13	<i>National Defense Education II</i>	2	CME 1002		
14	<i>National Defense Education III</i>	3	CME 1003		
15	<i>Introduction to computer science and information technology</i>	3	INM 1001		
16	<i>Fundamental of Vietnamese Culture</i>	2	HIS 1052		
17	<i>General Sociology</i>	2	SOC 1050		
<b>Major and minor courses (101 Cr)</b>					
<b>Fundamental courses (46 cr.)</b>					
18	<i>Biology / Evolution and Diversity</i>	3	L111	Biology   Evolution and Diversity	3
19	<i>Principles of chemistry I</i>	3	C105	Principles of chemistry I	3
20	<i>Principles of chemistry II</i>	3	C106	Principles of chemistry II	3
21	<i>Experimental Chemistry I</i>	2	C125	Experimental Chemistry I	2
22	<i>Experimental Chemistry II</i>	2	C126	Experimental Chemistry II	2
23	<i>Chemistry / Organic Chemistry</i>	3	C341	Chemistry   Organic Chemistry	3
24	<i>Geological Science / Earth Materials</i>	4	G225	Geological Science   Earth Materials	4
25	<i>Geological Science / Field experience</i>	6	G329	Geological Science   Field experience	6
26	<i>Meteorology and Climatology</i>	3	G304	Meteorology and Climatology	3
27	<i>Mathematics / Linear</i>	2	M111	Mathematics	2

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	<i>Algebra</i>			Linear Algebra	
28	<i>Mathematics / Calculus I</i>	3	M211	Mathematics   Calculus I	3
29	<i>Mathematics / Calculus II</i>	3	M212	Mathematics   Calculus II	3
30	<i>Mathematics / Introduction to Differential Equations with Applications I</i>	3	M343	Mathematics   Intro to Differential Equations with Application I	3
31	<i>Physics / Fundamental Physics I</i>	5	P221	Physics   Fundamental Physics I	5
32	<i>Physics / Fundamental Physics II</i>	5	P222	Physics   Fundamental Physics II	5
33	<i>Statistical Techniques</i>	3	K300	<i>Statistical Techniques</i>	3
<b>Core requirements (34 cr).</b>					
34	<i>Introduction to Ecology</i>	3	E332	Introduction to Ecology	3
35	<i>Environmental management</i>	3	SPEA E363	Environmental management	3
36	<i>Environmental Law and Regulation</i>	3	E476	Environmental Law and Regulation	3
37	<i>Environmental Economics and Finance</i>	3	E340	Environmental Economics and Finance	3
38	<i>Techniques in Environmental Science</i>	3	E475	Techniques in Environmental Science	3
39	<i>Introduction to Environmental Science</i>	3	E272	Introduction to Environmental Science	3

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	<i>Course</i>	<i>Cr</i>		<i>Course</i>	<i>Cr</i>
40	<i>Computing for Environmental Scientists</i>	3	E325	Computing for Environmental Scientists	3
41	<i>Research Methods and Statistical Modeling</i>	3	V370	Research Methods and Statistical Modeling	3
42	<i>Environmental Chemistry</i>	3	E536	Environmental Chemistry	3
43	<i>Senior research)</i>	3	E499	Senior research	3
<b>Advanced courses (18 TC)</b>					
<b><i>Selective courses (6 TC)</i></b>					
<b><i>Environmental Management Minor</i></b>					
44	<i>Database Management Systems</i>	3	V475	Database Management Systems	3
45	<i>Introduction to Risk Assessment and Communication</i>	3	E311	Introduction to Risk Assessment and Communication	3
<b><i>Environmental Technology Minor</i></b>					
46	<i>Introduction to Environmental Toxicology</i>	3	E410	Introduction to Environmental Toxicology	3
47	<i>Water supply and waste water treatment</i>	3	E431	Water supply and waste water treatment	3
<b><i>Natural resource and Environmental ecology Minor</i></b>					
48	<i>Geographic Information Systems</i>	3	E418	Geographic Information Systems	3
49	<i>Introduction to Conservation Biology</i>	3	E457	Introduction to Conservation Biology	3
<b><i>Elective courses (12 Cr)</i></b>					

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<i>Students choose four courses. Each course is equivalent to three credits.</i>					
50	<i>Air Pollution and Control</i>	3	E451	Air Pollution and Control	3
51	<i>Applied Remote Sensing of the Environment</i>	3	E419	Applied Remote Sensing of the Environment	3
52	<i>Introduction to Groundwater Hydrology</i>	3	E411	Introduction to Groundwater Hydrology	3
53	<i>Wetlands: Biology and Regulation</i>	3	E440	Wetlands: Biology and Regulation	3
54	<i>Solid and Hazardous Waste Management</i>	3	E452	Solid and Hazardous Waste Management	3
55	<i>Habitat Analysis- Terrestrial/Aquatic</i>	3	E442/ E443	Habitat Analysis- Terrestrial/Aquatic	3
56	<i>Lake and Watershed Management</i>	3	E456	Lake and Watershed Management	3
57	<i>Environmental Soil Science / Soil chemistry</i>	3	E470/ E570	Environmental Soil Science   Soil chemistry	3
58	<i>Introduction to Limnology</i>	3	E455	Introduction to Limnology	3
59	<i>Urban Problems and Solutions</i>	3	V161	Urban Problems and Solutions	3
60	<i>Topical Courses in Environmental Science</i>	3	E400	Topical Courses in Environmental Science	3