

LANSING COMMUNITY COLLEGE

CURRICULUM GUIDE

Environmental Technology
Associate in Applied Science Degree

Curriculum Code: 0793 (Effective Fall 2011 – Summer 2016)

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* or *Course Offerings* for course prerequisite information. See the *Assessment and Placement Testing* section for skills assessment and advising information.

INFORMATION

Contact the Science Department, Arts & Sciences Building, Room 301, telephone number (517) 483-1092 (Website: www.lcc.edu/science) or the Academic Advising Department, Gannon Building, Room 212, telephone number (517) 483-1904.

REQUIREMENTS

CODE	TITLE	TOTAL: 34 CREDITS 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 170	Introduction to Statistics	3

LIMITED CHOICE REQUIREMENTS (See Note 1)

TOTAL: 31 – 32 CREDITS

Complete the indicated number of credits from **EACH CHOICE** listed below.

CHOICE 1: General Education Core Areas (See Note 2)

10 –11 Credits

(See *General Education Core Requirements* for information on how to fulfill these requirements.

Core area proficiency exams, where appropriate, are available for each core area.)

Communication Core Area	3
Global Perspectives and Diversity Core Area	3 – 4
Mathematics Core Area	0
Science Core Area	0
Writing Core Area	4

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 Contempry	4
POLS 260 Comparative Political Systems	3
SOCL 120 Introduction to Sociology	4
Subchoice 1C: Writing Core Area	4 Credits
ENGL 122 Writ About Literature & Ideas	4
WRIT 121 Composition I	4
WRIT 122 Composition II (See Note 3)	4
WRIT 131 Honors Composition I	4
WRIT 132 Honors Composition II	4
CHOICE 2: Biology	4 Credits
BIOL 128 Organismal Biology	4
BIOL 210 Natural Resource Conservation	4
CHOICE 3: Math (See Note 4)	4 Credits
MATH 120 College Algebra	4
MATH 121 Precalculus I	4
CHOICE 4: Geographic Information Systems	3 Credits
GRET 203 Beginning MicroStation	3
GRET 205 Principles of GIS	3
GRET 210 Global Positioning Systems	3
GRET 220 Hydrological Systems	3
GRET 255 Beginning ARC/GIS	3
CHOICE 5: Environmentally Related Courses (See Note 5)	10 Credits
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 272 Organic Chemistry Laboratory	2
GRET 203 Beginning MicroStation	3
GRET 205 Principles of GIS	3
GRET 210 Global Positioning Systems	3
GRET 220 Hydrological Systems	3
GRET 255 Beginning ARC/GIS	3
NANO 130 Introduction to Nanotechnology	4

PHYS 200	Intro Physics With Application	4
PHYS 221	Introductory Physics I	4
POLS 120	American Political System	4
SCIN 287	Science Technology Internship	4
MINIMUM TOTAL		65

NOTES:

1. It is strongly recommended that students intending to transfer to four-year institutions meet additional course requirements as outlined in the MACRAO Transfer Agreement (see "Transfer Information"). Students should also consult appropriate Transfer Guides for specific four-year programs (available from the Academic Advising Department).
2. Students completing "REQUIREMENTS" have fulfilled the requirements for these Core areas.
3. WRIT 122 is strongly recommended if transferring to a 4 year institution.
4. Students planning to pursue a bachelor's degree should select MATH 121.
5. The GRET course taken to satisfy "CHOICE 4" and the Biology course taken to satisfy "CHOICE 2" may not also be used to satisfy the requirements for "CHOICE 5".

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.

I	II	III	IV	V
BIOL 127	CHEM 152	ENVR 122	ENVR 121	Lim. Ch.5
CHEM 151	CHEM 162	GEOL 230	ENVR 131	
CHEM 161	ISCI 275	STAT 170	Lim. Ch.4	
Lim. Ch.1	Lim. Ch.1	Lim. Ch.2	Lim. Ch.5	
Lim. Ch.3	Lim. Ch.1		Lim. Ch.5	