



Completion Award **AS Degree**

Program Length 6 Quarters

Program Code ASES



Western Washington University, Huxley College of the Environment on the Peninsulas *Equivalency Guide: Western Washington University*

This is the Pre-Environmental Science program map for the Math & Science Area of Study. It aligns with Western Washington University's Bachelor of Arts in Environmental Policy, offered through the Huxley College of the Environment. This map is intended as a general guide for a suggested course of study. Please work with your academic advisor regarding your specific goals and transfer requirements.

Suggested Order

Order	Category	Course	Credits
1	Required Pre-Major	CHEM& 161L: General Chemistry with Lab I	5
2	Remaining Credit	MATH&141: Precalculus I (if needed)	5
3	Communication Skills	ENGL& 101: Composition I	5
4	Required Pre-Major	CHEM& 162L: General Chemistry with Lab II	5
5	Remaining Credit	MATH&142: Precalculus II	5
6	Remaining Credit	Choose one:	5
		ENVS& 101L: Introduction to Environmental Science ENGL& 235: Technical Writing	

30 Credits

7	Required Pre-Major	CHEM& 163L: General Chemistry with Lab III	5
8	Quantitative Skills 1	MATH& 151: Calculus I: Analytic Geometry	5
9	Additional Requirement 1	GEOL& 101L: Introduction to Physical Geology	5

45 Credits

10	Required Pre-Major	BIOL& 221L: Ecology and Evolution	5
11	Required Pre-Major	MATH& 146: Introduction to Statistics	5
12	Additional Requirement 2	Choose one:	5



Suggested Order

Order	Category	Course	Credits
13	Required Pre-Major	BIOL& 222L: Molecular and Cellular Biology	5
14	Social Science 1	Choose one:	5
		SOC& 101: Introduction to Sociology SOC 115: Understanding Diversity POLS& 202: American Government (recommended)	
15	Quantitative 2	MATH& 152: Calculus II: Analytic Geometry	5
16	Required Pre-Major	BIOL& 223L: Organismal Biology	5
17	Humanities 1	Choose one:	5
		CMST& 210: Interpersonal Communication CMST&220: Public Speaking	
18	Social Science 2 or Humanities 2	Choose one:	5
		ENGL 250: Intercultural Literature ENGL& 254: World Literature I IS 103: Women's Voices Arts and Humanities IS 109: Introduction to Indigenous Humanities SOC 115: Understanding Diversity SOC 230: Sociology of Gender and Sexuality	

Total credits required:

90



Math & Science

Area of Study Outcomes

Communication Competencies

- Comprehend the difference between written opinions vs ideas supported by scientific inquiry.
- Demonstrate the ability to communicate scientific ideas and the process of science.

Quantitative Reasoning

- Manipulate numbers (large and small), use common measurement systems, and solve simple linear algebraic problems.
- Recognize functional relationships between and among measurable phenomena.
- Apply systematic approaches and logic to solving quantitative problems.
- Translate mathematical symbols into words and words into mathematical symbols.
- Demonstrate the ability to use modeling and simulation to solve scientific problems.

Information Competencies

- Recognize the difference between questions of high scientific impact vs those unlikely to provide critical information about a scientific phenomenon or process.
- Ability to apply the process of science.

Critical Thinking

- · Identify and troubleshoot scientific problems.
- Demonstrate the ability to use quantitative reasoning and analyze data.
- Demonstrate the ability to apply the process of science.

Personal and Interpersonal Competencies

- Gain an understanding of the relationships between science and society.
- Gain familiarity with and an appreciation for the interdisciplinary nature of science.
- Demonstrate the ability to collaborate and understand the importance of collaboration in science.

Career Pathways

By earning a degree or certificate in the area of Math & Science you'll be on your way to any of the following career opportunities listed below:

- Astronomer
- Atmospheric scientist
- Bioengineer
- Biologist
- Chemist
- Computer Scientist
- Engineer
- Environmental scientist
- Mathematician
- Materials scientist
- Physicist
- Sustainable agriculturist

Program Notes

Please note that many universities require a foreign language and intermediate algebra (Math 98 at PC) as admissions criteria. Select from three subject areas to fulfill Social Science, Natural Science, and Humanities Distribution requirements. Please refer to the AA degree guide for additional information.

Possible additional pre-college classes depending upon placement level:

- Engl 90 (5 credits) and Math 63/90 (5-10 credits)
- CHEM&121L or a 2.0 in high school Chemistry is a prerequisite for CHEM&161L
- MATH 141 may be required if prerequisite not met

