



## **Conservation and Sustainability C.A.**

Career Community: Science and Mathematics

Curriculum Code: 1844

Effective: Fall 2025 – Summer 2030

### **Purpose of the Major**

This certificate curriculum promotes entry-level technical knowledge, ethics, and rationale for a world view of sustainable practices in agriculture, alternative energy, business, construction, energy usage, natural resource management, and public policy. This certificate is for individuals seeking to enhance their employability by supplementing their existing credentials. Examples include those studying building trades or construction management seeking to implement sustainable building practices or students who hope to work in governmental and non-governmental agencies who intend to apply or advocate for sustainability.

### **Milestone**

Completion of CHEM 151 with a 2.0 or higher is a key component for success in completing this program. Knowledge obtained in this course 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 this course.

### **Additional Information**

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

### **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 – StarZone, telephone number 517-483-1904.

### **Major Required Courses**

Course Code	Course Title	Credit / Billing Hours
ARCH 113 or ARCH 275	Materials & Methods of Constr. Sustainable Building Design	4 / 6 4 / 6
BIOL 120 or BIOL 210	Environmental Science Natural Resource Conservation	4 / 6 4 / 6
BIOL 127	Cell Biology	4 / 6
BIOL 128	Organismal Biology	4 / 6
CHEM 151	General Chemistry Lecture I	4 / 4
CHEM 161	General Chemistry Lab I	1 / 3
ENGL 121 or ENGL 131	Composition I Honors Composition I	4 / 4 4 / 4

Course Code	Course Title	Credit / Billing Hours
GEOG 120 or GEOG 200	Introduction to Geography World Regional Geography	3 / 3 4 / 4
GEOL 230	Environmental Geology	4 / 6
MATH 120	College Algebra	4 / 4

Note: BIOL 210 offered Fall semester only.

### Additional Credits

After completing the course and credit requirements as noted on this pathway, students who fall short of the 30-credit minimum required for a Certificate of Achievement may select any course(s) needed to reach 30 credits, except those courses noted in number 7 in the [Institutional Requirements for Certificates of Achievement](#). Students are encouraged to use Degree Works and meet with an Advisor to ensure all requirements are met and for course recommendations.

### Minimum Total Credit Hours

36 credits / 48 billing hours

### Recommended Course Sequence

Semester I
BIOL 127
BIOL 210 (If choosing BIOL 210)
GEOG 120 or GEOG 200
MATH 120

Semester II
BIOL 120 (if choosing BIOL 120)
CHEM 151 – Milestone course
CHEM 161
ENGL 121 or ENGL 131

Semester III
ARCH 113 or ARCH 275
BIOL 128
GEOL 230

*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.*