



## **Environmental Technology A.A.S.**

Career Community: Science and Mathematics

Curriculum Code: 0793

~~Effective: Fall 2022—Summer 2027~~

Discontinued Fall 2023; Last Award Summer 2024

### **Description**

Environmental Technicians may work for environmental/engineering consulting firms, local or state regulatory agencies, manufacturers, recycling and waste management companies and local utility and public service (works) departments. They perform tasks such as environmental sample collection and monitoring, instrument calibration, report writing and data management. Environmental Technicians may help clients comply with governmental environmental standards, assist in field investigations, or work as a team member on a waste or contamination site. They use computer skills to work with environmental data as well as the concepts of chemistry, biology, meteorology, geology and hydrology to help professionals determine the movement and effects of environmental contaminants. Not all courses in this program transfer to all colleges. Students planning to transfer should see an academic advisor before enrolling in any course.

### **Milestone**

In addition to the required General Education courses in Math and English, completion of BIOL 127, CHEM 151, and CHEM 161 with a 2.0 or higher is a key component for success in completing this program. Knowledge obtained in these courses is the foundation for learning in other required courses. Students are encouraged to contact their faculty if they need additional assistance with learning the concepts presented in these courses.

### **Contact Information**

Contact the Science Department, Arts and Sciences Building, Room 255, telephone number 517-483-1092, or the Academic Advising Department, Gannon Building - StarZone, telephone number 517-483-1904.

### **General Education – Applied Degrees, Recommended Courses**

(For the full list of options, see [General Education](#))

- English Composition or Applied English – *Select one*  
ENGL 121, Composition I, 4 credits / 4 billing hours  
ENGL 131, Honors Composition I, 4 credits / 4 billing hours
- English Composition (second course)/Communications or Applied Communications – *Select one*  
COMM 130, Fundamentals Public Speaking, 3 credits / 3 billing hours  
ENGL 122, Composition II, 4 credits / 4 billing hours  
ENGL 132, Honors Composition II, 4 credits / 4 billing hours

- Humanities and Fine Arts or Social Sciences or Applied Social Sciences – *Select one*  
 ECON 120, Power, Authority and Exchange, 4 credits / 4 billing hours  
 GEOG 200, World Regional Geography, 4 credits / 4 billing hours  
 HUMS 213, World Civilizations to 1600, 4 credits / 4 billing hours  
 PHIL 151, Intro to Logic & Critical Think, 4 credits / 4 billing hours  
 SOCL 120, Introduction to Sociology, 4 credits / 4 billing hours
- Mathematics or Applied Mathematics  
 Program of Study Required Courses will meet this requirement
- Natural Sciences Lab or Applied Science and Technology Lab  
 Program of Study Required Courses will meet this requirement

### Program of Study Required Courses

| Course Code | Course Title                   | Credit / Billing Hours |
|-------------|--------------------------------|------------------------|
| BIOL 127    | Cell Biology                   | 4 / 6                  |
| BIOL 210    | Natural Resource Conservation  | 4 / 6                  |
| CHEM 151    | General Chemistry Lecture I    | 4 / 4                  |
| CHEM 152    | General Chemistry Lecture II   | 3 / 3                  |
| CHEM 161    | General Chemistry Lab I        | 1 / 3                  |
| CHEM 162    | General Chemistry Lab II       | 1 / 3                  |
| ENVR 131    | Industrial Process Safety      | 3 / 3                  |
| GEOG 230    | Environmental Geology          | 4 / 6                  |
| ISCI 245    | S.T.E.M. Workplace Practices   | 4 / 6                  |
| MATH 126    | Precalculus                    | 5 / 5                  |
| STAT 215    | Intro to Probability and Stats | 4 / 4                  |

### Program of Study Required Courses, Limited Choice - Biology – *Select one*

| Course Code | Course Title       | Credit / Billing Hours |
|-------------|--------------------|------------------------|
| BIOL 128    | Organismal Biology | 4 / 6                  |
| BIOL 203    | Microbiology       | 3 / 3                  |

**Program of Study Required Courses, Limited Choice** – *Select three or four courses for a minimum of nine credits to reach the 60 credits required for the degree. For MSU transfer students choosing Chemistry, select both CHEM 182 and 192, plus two additional courses.*

| Course Code | Course Title                   | Credit / Billing Hours |
|-------------|--------------------------------|------------------------|
| CHEM 182    | Introductory Organic Chemistry | 3 / 3                  |
| CHEM 192    | Intro Organic Chem Lab         | 1 / 3                  |
| CHEM 262    | Quantitative Analysis          | 3 / 6                  |
| GEOG 221    | Physical Geology               | 4 / 6                  |
| GSCI 110    | Beginning ArcGIS               | 3 / 5                  |

| Course Code | Course Title                  | Credit / Billing Hours |
|-------------|-------------------------------|------------------------|
| GSCI 120    | Advanced ArcGIS               | 3 / 5                  |
| GSCI 210    | Global Positioning Systems    | 3 / 4                  |
| PHYS 221    | Introductory Physics I        | 4 / 6                  |
| POLS 120    | American Political System     | 4 / 4                  |
| SCIN 287    | Science Technology Internship | 2-4 / 2-4              |

### Minimum Total Credit Hours

60 credits / 75 billing hours

### Recommended Course Sequence

| Semester I   |
|--|
| Gen Ed - English Composition or Applied English  |
| Gen Ed - English Composition (second course)/ Communications or Applied Communications |
| BIOL 127 – Milestone course  |
| CHEM 151 – Milestone course  |
| CHEM 161 – Milestone course  |

| Semester II |
|-------------|
| CHEM 152    |
| CHEM 162    |
| ISCI 245    |
| MATH 126    |

| Semester III  |
|---|
| Gen Ed - Humanities and Fine Arts or Social Sciences or Applied Social Sciences |
| BIOL 210  |
| GEOL 230  |
| STAT 215  |
| Limited Choice  |

| Semester IV            |
|------------------------|
| ENVR 131               |
| Limited Choice Biology |
| Limited Choice         |
| Limited Choice         |

*LCC makes every effort to limit revisions to the pathways during their effective timeframe. However, the College reserves the right to update certificate and degree title changes, and make course changes as needed, without prior notice.*