



Conservation and Sustainability A.S.

Career Community: Science and Mathematics

Curriculum Code: 1840

Effective: Fall 2025 – Summer 2030

Purpose of the Major

This degree is designed for students who intend to transfer to a four-year college or university to pursue a baccalaureate degree in a Natural Resources related program. The courses outlined in this pathway are designed for students interested in pursuing degrees related to Conservation, Environmental Science, Fisheries and Wildlife Management, Natural Resources Management and/or Sustainability, as their main emphasis of study. Students completing this curriculum will also satisfy the Michigan Transfer Agreement (MTA) between two-year and four-year institutions and qualify for an LCC Transfer Studies Certificate of Achievement (1482)

Not all courses in this pathway transfer to all colleges. Students who wish to transfer to a four-year institution should select coursework indicated for that institution.

Milestone

In addition to the required General Education courses in Math and English, completion of GEOG 120 or GEOG 200 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.

Additional Information

A student must earn a minimum grade of 2.0 in all courses.

BIOL 210 is only offered during Fall semester.

Contact Information

For further information, including career options, course substitutions and waivers, etc., contact the Science Department, Arts and Sciences Building, Room 3203, telephone number 517-483-1092, or the Academic Advising Department, Gannon Building—Star Zone, telephone number 517-483-1904.

Major Required Courses – *Some courses meet General Education requirements for Michigan Transfer Agreement (MTA). A minimum of 2.0 is required to transfer to other colleges (some colleges, and some programs within colleges, require a higher grade in a course.*

| Course Code | Course Title | Credit / Billing Hours |
|-------------|-----------------------|------------------------|
| ACAD 100 | First-Year Experience | 1 / 1 |
| BIOL 127 | Cell Biology | 4 / 6 |

| Course Code | Course Title | Credit / Billing Hours |
|--|---|---|
| BIOL 128 | Organismal Biology | 4 / 6 |
| CHEM 151 | General Chemistry Lecture I | 4 / 4 |
| CHEM 161 | General Chemistry Lab I | 1 / 3 |
| COMM 120 or COMM 130 or COMM 200 or COMM 240 or COMM 260 or ENGL 122 or ENGL 132 | Dynamics of Communication Fundamentals Public Speaking Small Group Communication Interpersonal Communication Nonverbal Communication Composition II Honors Composition II | 3 / 3 3 / 3 3 / 3 3 / 3 3 / 3 4 / 4 4 / 4 |
| ENGL 121 or ENGL 131 | Composition I Honors Composition I | 4 / 4 4 / 4 |
| GEOG 120 or GEOG 200 | Introduction to Geography World Regional Geography | 3 / 3 4 / 4 |
| GEOG 206 or GEOG 220 or GEOL 221 | Physical Geography Weather, Forecasting & Climate Physical Geology | 4 / 4 4 / 4 4 / 6 |
| MATH 120 or MATH 126 or MATH 151 | College Algebra Precalculus Calculus I | 4 / 4 5 / 5 4 / 4 |

Notes:

ACAD 100 may be waived when students meet one of the following College-approved waiver criteria:

- Completion of 12 college-level credits with minimum grades of 2.0 shown on the LCC transcript (including transfer, if applicable), or
- Employment in the field of, or a field related to, the degree being sought, or
- For Health Careers students, successful completion of CHSE 100.

Students wishing to waive ACAD 100 should contact their advisor.

Major Required Courses, Limited Choice – Humanities and Fine Arts - *Select two courses from different disciplines from [LCC General Education, Transfer Degrees \(MTA\), Humanities and Fine Arts](#).*

Major Required Courses, Limited Choice – Social Sciences – *Select one course from [LCC General Education, Transfer Degrees \(MTA\), Social Sciences](#), from a discipline other than GEOG.*

Notes:

Students considering adding Secondary Education Certification in Math or Science in order to teach in Michigan Public Schools are strongly encouraged to select EDUC courses as listed to meet the Michigan Transfer Agreement (MTA) Social Science requirement.

For future transfer (Secondary Education Certification) to:

- Central Michigan University, Ferris State University, or Michigan State University choose EDUC 204.
- Eastern Michigan University, Grand Valley State University, University of Michigan Flint, or Western Michigan University choose EDUC 220.

Major Required Courses, Limited Choice – *Select 13 credits*

| Course Code | Course Title | Credit / Billing Hours |
|-------------|--------------------------------|------------------------|
| BIOL 210 | Natural Resource Conservation | 4 / 6 |
| BIOL 260 | Botany | 4 / 6 |
| BIOL 265 | Zoology | 4 / 6 |
| BIOL 270 | Human Genetics | 3 / 3 |
| CHEM 152 | General Chemistry Lecture II | 3 / 3 |
| CHEM 162 | General Chemistry Lab II | 1 / 3 |
| CHEM 251 | Organic Chemistry Lecture I | 4 / 4 |
| CHEM 252 | Organic Chemistry Lecture II | 4 / 4 |
| CHEM 272 | Organic Chemistry Laboratory | 2 / 6 |
| COMM 240 | Interpersonal Communication | 3 / 3 |
| ECON 202 | Principles of Economics-Macro | 4 / 4 |
| GEOL 222 | Historical Geology | 4 / 6 |
| GEOL 230 | Environmental Geology | 4 / 6 |
| GSCI 100 | Intro to Geospatial Tech | 3 / 3 |
| MATH 141 | Calculus with Applications | 4 / 4 |
| MATH 151 | Calculus I | 4 / 4 |
| MATH 152 | Calculus II | 4 / 4 |
| PHYS 221 | Introductory Physics I | 4 / 6 |
| PHYS 222 | Introductory Physics II | 4 / 6 |
| PHYS 251 | Physics I with Calculus | 5 / 7 |
| PHYS 252 | Physics II with Calculus | 5 / 7 |
| STAT 215 | Intro to Probability and Stats | 4 / 4 |

Note: BIOL 210 is highly recommended for this degree (offered Fall semester only).

General Education – Transfer Degrees (MTA)

- English Composition
Major Required Courses meet this requirement.

- English Composition (second course)/Communication
Major Required Courses meet this requirement.
- Humanities and Fine Arts
Major Required Courses meet this requirement.
- Mathematics
Major Required Courses meet this requirement.
- Natural Sciences
Major Required Courses meet this requirement.
- Social Sciences
Major Required Courses meet this requirement.

Elective Courses

Complete courses as needed from the list of [AA and AS Elective Courses](#) to reach the 60-credit minimum for this degree. Courses used to fulfill the requirements above cannot be used as Elective courses. For course selections, speak with an advisor or consult the program website(s) at the institution(s) you are considering for transfer.

Minimum Total Credit Hours

60 credits / 66 billing hours

Recommended Course Sequence

| Semester I |
|----------------------------------|
| ACAD 100 |
| ENGL 121 or ENGL 131 |
| MATH 120 or MATH 126 or MATH 151 |
| Limited Choice |

| Semester II |
|--|
| CHEM 151 |
| CHEM 161 |
| COMM 120 or COMM 130 or COMM 200 or COMM 240 or COMM 260 or ENGL 122 or ENGL 132 |
| Limited Choice, Humanities and Fine Arts |

| Semester III |
|--|
| BIOL 127 |
| GEOG 120 or GEOG 200 – Milestone course |
| Limited Choice, Humanities and Fine Arts |
| Limited Choice |

| Semester IV |
|----------------------------------|
| BIOL 128 |
| GEOG 206 or GEOG 220 or GEOL 221 |

| |
|---|
| Semester IV |
| Limited Choice, Social Sciences |
| Limited Choice |
| Electives as needed for the total credits |

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 titles, and make course changes as needed, without prior notice. The College also reserves the right to discontinue programs when warranted.