

# LANSING COMMUNITY COLLEGE

## CURRICULUM GUIDE

Environmental Technology  
Associate in Applied Science Degree

Curriculum Code: 0793 (Effective Fall 2015 – Summer 2020)

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.

### PREREQUISITES

Students should see [Course Descriptions](#) for course prerequisite information. See [Academic Assessment and Placement Testing for Student Success](#) for skills assessment and advising information.

### INFORMATION

Contact the Science Department, Arts & Sciences Building, Room 255, telephone number (517) 483-1092 (Website: [www.lcc.edu/science](http://www.lcc.edu/science)) or the Academic Advising Department, Gannon Building – StarZone, telephone number (517) 483-1904.

### REQUIREMENTS

**TOTAL: 35 CREDITS**

CODE	TITLE	CREDIT HOURS
BIOL 127	Cell Biology	4
CHEM 151	General Chemistry Lecture I	4
CHEM 152	General Chemistry Lecture II	3
CHEM 161	General Chemistry Lab I	1
CHEM 162	General Chemistry Lab II	1
ENVR 121	Environmental Rules and Regs	3
ENVR 122	Enviro Sampl & Instrumentation	4
ENVR 131	Industrial Process Safety	3
GEOL 230	Environmental Geology	4
ISCI 275	Advanced Technology Workplace	4
STAT 215	Intro to Probability and Stats	4

**LIMITED CHOICE REQUIREMENTS****TOTAL: 31 – 32 CREDITS**Complete the indicated number of credits from **EACH CHOICE** listed below.**CHOICE 1: [General Education Core Areas](#)** (See Notes 1 and 2) **0 Credits**

(Click the link above for information on how to fulfill these requirements. Core area proficiency exams, where appropriate, are available for each core area.)

Communication Core Area (See Note 2)	0
Global Perspectives and Diversity Core Area (See Note 2)	0
Mathematics Core Area (See Note 2)	0
Science Core Area (See Note 2)	0
Writing Core Area (See Note 2)	0

**Subchoice 1A: Communication Core Area** **3 Credits**

SPCH 120	Dynamics of Communication	3
SPCH 130	Fund of Public Speaking	3

**Subchoice 1B: Global Perspectives and Diversity Core Area** **3 – 4 Credits**

ECON 120	Power, Authority and Exchange	4
ECON 260	Comparative Economic Systems	3
GEOG 200	World Regional Geography	4
HUMS 213	World Civilizations to 1600	4
HUMS 214	World Civilizations from 1600	4
PHIL 211	Philosophy: Ancient & Medieval	4
PHIL 212	Philosophy: Modern and Contemporary	4
POLS 260	Comparative Political Systems	3
SOCL 120	Introduction to Sociology	4

**Subchoice 1C: Writing Core Area** **4 Credits**

ENGL 122	Write About Literature & Ideas	4
WRIT 121	Composition I	4
WRIT 122	Composition II (See Note 1)	4
WRIT 131	Honors Composition I	4
WRIT 132	Honors Composition II	4

**Subchoice 1D: Math** (See Note 3) **4 Credits**

MATH 120	College Algebra	4
MATH 121	Precalculus I	4
MATH 151	Calculus I	4

**CHOICE 2: Biology** **4 Credits**

BIOL 128	Organismal Biology	4
BIOL 210	Natural Resource Conservation	4

<b>CHOICE 3: Geographic Information Systems</b>	<b>3 Credits</b>
GRET 100 GIS Principles & Applications	3
GRET 110 Beginning ArcGIS Desktop	3
GRET 203 Beginning MicroStation	3
GRET 210 Global Positioning Systems	3
GRET 220 Hydrological Systems	3
<b>CHOICE 4: Environmentally Related Courses (See Note 4)</b>	<b>10 Credits</b>
BIOL 128 Organismal Biology	4
BIOL 203 Microbiology	3
BIOL 204 Microbiology Laboratory	1
BIOL 210 Natural Resource Conservation	4
BIOL 260 Botany	4
BIOL 265 Zoology	4
CHEM 182 Introductory Organic Chemistry	3
CHEM 192 Intro Organic Chem Lab	1
CHEM 251 Organic Chemistry Lecture I	4
CHEM 252 Organic Chemistry Lecture II	4
CHEM 262 Quantitative Analysis	3
CHEM 272 Organic Chemistry Laboratory	2
GRET 100 GIS Principles & Applications	3
GRET 110 Beginning ArcGIS Desktop	3
GRET 210 Global Positioning Systems	3
GRET 220 Hydrological Systems	3
PHYS 200 Intro Physics With Application	4
PHYS 221 Introductory Physics I	4
POLS 120 American Political System	4
SCIN 287 Science Technology Internships	2-4
<b>MINIMUM TOTAL</b>	<b>66</b>

**NOTES:**

1. WRIT 122 is strongly recommended if transferring to a 4 year institution.
2. Students completing "REQUIREMENTS" have fulfilled the requirements for these Core areas.
3. Students planning to pursue a bachelor's degree should select MATH 121.
4. The GRET course taken to satisfy "CHOICE 3" and the Biology course taken to satisfy "CHOICE 2" may not also be used to satisfy the requirements for "CHOICE 4".
5. A 2.0 or higher is required in all courses used to satisfy this degree.

## SUGGESTED COURSE SEQUENCE

Students should see course descriptions to find out when departments plan to offer courses. Students who for any reason are unable to follow the course sequence suggested below (for example, those who are part-time, have transferred in courses from another school, or have prerequisites to fulfill) should contact an academic advisor for help with adjustments.

<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>
BIOL 127	CHEM 152	ENVR 122	ENVR 121
CHEM 151	CHEM 162	GEOL 230	ENVR 131
CHEM 161	STAT 215	ISCI 275	Lim. Ch.3
Lim. Ch.1	Lim. Ch.1	Lim. Ch.2	Lim. Ch.4
Lim. Ch.1	Lim. Ch.1	Lim.Ch.4	Lim. Ch.4