

# ENVIRONMENTAL SCIENCE

## ASSOCIATE IN SCIENCE (AS) DEGREE

### ENVIRONMENTAL SCIENCE CONCENTRATION

For students considering a major in ENVIRONMENTAL SCIENCE upon transferring to a four-year institution, the Associate of Science degree with an ENVIRONMENTAL SCIENCE concentration from ACC offers a strong foundation, providing essential courses that serve as building blocks for advanced study.

A concentration in ENVIRONMENTAL SCIENCE can lead to diverse career opportunities, including conservation, sustainability, policy, and research, and roles as environmental consultants, sustainability managers, environmental educators, ecologists, wildlife conservationists, air and water quality specialists, and environmental policy analysts.

#### Program Objectives

Upon graduating from ACC with an Associate of Science degree with a concentration in ENVIRONMENTAL SCIENCE, students will:

1. **Demonstrate** a solid understanding of environmental principles, including ecology, climate science, and sustainability practices.
2. **Apply** analytical and research skills to assess environmental issues, collect data, and propose solutions to ecological challenges.
3. **Apply** scientific knowledge and communication skills to advocate for environmental conservation and prepare for further academic study or careers in environmental science and policy.

It is strongly recommended that students consult with an ACC Academic Advisor in ENVIRONMENTAL SCIENCE to ensure they meet specific program requirements, objectives, and transfer goals.

#### PROGRAM REQUIREMENTS (PR)

<b>BIO 161</b>	<b>GENERAL COLLEGE BIOLOGY I (4/5)</b>
<b>BIO162</b>	<b>GENERAL COLLEGE BIOLOGY II (4/5)</b>
<b>BIO 207</b>	<b>WILDLIFE &amp; FISHERIES ECOLOGY &amp; MGT (3/3)</b>
<b>CEM 121</b>	<b>GENERAL &amp; INORGANIC CHEMISTRY (4/7)</b>
<b>CEM 122</b>	<b>INORGANIC CHEM &amp; QUALITATIVE ANALYSIS (4/7)</b>
<b>ENV 101</b>	<b>ENVIRONMENTAL SCIENCE (4/5)</b>
<b>MTH 223</b>	<b>STATISTICAL METHODS (4/4)</b>
<b>MTH 123</b>	<b>COLLEGE ALGEBRA &amp; ANALYTICAL TRIG (4/4)</b>

#### GENERAL EDUCATION

#### DEGREE DISTRIBUTION REQUIREMENTS

##### GROUP 1 (G1) – ENGLISH COMPOSITION

Six (6) semester credits are required, including ENG 111 or 121 and 112, 122 or 123

##### GROUP 2 (G2) – SCIENCES/MATHEMATICS

Twenty (20) semester credits are required, including at least one laboratory science course. Courses will be taken in more than one academic discipline (course abbreviation/prefix). Note: Two (2) courses in Natural Sciences, including one with laboratory experience (from two disciplines), in addition to MTH 118 or MTH 121 or higher, are required to achieve the Michigan Transfer Agreement (MTA).

##### GROUP 3 (G3) – SOCIAL SCIENCES & HUMANITIES/FINE ARTS

Ten (10) semester credits are required in combination from both of these groups, with a minimum of three (3) credits from each group. Political Science or U.S. History courses used to satisfy the American Government requirement can be included. Courses will be taken in more than one academic discipline (course abbreviation/prefix). Note: Two (2) courses in Social Sciences (from two disciplines) and two (2) courses in Humanities and Fine Arts (from two disciplines and excluding studio and performance classes) are required for the Michigan Transfer Agreement (MTA).

##### ELECTIVE CREDITS (EC)

The remainder of credits for an AS degree with this concentration should be oriented toward additional courses in ENVIRONMENTAL SCIENCE with prefixes **CEM**, **MTH**, and **PHY** when available in consultation with an ACC Academic Advisor in ENVIRONMENTAL SCIENCE.

#### RECOMMENDED COURSES - SEQUENCE

##### GROUP 1-4 REQUIREMENTS + ELECTIVE CREDITS

Meets ACC degree distribution and MTA requirements  
60 CREDITS - 73 CONTACT HOURS

<b>YEAR 1 FALL</b>	<b>15 CREDITS</b>
G1	ENG 111 ENGLISH COMPOSITION I (3/3)
<b>G2 PR</b>	<b>BIO 161 GENERAL COLLEGE BIOLOGY I (4/5)</b>
<b>G2 PR</b>	<b>ENV 101 ENVIRONMENTAL SCIENCE (4/5)</b>
<b>G2 PR</b>	<b>MTH 123 COLLEGE ALGEBRA &amp; ANALYTIC TRIG (4/4)</b>

<b>YEAR 1 SPRING</b>	<b>17 CREDITS</b>
G1	ENG 112 ENGLISH COMPOSITION II (3/3)
<b>G2 PR</b>	<b>BIO 162 GENERAL COLLEGE BIOLOGY II (4/5)</b>
<b>G2 PR</b>	<b>BIO 207 WILDLIFE &amp; FISHERIES ECOL &amp; MGT (3/3)</b>
<b>G2 PR</b>	<b>MTH 223 Statistical Methods (4/4)</b>
G3	GEO 151 ELECTIVE – INTRODUCTION TO GIS (1.5/2)
G3	GEO 152 ELECTIVE – ADVANCED GIS (1.5/2)

<b>YEAR 2 FALL</b>	<b>13 CREDITS</b>
<b>G2 PR</b>	<b>CEM 121 GENERAL &amp; INORGANIC CHEMISTRY (4/7)</b>
G3	PLS 221 AMERICAN GOVERNMENT & POLITICS (3/3)
G3	ECN 231 ECONOMICS (MICRO) (3/3)
G3	PHL 228 INTRODUCTION TO ETHICS (3/3)

<b>YEAR 2 SPRING</b>	<b>15 CREDITS</b>
<b>G2 PR</b>	<b>CEM 122 INORGANIC CHEM &amp; QUAL ANALYSIS (4/7)</b>
G2	BIO 227 MICROBIOLOGY (4/6) or BIO 211 GENERAL ZOOLOGY (4/5)
G3/G2	GEO 127 PHYSICAL GEOGRAPHY (4/5) or PHY 124 INTRO TO PHYSICAL GEOLOGY (4/5)
G3	SPE 121 SPEECH COMMUNICATION (3/3)